

DRAFT MITIGATED NEGATIVE DECLARATION MALIBOU LAKE SIPHON REPLACEMENT PROJECT



Lead Agency:



LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
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Project No. 2202-1151

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DRAFT MITIGATED NEGATIVE DECLARATION FOR THE MALIBOU LAKE SIPHON REPLACEMENT PROJECT

PROJECT DESCRIPTION

Existing Facilities. Currently, a 10-inch, 14-inch and 24-inch diameter triple barrel sewer siphon (pipeline) transports municipal wastewater under Medea Creek at its confluence with Malibou Lake. The sewer siphon crossing is located about 15 feet north of the Lake Vista Drive bridge, spanning about 130 feet from a buried concrete inlet structure near the west bank of Medea Creek to a buried concrete outlet structure near the east bank of Medea Creek. The inlet and outlet structures are connected to access manholes located on or adjacent to Lake Vista Drive by buried sewer pipelines (see existing siphon on Figure 1).

Project Components. The project involves the replacement of the existing sewer siphon crossing directly north of the existing siphon alignment. The proposed replacement siphon crossing would consist of two high-density polyethylene (HDPE) pipelines (12-inch and 24-inch diameter) encased in concrete. The replacement siphon crossing under Medea Creek would be approximately 150 feet long and include two new 10-foot-diameter pre-cast concrete sewer manholes to function as inlet and outlet structures. In addition, a 7-foot-diameter pre-cast concrete manhole is proposed on both sides of the replacement siphon crossing to connect to the existing sewer pipelines. The proposed connection manholes would connect to the proposed inlet and outlet manholes with a 19 foot-long 36-inch diameter HDPE sewer pipe on the west side and a 64-foot-long 36-inch diameter HDPE sewer pipe on the east side (see Figure 1). A new 30-foot-wide permanent easement on APN 4462-004-032 along the replacement siphon crossing alignment would be acquired by the District.

Access roads composed of asphalt concrete would be provided to access the proposed siphon inlet and outlet manholes (see Figure 1). On the west side, the proposed asphalt access road would connect to Lake Vista Drive at the existing unpaved Medea Creek west bank access gate and would extend to include the existing bank access road up to the proposed siphon inlet manhole location. On the east side, the proposed asphalt access road would connect to a paved portion of Laguna Circle Drive north of the existing motorized sliding access gate and extend about 80 feet west to the proposed siphon outlet manhole location.

The existing concrete-encased triple barrel sewer siphon would be completely removed from the Medea Creek channel along with the existing inlet and outlet structures and backfilled with clean earth material to match the surrounding existing grades.

Construction is anticipated to start in 2023 or 2024 and require about six months to complete. Construction activities would be scheduled for the dry season to avoid high flows in Medea Creek and elevated lake levels.

PROJECT LOCATION

The Project site is located at the Lake Vista Drive crossing of Medea Creek at its confluence with Malibou Lake, Los Angeles County, California (see Figure 1 inset map). The Project site is located on Assessor's Parcel Number (APN) 4462-004-032 within the County's Santa Monica Mountains North Area Plan planning area.

PROJECT PROPONENT AND LEAD AGENCY

Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, California 91302

Contact: Alex Leu, Project Manager

PROPOSED FINDINGS

The Las Virgenes Municipal Water District (District) has prepared this Mitigated Negative Declaration (MND) pursuant to Sections 15070-15075 of the State Guidelines for the Implementation of the California Environmental Quality Act. This Mitigated Negative Declaration documents the District's finding that there are no significantly adverse unavoidable impacts associated with the proposed project, and the project does not require the preparation of an Environmental Impact Report (EIR). The attached Initial Study identifies and discusses potential impacts, mitigation measures and residual impacts for identified subject areas.

PUBLIC COMMENTS

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, the District will accept written comments on the adequacy of the information contained in the Draft MND. Please make sure that written comments reach the District's office by 5:00 p.m. on April 28, 2023, the close of the public review period. As a result of this project, potentially significant, but mitigable effects on air quality, biological resources, cultural resources and noise may occur. After the close of the public comment period, the District will make appropriate changes to the document pursuant to the comments received and will release a Final MND.

Due to the non-complex nature of this project, a separate environmental hearing will not be held. However, public testimony will be accepted at the MND approval hearing before the District's Board of Directors. For information regarding scheduling of this hearing, please contact Alex Leu, Project Manager (818/251-2100).

MITIGATION MEASURES

The following mitigation measures have been integrated into the proposed project and would reduce impacts to a level of less than significant.

Air Quality

MM AQ-1. Relevant SCAQMD Rule 403 best available control measures (Table 1 of the Rule) shall be incorporated into the Project to minimize construction-related fugitive dust generation and adverse effects on the public.

MM AQ-2. Stockpiled streambed and lake sediment shall be covered to reduce odors. Fish stranded in the dewatered work area shall be captured using seines as the area is pumped dry and relocated to adjacent portions of Malibou Lake as dewatering progresses. This measure may be implemented simultaneously with mitigation measure **MM BIO-1**.

Biological Resources

MM BIO-1. Dewatering of the lakebed following installation of the cofferdams shall be monitored by a qualified biologist. The dewatering pump intake shall have a 0.5-inch (or smaller) mesh screen to prevent entrainment of two-striped garter snake. A qualified biologist shall use a seine (or appropriate hand-held nets) to capture any two-striped garter snakes in the dewatered area and relocate them to suitable habitat along the lake shoreline at least 500 feet from the work area.

Archaeological Resources

MM CR-1. The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and shall be incorporated into the Project to prevent significant impacts, should resources be found during excavation.

- A worker cultural resources sensitivity program shall be implemented prior to construction at the Project site. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected contractors, subcontractors, and other workers, with subsequent training sessions to accommodate new personnel becoming involved in Project construction. The sensitivity program shall address the cultural sensitivity of the area and how to identify these cultural resources, specific procedures to be followed in the event of an inadvertent discovery, and consequences in the event of non-compliance.
- Should any buried archaeological materials be uncovered during Project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.
- If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

Noise

MM N-1. A minimum 10-foot-tall temporary sound wall (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) shall be installed along the top of the east bank of Medea Creek to reduce noise impacts to the adjacent residence. The sound wall shall extend from Lake Vista Drive approximately 200 feet to the north and located to not prevent access to the adjacent residence. The sound wall may be removed following completion of siphon installation (when equipment activity and noise levels are reduced) to allow construction of the eastern access road and connection manholes, and installation of tie-in pipes.

MM N-2. The sewer bypass pump shall be located below grade or surrounded with acoustic shielding. The electrical generator powering the pump shall be provided with a factory-supplied sound attenuated enclosure.

MITIGATION MONITORING AND REPORTING

Section 15074(d) of the State Guidelines for the Implementation of the California Environmental Quality Act and Section 21081.6 of the Public Resources Code, requires the lead agency (District) to adopt a monitoring program to ensure mitigation measures are complied with during implementation of the project. In compliance with these requirements, a Mitigation Monitoring Program Implementation Table is provided below. This Table identifies the timing, monitoring methods, responsibility and compliance verification method for all mitigation measures identified in this MND. Monitoring would be conducted by the District's construction manager and qualified specialists under contract to the District.

**MALIBOU LAKE SIPHON REPLACEMENT PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE**

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
AIR QUALITY								
MM AQ-1. Relevant SCAQMD Rule 403 best available control measures (Table 1 of the Rule) shall be incorporated into the Project to minimize construction-related fugitive dust generation and adverse effects on the public.	Throughout the construction period	The construction manager will ensure the measures are implemented	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			
MM AQ-2. Stockpiled streambed and lake sediment shall be covered to reduce odors. Fish stranded in the dewatered work area shall be captured using seines as the area is pumped dry and relocated to adjacent portions of Malibou Lake as dewatering progresses. This measure may be implemented simultaneously with mitigation measure MM BIO-1 .	Throughout the construction period	The construction manager will ensure the measures are implemented	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			
BIOLOGICAL RESOURCES								
MM BIO-1. Dewatering of the lakebed following installation of the cofferdams shall be monitored by a qualified biologist. The dewatering pump intake shall have a 0.5-inch (or smaller) mesh screen to prevent entrainment of two-striped garter snake. A qualified biologist shall use a seine (or appropriate hand-held nets) to capture any two-striped garter snakes in the dewatered area and relocate them to suitable habitat along the lake shoreline at least 500 feet from the work area.	During dewatering	The construction manager will ensure the measures are implemented	Daily during dewatering	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			
CULTURAL RESOURCES								
MM CR-1. A worker cultural resources sensitivity program shall be implemented prior to construction at the Project site. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected contractors, subcontractors, and other workers, with subsequent training sessions to accommodate new	Throughout the construction period	The construction manager will ensure the sensitivity training program is fully implemented	Initially prior to ground disturbance, and as new workers are assigned to construction tasks	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			

**MALIBOU LAKE SIPHON REPLACEMENT PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE**

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
personnel becoming involved in Project construction. The sensitivity program shall address the cultural sensitivity of the area and how to identify these cultural resources, specific procedures to be followed in the event of an inadvertent discovery, and consequences in the event of non-compliance.								
Should any buried archaeological materials be uncovered during Project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.	Throughout the construction period	The construction inspector will observe work in progress and ensure work is suspended as appropriate, the District project manager will ensure evaluation of the find is completed	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			

**MALIBOU LAKE SIPHON REPLACEMENT PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE**

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.	Throughout the construction period	The construction inspector will observe work in progress and ensure work is suspended as appropriate, the District project manager will notify the coroner	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			
NOISE								
MM N-1. A minimum 10-foot-tall temporary sound wall (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) shall be installed along the top of the east bank of Medea Creek to reduce noise impacts to the adjacent residence. The sound wall shall extend from Lake Vista Drive approximately 200 feet to the north and located to not prevent access to the adjacent residence. The sound wall may be removed following completion of siphon installation (when equipment activity and noise levels are reduced) to allow construction of the eastern access road and connection manholes, and installation of tie-in pipes.	During siphon replacement activities	The construction manager will ensure the measures are implemented	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			
MM N-2. The sewer bypass pump shall be located below grade or surrounded with acoustic shielding. The electrical generator powering the pump shall be provided with a factory-supplied sound attenuated enclosure.	Throughout the construction period	The construction manager will ensure the measures are implemented	Initially and weekly thereafter	Las Virgenes Municipal Water District	District staff will document compliance in construction progress reports			

1.0 INTRODUCTION

1.1 PURPOSE AND LEGAL AUTHORITY

This Initial Study has been prepared for the Malibou Lake wastewater siphon replacement project (Project), which is intended to terminate infiltration of lake water into the siphon and prevent potential discharges associated with pipe failure. Section 2.0 of this document provides a description of the Project. Section 2.0 of this document provides a description of the Project. The Las Virgenes Municipal Water District (District) is the “lead agency” for the Project. As defined by Section 15367 of the California Environmental Quality Act (CEQA) Guidelines, the lead agency is “the public agency which has the principal responsibility for carrying out or approving a project that may have a significant impact on the environment.” Based on the findings of the Impact Analysis (Section 3.0 of this Initial Study), it has been determined that the Project (with mitigation) would not have a significant impact on the environment. As such, a Mitigated Negative Declaration has been prepared for the Project in accordance with CEQA.

1.2 PROJECT PROPONENT AND LEAD AGENCY

Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, California 91302

Contact: Alex Leu, Project Manager

1.3 PROJECT LOCATION

The Project site is located at the Lake Vista Drive crossing of Medea Creek at its confluence with Malibou Lake, Los Angeles County, California (see Figure 1 inset map). The Project site is located on Assessor’s Parcel Number (APN) 4462-004-032 within the County’s Santa Monica Mountains North Area Plan planning area. Photographs of the Project site are provided as Figure 4.

1.4 PROJECT BACKGROUND

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

The District through a Joint Powers Agreement (JPA) with Triunfo Water and Sanitation District also operates a municipal wastewater collection system and treatment plant (Tapia Water Reclamation Facility) and distributes recycled water. The system begins at the Tapia Water Reclamation Facility (Tapia), where wastewater is treated to a high level, allowing it to be distributed for non-potable uses such as landscape irrigation and various commercial uses. The JPA also owns and operates a distribution system, consisting of pipelines, pump stations, tanks and reservoirs, and associated appurtenances to deliver the recycled water to areas of Los Angeles and Ventura counties.

The affected sewer pipeline transports municipal wastewater from the Agoura Hills area southeast to the Tapia Water Reclamation Facility, and crosses under Medea Creek at its confluence with Malibou Lake. The existing pipe crossing (siphon) was constructed around 1967 and consists of the three steel pipes, 10-inch, 14-inch and 24-inch diameter. Record drawings indicate the pipes are encased in concrete on three sides, but were laid on bare ground, perhaps without proper bedding material. From manhole-to-manhole, the siphon is 134-feet long and is 19-feet below grade at its lowest point.

1.5 PURPOSE AND NEED

Observations from the siphon inlet structure indicates the 24-inch pipeline is largely plugged and recent attempts by the District to clean and inspect the pipelines have been unsuccessful. Video inspection indicates the 24-inch pipeline is buckling inward. Additional damage is suspected elsewhere in the pipelines, which cannot be currently inspected. Significant risks exist that the siphon pipes may collapse or become blocked, resulting in a potential spill. While District staff has confirmed there is no evidence of exfiltration and that flow is still being conveyed through the smaller pipelines that comprise the siphon, it is imperative that the larger 24-inch siphon be addressed quickly to avoid any further damage or the possibility of a spill. Flow meters have been installed on the upstream and downstream sides of the existing siphon to monitor flow conditions and notify staff of a potential sanitary sewer overflow.

The purpose of the Project is to:

- Replace the existing siphon pipes to avoid the potential for wastewater discharge into surface waters.
- Provide for inspection and maintenance of the siphon.
- Eliminate any potential infiltration of surface water into the District's sewer collection system at this location.

1.6 PROJECT APPROVALS

Proposed construction activities and operation of improvements would require the following permits and/or agency consultation:

- Construction activities would require coverage under the General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities from the California Regional Water Quality Control Board, Los Angeles Region. However, this is not a discretionary action, and the Regional Board would not be considered a responsible agency under CEQA.
- Project-related construction activities would be subject to best management practices for the Development and Construction Program of the Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County (Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075). However, this is not a discretionary action, and the Regional Board would not be considered a responsible agency under CEQA.

- Construction activities within Medea Creek/Malibou Lake would require a streambed alteration agreement with the California Department of Fish and Wildlife (CDFW). This is a discretionary action, and the CDFW would be considered a responsible agency under CEQA.
- Construction activities within Medea Creek/Malibou Lake would occur within waters of the U.S. and require a water quality certification from the Regional Board under the Clean Water Act. This is a discretionary action, and the Regional Board would be considered a responsible agency under CEQA.
- Construction activities within Medea Creek/Malibou Lake would occur within waters of the U.S. and require a nationwide permit verification from the U.S. Army Corps of Engineers under the Clean Water Act.
- Construction activities within the public right-of-way of Lake Vista Drive would require a roadway encroachment permit from the Los Angeles County Department of Public Works. However, this is not a discretionary action, and Los Angeles County would not be considered a responsible agency under CEQA.

1.7 MITIGATION MONITORING PLAN

Pursuant to California Resources Code Section 21081.6, a Mitigation Monitoring Plan will be developed to ensure the implementation of mitigation measures necessary to reduce or eliminate identified significant impacts. The Plan will be reviewed and adopted by the District in conjunction with the findings required under CEQA.

1.8 ADOPTION OF THE FINAL MITIGATED NEGATIVE DECLARATION

The Draft MND will be circulated for review by responsible agencies and interested members of the public for a minimum 30-day period. Following the public review period, the District will prepare responses to all comments received during the review period. Following the end of the review period, a Final MND will be prepared, and will be comprised of the Draft MND and any changes made in response to comments received during circulation of the Draft MND and responses to comments. At the time the Project is approved, the mandated CEQA Findings and a Mitigation Monitoring Plan will be adopted. The District is the lead agency and has the responsibility of determining the adequacy of the MND pursuant to CEQA.

1.9 PREPARERS OF THE INITIAL STUDY

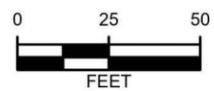
This document was prepared for the District by Matt Ingamells, Rachael Letter, Lucas Bannan and Maribel Sandoval of Padre Associates, Inc.



LEGEND:

- Proposed Manhole
- Construction Footprint
- Proposed Access Road
- Proposed Siphon and Tie-in Pipes
- Proposed Permanent Easement
- Existing Siphon

MAP EXTENT:



Source: Google Earth Imagery
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
 Notes: This map was created for informational and display purposes only.



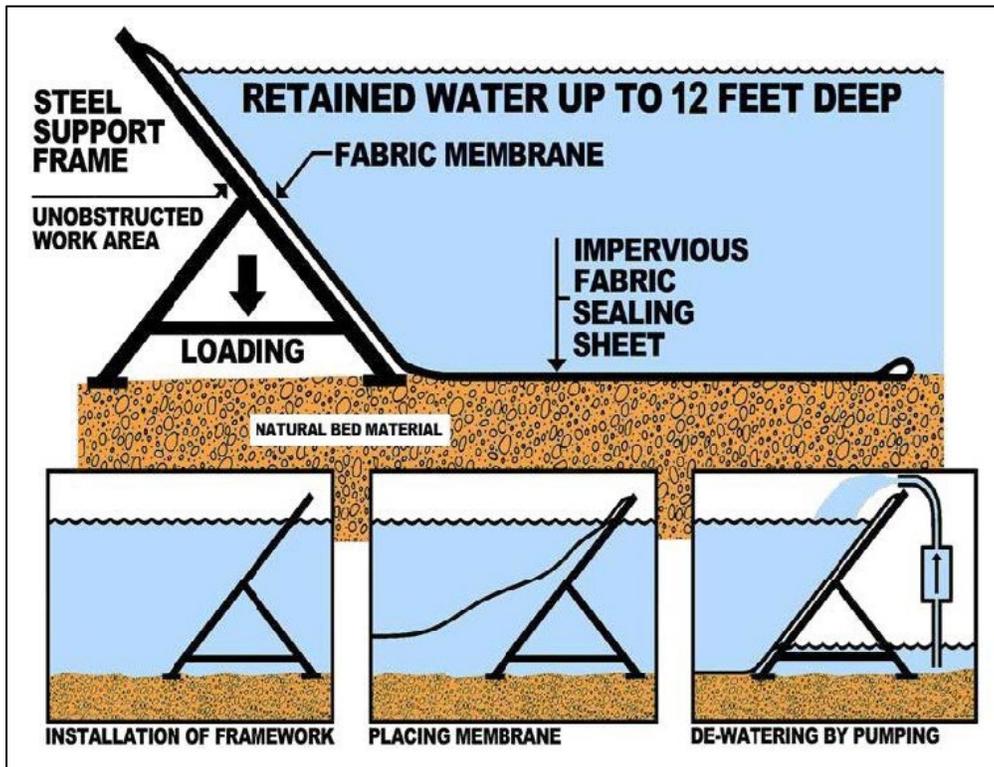
PROJECT NAME:
MALIBOU LAKE SIPHON REPLACEMENT
 LOS ANGELES COUNTY, CA

PROJECT NUMBER: 2202-1151 DATE: February 2023

IMPACT FOOTPRINT MAP

FIGURE
1

GIS Projects\GIS_Maps\Map_MalibouLake_SiphonReplacement\MalibouLake_SiphonReplacement_Lake_Siphon.aprx - 2/27/2023



a. Example cofferdam system side view



b. Example installed cofferdam system

**EXAMPLE COFFERDAM SYSTEM LAYOUT
FIGURE 3**



a. Proposed siphon alignment north of the Lake Vista Drive bridge



b. Proposed construction staging area west of Medea Creek



c. Proposed sewer bypass pipe alignment on bridge and shoulder



d. Proposed eastern access road and outlet manhole location

2.0 PROJECT DESCRIPTION

2.1 EXISTING FACILITIES

Currently, a 10-inch, 14-inch and 24-inch diameter triple barrel sewer siphon (pipeline) transports municipal wastewater under Medea Creek at its confluence with Malibou Lake. The sewer siphon crossing is located about 15 feet north of the Lake Vista Drive bridge, spanning about 130 feet from a buried concrete inlet structure near the west bank of Medea Creek to a buried concrete outlet structure near the east bank of Medea Creek. The inlet and outlet structures are connected to access manholes located on or adjacent to Lake Vista Drive by buried sewer pipelines (see existing siphon on Figure 1).

2.2 PROJECT COMPONENTS

2.2.1 Replacement Sewer Siphon Crossing

The project involves the replacement of the existing sewer siphon crossing directly north of the existing siphon alignment. The proposed replacement siphon crossing would consist of two high-density polyethylene (HDPE) pipelines (12-inch and 24-inch diameter) encased in concrete. The replacement siphon crossing under Medea Creek would be approximately 150 feet long and include two new 10-foot-diameter pre-cast concrete sewer manholes to function as inlet and outlet structures. In addition, a 7-foot-diameter pre-cast concrete manhole is proposed on both sides of the replacement siphon crossing to connect to the existing sewer pipelines. The proposed connection manholes would connect to the proposed inlet and outlet manholes with a 19 foot-long 36-inch diameter HDPE sewer pipe on the west side and a 64-foot-long 36-inch diameter HDPE sewer pipe on the east side (see Figure 1).

A new 30-foot-wide permanent easement on APN 4462-004-032 along the replacement siphon crossing alignment would be acquired by the District.

2.2.2 New Access Roads

Access roads composed of asphalt concrete would be provided to access the proposed siphon inlet and outlet manholes (see Figure 1). On the west side, the proposed asphalt access road would connect to Lake Vista Drive at the existing unpaved Medea Creek west bank access gate and would extend to include the existing bank access road up to the proposed siphon inlet manhole location. On the east side, the proposed asphalt access road would connect to a paved portion of Laguna Circle Drive north of the existing motorized sliding access gate and extend about 80 feet west to the proposed siphon outlet manhole location.

2.2.3 Existing Sewer Siphon Removal

The existing concrete-encased triple barrel sewer siphon would be completely removed from the Medea Creek channel along with the existing inlet and outlet structures and backfilled with clean earth material to match the surrounding existing grades. However, the District is considering abandonment of the existing sewer siphon in place, which would consist of removal of the top five feet of the existing inlet and outlet structures and filling the existing siphon pipes with lean cement.

2.3 CONSTRUCTION

2.3.1 Work Area

All construction work would be located within temporary construction and permanent easements encompassing work areas required for the siphon crossing and manhole installation, dewatering and sewer bypass operations (see construction footprint on Figure 1). The work area includes a 200-foot-long portion of the existing paved and unpaved areas along the western and eastern banks of Medea Creek as construction staging areas. Temporary closure of both traffic lanes on Lake Vista Drive at the Medea Creek bridge would be required during some construction activities during work hours and traffic would be detoured. Traffic flow would be restored during non-construction work hours.

2.3.2 Temporary Sewer Bypass

A temporary sewer bypass pumping system would be installed to ensure sewer flows are not interrupted by Project construction activities and would be operating for about four months. A eight to 10-inch diameter sewer bypass pipeline would be installed mostly above-ground (would be buried where crossing Lake Vista Drive) and extend from just upstream of the Project site (west of Medea Creek) to existing Manhole 38E east of Medea Creek (see Figure 3.c). The above-ground portion of the sewer bypass pipeline would cross Medea Creek on the existing bridge structure and would be placed within the road traveled way against the existing guard rail on the south side of the bridge. The bypass pump would be located in the staging area located northwest of the bridge and driven by an electric motor powered by portable generators either alone or in combination with a connection to the nearby Southern California Edison power line. The sewer bypass pump would also be used to remove wastewater from the existing siphon crossing. All wastewater collected would be discharged to the District's sewer system at Manhole 38E at the southwest corner of Lake Vista Drive and East Lake Shore Drive.

2.3.3 Dewatering the Siphon Crossing Installation Work Area

Temporary cofferdams would be installed, and surface water pumped out to provide a dry work area for siphon crossing installation and removal of the existing siphon crossing (see example cofferdam system in Figure 3). The cofferdams would function as a water retention system. Two cofferdams would be installed, one within Medea Creek (upstream) and one within Malibou Lake (downstream). The cofferdams (Port-a-Dam, or equivalent) would consist of steel frames supporting a continuous-reinforced vinyl liner membrane. The support frames would be assembled in pairs onshore, then lowered into surface water using a boom truck onshore and moved in place by divers to produce a continuous barrier, upstream and downstream of the siphon crossing installation area. The steel frames are designed to be a free-standing structure with no anchoring into foundations. Barges powered by outboard motors (currently used for lake dredging) may be used to assist the drivers and boom trucks in placing the support frames and liner membrane.

The liner sections would also be prepared onshore and joined into the desired configuration. The assembled liner would be placed around the perimeter of the support frames and secured at the top of each frame pair location by divers. The liner would then be unrolled down the diagonal face of the support frames and extended out onto the existing streambed at the toe of the frame, then pulled horizontally out away from the toe to form a sealing apron. The support frame and lining system creates a retaining area that prevents surface water from entering the work zone. A gravity bypass pipe would be provided to convey surface flow through the streambed work area while the cofferdams are in place.

Once the cofferdams are in place, surface water present between the cofferdams would be pumped out to provide a dry work area. Surface water would be pumped using either electric or diesel-powered pumps discharging to the District's sewer system. The electric pump may be powered by a portable generator located in the onshore work area or by a connection to the nearby Southern California Edison power line. The diesel-powered pump would be located in the onshore work area with the suction inlet line extending into surface water. Once the streambed work area is dry, periodic pumping would be required to remove any water seeping from the cofferdams.

Once installation of the replacement siphon crossing and manholes and demolition and removal of the existing siphon and structures (see Section 2.3.4) is complete, the cofferdams would be removed. Removal would be conducted by divers, barges and boom trucks, by first unsealing the liner to allow the work area to be flooded, removal of the liner, support frames and bypass pipe.

2.3.4 Sewer Siphon Installation

Once the streambed work area is dry, a trench would be excavated along the replacement siphon crossing alignment, using an excavator and wheeled loaders. Streambed sediments would be temporarily stockpiled. The two siphon crossing pipelines would be pulled into the trench (separately) by a dozer as HDPE pipe segments are fused together onshore. Concrete would be pumped over and around the installed pipelines to form a concrete encasement within the streambed. Stockpiled native stream sediments would be backfilled over the installed pipeline and encasement and graded to produce a level surface. The banks of Medea Creek affected by siphon installation would be backfilled and graded to pre-project topographic contours.

The proposed four new manholes and pipe connections would be constructed following installation of the sewer bypass system. This would entail excavation of the manhole location, installation of the manholes, construction of internal components and connection to new and existing sewer pipes. The pipe connections between the proposed manholes would be installed by trenching, placement of pipe bedding, placement of pipe, backfill and pavement restoration.

2.3.5 Construction Equipment and Vehicles

Equipment and vehicles anticipated to be used for Project construction activities include excavators, backhoes, wheeled loaders, dump trucks, concrete mixing truck, paver, trench shoring equipment (such as slide rails, beams and plates, sheet piles), HDPE pipe cutters, HDPE pipe fusion machine, self-priming sump, and submersible pumps, suction/discharge hoses, flexible piping, steel plating, cofferdam support frames and liner; generators, high pressure wash sprayer, coating applicator and traffic control sign board.

2.3.6 Construction Schedule

Construction is anticipated to start in 2023 or 2024 and require about six months to complete. Construction activities would be scheduled for the dry season to avoid high flows in Medea Creek and elevated lake levels. The likely order of construction activities is:

- Install the sewer bypass system.
- Install both cofferdams and the surface flow bypass pipe.
- Demolish and remove the existing siphon crossing and inlet and outlet manholes.
- Construct the replacement siphon crossing.
- Construct inlet and outlet manholes.
- Remove both cofferdams and the surface flow bypass pipe.
- Construct connection manholes and install tie-in pipes.
- Construct manhole access roads.
- Remove the sewer bypass system.

2.4 OPERATION

Changes in operation of the siphon crossing will include periodic inspection and maintenance activities for cleaning the replacement siphon utilizing the new access roads. These activities will be similar to those previously used for the existing siphon crossing.

3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section provides an assessment of the potential environmental impacts associated with the Project. The analysis is organized by environmental issue area (e.g., aesthetics, agricultural resources, air quality). Each issue area begins with a checklist, which identifies criteria that have been used to assess the significance or insignificance of each potential impact. The checklists used in this Initial Study were taken from the 2022 update to the State CEQA Guidelines prepared by the Association of Environmental Professionals. The checklists also indicate the conclusions made regarding the potential significance of each impact. Brief explanations of each conclusion are provided after the checklists.

Impact classifications used in the checklists are the following:

- **Potentially Significant Impact.** An impact that could be significant and requires further study in an Environmental Impact Report (EIR).
- **Less than Significant Impact with Mitigation.** An impact that is potentially significant but can feasibly be mitigated to a less than significant level with measures identified in the Initial Study.
- **Less than Significant Impact.** An impact that would not be significantly adverse.
- **No Impact.** Applied when the Project would not result in any impact to a specific issue area.

3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urban areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.1.1 Setting

The Project site is located in a rural/suburban setting, with single-family residences on small lots along the lakeshore. The Malibou Lake Mountain Club facilities are located on the west side of the Lake Vista Drive bridge and include a clubhouse, picnic area, boat launch and parking lot. These facilities provide a park-like visual character to the area. Mulholland Highway has been designated a scenic route by Los Angeles County and is located approximately 550 feet north of the construction footprint but is not visible from the Project site due to intervening vegetation. U.S. Highway 101 is located approximately 2.4 miles north of the Project site and is an eligible State Scenic highway.

The Cornell Sandstone Peaks scenic element as designated by Los Angeles County is located approximately 600 feet north of the proposed construction footprint but is not visible from the Project site due to intervening vegetation. Photographs of the Project site are provided as Figure 4.

3.1.2 Impact Analysis

- a. The Project site is not visible from any public areas that also have views of the Cornell Sandstone Peaks. Therefore, temporary adverse effects on visual resources at the Project site would not affect any scenic vistas. Impacts to County-designated scenic corridors are addressed under checklist item c.
- b. The nearest State-designated scenic highway is a segment of Topanga Canyon Boulevard (State Route 27) approximately 9.1 miles east-southeast of the Project site. The proposed Project would have no effect on this scenic highway.
- c. The proposed Project involves removal of vegetation on the banks of Medea Creek and shoreline of Malibou Lake both upstream and downstream of the Lake Vista Drive bridge. The lakebed would be temporarily exposed, and soil stockpiles, materials and equipment would be visible to the public, including motorists on Lake Vista Drive. These industrial-like features and activities would alter the visual character of the Project site and temporarily degrade the visual quality of public views in the area. However, these impacts would be short-term (a few months) and would have a minimal effect on Malibou Lake and shoreline, which is the primary scenic element in the immediate Project area. The visibility of the Project site and associated visual impacts from Mulholland Highway would be limited to a short glimpse through intervening trees from the Medea Creek bridge and would not adversely affect public views. Overall, aesthetics impacts are considered less than significant.
- d. The proposed Project does not include any lighting or glare-producing surfaces. Therefore, impacts are not anticipated.

3.1.3 Mitigation Measures and Residual Impacts

None required.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

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

3.2.1 Setting

Based on review of the California Important Farmland Finder provided by the California Department of Conservation, areas surrounding Malibou Lake support Urban and Built-Up Land and Other Land. The closest designated important farmlands are Prime farmland located approximately 2.5 miles to the east along Las Virgenes Road. There are no agricultural zoned parcels near the Project site.

The nearest forestland is located in the Angeles National Forest, approximately 24.5 miles to the north.

3.2.2 Impact Analysis

- a. The proposed Project would not result in the conversion of farmland to non-agricultural use and no loss of farmland soils would occur.
- b. The proposed Project would not conflict with any agriculturally zoned areas or any Williamson Act contracts.
- c. The proposed Project would not conflict with any areas zoned for forestry and would not cause any forest land or timberlands to be rezoned.
- d. The proposed Project would not result in the loss or conversion of forest land to non-forest uses.

- e. Projects that involve public infrastructure (e.g., roads, power, water, sewer) in a previously undeveloped area may lead to inducement of population growth and associated conversion of agricultural lands or forest lands. The proposed Project is limited to improving the reliability of the municipal wastewater collection system with no increase in capacity and could not foster new development or population growth.

3.2.3 Mitigation Measures and Residual Impacts

None required.

3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3.1 Setting

Climatological Setting. The Project area is characterized by cool winters and moderate summers typically tempered by cooling sea breezes. Summer, spring and fall weather is generally a result of the movement and intensity of the semi-permanent high-pressure area located several hundred miles to the west. Winter weather is generally a result of the size and location of low-pressure weather systems originating in the North Pacific Ocean.

The nearest climate data station to the Project site is located at Pierce College (Canoga Park), where the maximum average monthly temperature is 95.4 degrees Fahrenheit (°F) in August, and the minimum average monthly temperature is 38.8 °F in September. The average monthly precipitation ranges from 3.95 inches in February to 0.01 inches in July, with an average annual precipitation of 16.86 inches. Air quality in the region is directly related to air pollutant emissions and regional topographic and meteorological factors.

Criteria Pollutants. Criteria air pollutants are those contaminants for which State and Federal ambient air quality standards have been established for the protection of public health and welfare. Criteria pollutants include ozone (O₃) carbon monoxide (CO), oxides of nitrogen (NO_x), sulfur dioxide (SO₂), particulate matter with a diameter of 10 microns or less (PM₁₀) and particulate matter with a diameter of 2.5 microns or less (PM_{2.5}).

Regulatory Overview. Air pollution control is administered on three governmental levels. The U.S. Environmental Protection Agency (USEPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and local districts (South Coast Air Quality Management District [SCAQMD]) share responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained.

CARB has divided the State into 15 air basins to better manage air pollution. Air basin boundaries were determined by grouping together areas with similar geographical and meteorological features. Political boundaries were also considered in determining the air basin boundaries. The proposed Project is located in the Los Angeles County portion of the South Coast Air Basin (SCAB), which encompasses Orange County and coastal portions of Los Angeles, San Bernardino, and Riverside counties.

The U.S. Environmental Protection Agency (USEPA) and CARB classify an area as attainment, unclassified, or nonattainment depending on whether the monitored ambient air quality data shows compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively.

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

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

Pursuant to the CAA, State and local agencies are responsible for planning for attainment and maintenance of the NAAQS. The USEPA classifies air basins (i.e., distinct geographic regions) as either "attainment" or "non-attainment" for each criteria pollutant, based on whether the NAAQS have been achieved. Some air basins have not received sufficient analysis for certain criteria air pollutants and are designated as "unclassified" for those pollutants. The SCAQMD and CARB are responsible agencies for providing attainment plans and for demonstrating attainment of these standards within the Project area.

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

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

Attainment Status. The proposed Project is located in Los Angeles County within the SCAB. The Los Angeles County portion of the SCAB has been designated by CARB and USEPA as unclassified or in attainment of all criteria ambient air pollutant standards with the exception of:

- Federal 2015 8-hour ozone standard: non-attainment, classified as “extreme”.
- Federal 1-hour ozone standard: non-attainment, classified as “extreme”.
- Federal particulate matter less than 2.5 microns (PM_{2.5}) 24-hour standard: non-attainment, classified as “serious”.
- Federal 2012 PM_{2.5} annual standard: non-attainment, classified as “serious”.
- California 8-hour ozone standard: non-attainment.
- California 1-hour ozone standard: non-attainment.
- California PM₁₀ 24-hour and annual standards: non-attainment.
- California PM_{2.5} annual standard: non-attainment.

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

Applicable Regulatory Requirements. The Portable Equipment Registration Program (PERP) establishes a uniform State-wide program to regulate portable engines and portable engine-driven equipment units. The term “portable” is defined as not residing at a location for more than 12 consecutive months. Once registered in the PERP, engines and equipment units may operate throughout California without the need to obtain individual permits from local air districts. To be eligible for the PERP, an engine must be certified to the current emission tier (non-road, on-highway or marine). The PERP does not apply to self-propelled equipment but would apply to engines used in stationary construction equipment.

Applicable SCAQMD rules and regulations are limited to:

- Rule 402 (Nuisance): This Rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury, or damage to business or property. This Rule would apply to fugitive dust generated during Project-related construction.
- Rule 403 (Fugitive Dust): This Rule prohibits the emissions of fugitive dust associated with construction activities (and other operations) such that the dust remains visible beyond the property boundary or the dust emissions exceed 20 percent opaDistrict (if the dust is the result of vehicle movement). Rule 403 also limits track-out of earth material onto adjacent streets and requires implementation of best available control measures.

Air Quality Monitoring. The air quality of the SCAB is monitored by a network of 43 stations operated by the SCAQMD. The Reseda monitoring station is the nearest station located within the SCAB approximately 14.1 miles northeast of the Project site. However, the Thousand Oaks monitoring station is located closer to the Project site and is more representative of the ambient air quality in the area. Table 1 lists the monitored maximum concentrations and number of exceedances of air quality standards at the Thousand Oaks monitoring station for the years 2019 through 2021. As shown in Table 1, ozone concentrations monitored at the Thousand Oaks monitoring station rarely exceed the State 1-hour standard (less than one day per year on average). The State 8-hour ozone standard was exceeded an average of 3.7 days per year from 2019 through 2021. PM_{2.5} concentrations exceeded the Federal 24-hour standard at the Thousand Oaks monitoring station on only one day from 2019 through 2021.

**Table 1. Summary of Data Collected
 at the Thousand Oaks Ambient Air Quality Monitoring Station**

Parameter	Standard	Year		
		2019	2020	2021
Ozone – parts per million (ppm)				
Maximum 1-hr concentration monitored		0.082	0.097	0.077
Number of days exceeding CAAQS	0.095	0	1	0
Maximum 8-hr concentration monitored		0.074	0.084	0.073
Number of days exceeding 8-hour ozone CAAQS	0.070	2	7	2
PM_{2.5} – micrograms per cubic meter (µg/m³)				
Maximum 24-hour sample (National)		24.5	36.3	29.1
Number of samples exceeding NAAQS	35	0	1	0

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

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

Residential land uses occur along the shore of Malibou Lake adjacent to the Project site. The nearest school is Agoura Hills High School, located approximately 2.8 miles to the north of the Project site.

3.3.2 Impact Analysis

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

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

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

- a. Projects that cause local populations to exceed population forecasts in the 2016 AQMP may be inconsistent, as exceeding population forecasts can result in the generation of air pollutant emissions beyond those which have been projected in the 2016 AQMP. The proposed Project would not increase access to undeveloped areas, extend infrastructure or otherwise induce land development or population growth. Overall, the proposed Project would have no effect on implementation of the 2016 AQMP and progress towards attainment of air quality standards.
- b. For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project’s incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted significance thresholds. The proposed Project does not include any new land uses that may generate air pollutant emissions. In addition, the proposed Project would not increase wastewater treatment capacity that could induce population growth. Construction of the proposed Project would generate temporary air pollutant emissions, primarily exhaust emissions from heavy-duty trucks, worker vehicles and heavy equipment. Daily heavy equipment emissions were estimated using the CARB OFFROAD 2021 model. Emissions of on-road vehicles were estimated using CARB’s EMFAC 2021 model (year 2023, Los Angeles County inputs). Peak day (siphon replacement) construction emissions have been estimated for comparison to the SCAQMD construction emissions thresholds (see Table 2).

Table 2. Peak Day Construction Air Pollutant Emissions

Source	Pollutant, Pounds per Peak Day			
	ROC	NO _x	CO	PM ₁₀
Equipment exhaust	2.3	20.5	21.7	0.9
On-road vehicles	<0.1	0.9	0.8	0.1
Fugitive dust	0.0	0.0	0.0	9.9
Total	2.3	21.4	22.5	10.9
SCAQMD Significance Threshold	75	100	550	150
Localized Significance Threshold*	--	103	426	4.0

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

Peak day construction PM₁₀ emissions would exceed the applicable LST and are considered significant. The Project is subject to SCAQMD Rule 403 and best available control measures to minimize fugitive dust have been provided below as mitigation measures.

- c. Residences located adjacent to the construction footprint may be considered sensitive receptors. Construction activities would generate fugitive dust and exhaust emissions. Project-related exposure of these sensitive receptors to air pollutants would be minimal due to the following factors:

- Air pollutant emission rates are relatively low.
 - Air pollutant emissions would be short-term (a few months).
 - Air pollutant emissions would be minimized through implementation of best available control measures required by SCAQMD Rule 403 to minimize fugitive dust (see Section 3.3.3).
 - The ambient air quality in the local area (Santa Monica Mountains) is generally very good.
- d. Excavation to install the replacement siphon and remove the existing siphon would expose streambed and lake sediments that may be odorous. In addition, fish left stranded in the dewatered work area would decompose and produce odors. These odors would be short-term but may cause annoyance to a considerable number of persons and violate SCAQMD Rule 402.

3.3.3 Mitigation Measures and Residual Impacts

MM AQ-1. Relevant SCAQMD Rule 403 best available control measures (Table 1 of the Rule) shall be incorporated into the Project to minimize construction-related fugitive dust generation and adverse effects on the public.

Implementation of these measures would reduce air quality impacts to a level of less than significant.

MM AQ-2. Stockpiled streambed and lake sediment shall be covered to reduce odors. Fish stranded in the dewatered work area shall be captured using seines as the area is pumped dry and relocated to adjacent portions of Malibou Lake as dewatering progresses. This measure may be implemented simultaneously with mitigation measure **MM BIO-1**.

Implementation of these measures would reduce odor-related air quality impacts to a level of less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 Setting

Significant Ecological Areas (SEA) and Open Space Areas. Los Angeles County has designated much of the Santa Monica Mountains within their jurisdiction as a significant ecological area. The Project site is located within the Santa Monica Mountains SEA.

Open space areas supporting substantial native vegetation and wildlife habitat occur within the Santa Monica Mountains SEA near the Project site including Malibu Creek State Park (to the east and south) and Paramount Ranch (part of the Santa Monica Mountains National Recreation Area, located to the north).

Botanical Resources. Botanical surveys of the Project site were conducted by Padre biologist Matt Ingamells on February 2, 2023. A total of 51 plant species were observed, including 17 native species (33 percent). Nineteen plant species listed as invasive by the California Invasive Plant Council were observed, including three species rated as highly invasive (freeway ice plant, pampas grass and English ivy), nine species rated as moderately invasive, and seven species considered to have limited invasiveness. A list of plant species observed at the Project site is provided as Attachment A.

Protected Oak Trees. Section 22.174.030 of the Los Angeles County Code of Ordinances prohibits damage or removal of oak trees with a single trunk circumference of 25 inches or more (8 inches in diameter), or two trunks with a combined circumference of at least 38 inches (12 inches in diameter). A heritage oak tree is considered as any oak tree with a diameter of 36 inches or more, or identified as having significant historical or cultural importance to the community. Oak trees at least 6 inches in diameter at breast height within the Santa Monica Mountains North planning area are also protected. Oak trees are not located in proximity to the Project site (construction footprint shown in Figure 1).

Vegetation. The area surrounding Malibou Lake burned in November 2018 as part of the regional Woolsey Fire. The Fire did not burn the Project site; however, several residences located east of the Project site were lost in this fire. The vegetation of the Project site has been mapped as S4 habitat in the Santa Monica Mountains North Area Plan indicating this area supports existing residential or commercial development, or other facilities or agricultural practices.

Excluding the banks of Medea Creek and shoreline of Malibou Lake, the entire Project site is developed (Lake Vista Drive, boat launch area, Laguna Circle Drive), supports landscaping (at Malibou Lake Mountain Club and east of the Lake Vista Drive bridge) or previously disturbed areas (proposed construction staging areas) with only scattered weedy plant species. Native vegetation is limited to linear strips of shrubby arroyo willow (*Salix lasiolepis*) and southern cattail (*Typha domingensis*) along the lower banks of Medea Creek and shoreline of Malibou Lake. A vegetation map is provided as Figure 5.

The linear strips of shrubby arroyo willows at the site, varying from about five to 25 feet in width may be classified as arroyo willow thicket as per A Manual of California Vegetation (Sawyer et al., 2009). Arroyo willow thickets have been assigned a State rarity ranking of S4, meaning this plant community is apparently secure, at a fairly low risk of extirpation due to its extensive range and/or many populations or occurrences.

The linear strips of southern cattail at the site, varying from about two to six feet in width may be classified as cattail marshes as per A Manual of California Vegetation (Sawyer et al., 2009). Cattail marshes have been assigned a State rarity ranking of S5, meaning this plant community is secure, at very low or no risk of extirpation due to its very extensive range and/or abundant populations or occurrences.

Wildlife Resources. Malibou Lake and adjacent portions of Medea Creek support non-native fish introduced for fishing, including bluegill, large-mouth bass, common carp and catfish. A wildlife survey of the Project site (with 100-foot buffer) was conducted on February 2, 2023. Wildlife observed were Canada goose, northern flicker, black phoebe, white-crowned sparrow, acorn woodpecker, Allen's hummingbird, Audubon's warbler, song sparrow, American crow, western scrub jay, oak titmouse, ruby-crowned kinglet, cedar waxwing, European starling, red-winged blackbird, and lesser goldfinch. Canada geese are abundant at Malibou Lake, and forage in grassy areas along the shoreline. A list of wildlife species observed at the Project site is provided as Attachment B.

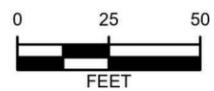
Special-Status Species. Table 3 provides a summary of special-status plant and wildlife species reported within three miles of the Project site, based on review of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Data Base (CNDDDB), California Native Plant Society (CNPS) on-line inventory, and on-line search of the Consortium of California Herbaria (CCH) collections. Table 3 also includes the results of biological surveys conducted at Project site.



LEGEND:

- Construction Footprint
- C Cattail Marsh
- D Disturbed
- O Open Water
- AW Arroyo Willow Thicket
- DW Developed (roadways, boat launch)
- L Landscaping (including trees, turfgrass)

MAP EXTENT:



Source: Google Earth Imagery
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
 Notes: This map was created for informational and display purposes only.



PROJECT NAME:
MALIBOU LAKE SIPHON REPLACEMENT
LOS ANGELES COUNTY, CA

PROJECT NUMBER: 2202-1151 DATE: February 2023

VEGETATION MAP

GIS Projects\GIS_Maps\Map_Malibou_Lake_Siphon_Replacement\Malibou_Lake_Siphon_Replacement_Vegetation_Map.aprx - 2/28/2023

Table 3. Special-status Species Reported within Three miles of the Project Site

Common Name (Scientific Name)	Status	Nearest Report Location to the Project Site
Plants		
Malibu baccharis (<i>Baccharis malibuensis</i>)	List 1B	Paramount Ranch, 0.6 miles to the northwest (CNDDDB, 2023)
Brewer's calandrinia (<i>Calandrinia breweri</i>)	List 4	Near Castro Peak, 2.0 miles to the south, collected 2005 (CCH, 2023).
Catalina mariposa lily (<i>Calochortus catalinae</i>)	List 4	Cornell Corners, 1.4 miles to the west-northwest, collected 1978 (CCH, 2023).
Plummer's mariposa lily (<i>Calochortus plummerae</i>)	List 4	Near Mulholland Highway, 2.4 miles to the west-southwest (CNDDDB, 2023)
Slender mariposa lily (<i>Calochortus clavatus</i> var. <i>gracilis</i>)	List 1B	Cornell corners, 1.2 miles to the west-northwest, collected 1960 (CNDDDB, 2023)
Santa Susana tarplant (<i>Deinandra minthornii</i>)	SR, List 1B	Near Castro Peak, 1.8 miles to the southwest (CNDDDB, 2023)
Marcrescent dudleya (<i>Dudleya cymosa</i> ssp. <i>marcescens</i>)	FT, SR, List 1B	Near Malibou Lake dam, 0.4 miles to the south-southwest (CNDDDB, 2023)
Agoura Hills dudleya (<i>Dudleya cymosa</i> ssp. <i>agourensis</i>)	FT, List 1B	Near Kanan Road, 2.1 miles to the north (CNDDDB, 2023)
Southern California black walnut (<i>Juglans californica</i>)	List 4	Common in the region, likely occurs along Medea Creek upstream of Mulholland Highway
Ojai navarretia (<i>Navarretia ojaiensis</i>)	List 1B	Near Seminole Hot springs, 1.9 miles to the west (CNDDDB, 2023)
Lyon's pentachaeta (<i>Pentachaeta lyonii</i>)	FE, SE, List 1B	Paramount Ranch, 0.2 miles to the northwest (CNDDDB, 2023)
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	List 4	Near Malibu Creek, 1.1 miles to the southeast, collected 1960 (CCH, 2023)
Coulter's matilija poppy (<i>Romneya coulteri</i>)	List 4	North of Mulholland Highway, 1.4 miles to the east, collected 1965 (CCH, 2023)
Insects, Fish and Wildlife		
Santa Monica grasshopper (<i>Trimerotropis occidentiloides</i>)	SA	Near Kanan Road, 1.7 miles to the northwest (CNDDDB, 2023)
Crotch bumble bee (<i>Bombus crotchii</i>)	CE	Paramount Ranch, 0.6 miles to the northwest (CNDDDB, 2023)
Arroyo chub (<i>Gila orcuttii</i>)	CSC	Malibu Creek, three miles to the southeast (CNDDDB, 2023)
Western pond turtle (<i>Emys marmorata</i>)	CSC	Malibu Creek, 2.1 miles to the southeast (CNDDDB, 2023)
Two-striped garter snake (<i>Thamnophis hammondi</i>)	CSC	Triunfo Canyon Creek, 1.9 miles to the northwest (CNDDDB, 2023)
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	CSC	Tapia Park (historic, 1962), three miles to the southeast (CNDDDB, 2023)

Common Name (<i>Scientific Name</i>)	Status	Nearest Report Location to the Project Site
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	CSC	Near Malibu Creek, 1.7 miles to the southeast (CNDDDB, 2023)
Black-crowned night heron (<i>Nycticorax nycticorax</i>)	SA (nesting colony)	Reported from Malibou Lake area (eBird.org, 1/15/22), migrant, historically bred at Malibu Lagoon
Snowy egret (<i>Egretta thula</i>)	SA (nesting colony)	Reported from Malibou Lake area (eBird.org, 6/8/19), does not breed in the region
Great egret (<i>Ardea alba</i>)	SA (nesting colony)	Reported from Malibou Lake area (eBird.org, 3/28/22), migrant, does not breed in the region
Double-crested cormorant (<i>Phalacrocorax auritus</i>)	WL (colony)	Reported from Malibou Lake area (eBird.org, 1/21/23), migrant, does not breed in the region
American peregrine falcon (<i>Falco peregrinus anatum</i>)	FP	Malibu Creek State Park
Golden eagle (<i>Aquila chrysaetos</i>)	FP, WL (nesting)	Lobo Canyon, three miles to the west (CNDDDB, 2023)
Osprey (<i>Pandion haliaetus</i>)	WL (nesting)	Reported from Malibou Lake area (eBird.org, 8/15/20), migrant, does not breed in the region
Sharp-shinned hawk (<i>Accipiter striatus</i>)	WL (nesting)	Reported from Malibou Lake area (eBird.org, 1/15/22), migrant, does not breed in the region
Cooper's hawk (<i>Accipiter cooperi</i>)	WL (nesting)	Reported from Malibou Lake area (eBird.org, 5/8/21), uncommon in the Santa Monica Mountains (breeder)
Nuttall's woodpecker (<i>Dryobates nuttallii</i>)	BCC	Reported from Malibou Lake area (eBird.org, 1/21/23), abundant in the Santa Monica Mountains (breeder)
Allen's hummingbird (<i>Selasphorus sasin</i>)	BCC	Reported from Malibou Lake area (eBird.org, 1/21/23), common in the Santa Monica Mountains (breeder)
Vaux's swift (<i>Chaetura vauxi</i>)	CSC (nesting)	Reported from Malibou Lake area (eBird.org, 4/17/20), migrant, does not breed in the region
Oak titmouse (<i>Baeolophus inornatus</i>)	BCC	Observed within the Project site during the wildlife survey, abundant in the Santa Monica Mountains (breeder)
Yellow warbler (<i>Setophaga petechia</i>)	CSC (nesting)	Reported from Malibou Lake area (eBird.org, 9/17/21), common in the Santa Monica Mountains (breeder)
Lawrence's goldfinch (<i>Spinus lawrencei</i>)	BCC	Reported from Malibou Lake area (eBird.org, 4/25/20), uncommon in the Santa Monica Mountains (breeder)
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	WL	Near Kanan Road, 2.2 miles to the north (CNDDDB, 2023)
Hoary bat (<i>Lasiurus cinereus</i>)	SA, WBWG-M	Peter Strauss Ranch, 1.5 miles to the west (CNDDDB, 2023)

Common Name (<i>Scientific Name</i>)	Status	Nearest Report Location to the Project Site
Western small-footed bat (<i>Myotis ciliolabrum</i>)	SA, WBWG-M	Malibu Creek State Park, 1.6 miles to the southeast (CNDDDB, 2023)
Spotted bat (<i>Euderma maculatum</i>)	CSC, WBWG-H	Malibu Creek State Park, 1.6 miles to the southeast (CNDDDB, 2023)
Yuma myotis (<i>Myotis yumanensis</i>)	SA, WBWG-L	Malibu Creek State Park, 1.6 miles to the southeast (CNDDDB, 2023)
Western red bat (<i>Lasiurus frantzii</i>)	CSC, WBWG-H	Paramount Ranch, 0.4 miles to the north (CNDDDB, 2023)
Western mastiff bat (<i>Eumops perotis californicus</i>)	CSC, WBWG-H	Paramount Ranch, 0.6 miles to the northwest (CNDDDB, 2023)

- BCC 2021 Birds of Conservation Concern (USFWS)
- CCH Consortium of California Herbaria
- CE Candidate endangered (CDFW)
- CSC California Species of Special Concern (CDFW)
- FE Federal Endangered (USFWS)
- FP Fully protected (CDFW)
- FT Federal Threatened (USFWS)
- List 1B Plants rare, threatened, or endangered in California and elsewhere (CNPS)
- List 4 Plants of limited distribution (CNPS)
- SA Special Animal (CDFW)
- SE State Endangered (CDFW)
- SR State Rare (CDFW)
- WBWG-M Western Bat Working Group-Medium Priority
- WBWG-H Western Bat Working Group-High Priority
- WBWG-L Western Bat Working Group-Low Priority
- WL Watch List (CDFW)

3.4.2 Impact Analysis

a. Plants. Based on literature review and a botanical survey of the Project site, special-status plant species occurring in proximity (within 0.5 miles) to the Project site are limited to marcescent dudleya and Lyon’s pentachaeta. Suitable habitat for these species does not occur at or adjacent to the Project site and they were not observed during the botanical survey. Therefore, special-status plants would not be adversely affected.

Vegetation. Vegetation would be temporarily removed to facilitate access to the bank of Medea Creek to install the replacement siphon and manholes. In addition, installing the cofferdams may result in the loss of vegetation on the banks of Medea Creek and the shoreline of Malibou Lake. Native vegetation affected would be limited to 0.06 acres of arroyo willow thickets and 0.01 acres of cattail marshes. Affected vegetation is not rare or declining. Due to the small area affected and abundance of the affected plant communities in the region, impacts to vegetation are considered less than significant.

Special-Status Reptile Species. Western pond turtle was historically reported from Malibou Lake, but is considered extirpated, possibly due to competition from the non-native red-eared slider. Two-striped garter snake has been reported from both Medea Creek and Triunfo Canyon Creek upstream of Malibou Lake (De Lisle et al., 1986) and in Malibu Creek downstream of Malibou Lake (iNaturalist.org, 2023). This aquatic species may be present and adversely affected by installation of the cofferdams and dewatering the lakebed. This impact is considered potentially significant.

Special-Status Bird Species. As shown in Table 3, several special-status bird species have been reported from Malibou Lake. However, most of these species are casual migrants and do not rely on the resources of Malibou Lake. Of the special-status bird species observed at Malibou Lake, those that are known to breed in the Santa Monica Mountains are limited to Cooper's hawk, Nuttall's woodpecker, Allen's hummingbird, oak titmouse, yellow warbler and Lawrence's goldfinch.

Cooper's hawk was previously listed as a species of special concern by CDFW, but breeding populations have increased in California and expanded into urban areas (Shuford and Gardali, 2008) and is currently on CDFW's Watch List. Nuttall's woodpecker, Allen's hummingbird, oak titmouse and Lawrence's goldfinch are considered bird species of conservation concern on a regional basis (most of coastal California) by the U.S. Fish and Wildlife Service but are not assigned any special status by CDFW. Suitable habitat for Cooper's hawk, Nuttall's woodpecker, oak titmouse and Lawrence's goldfinch (including chaparral, oak woodland, savannah, riparian woodland) does not occur within or adjacent to Project site. Therefore, substantial adverse effects to the local population of these species are not anticipated and impacts are considered less than significant.

Yellow warbler is listed as a species of special concern by CDFW when breeding, and typically nests in riparian woodland. Arroyo willow thickets do not provide suitable habitat for yellow warbler due to the small size of the willows, and the small area and highly linear and fragmented nature of this plant community at the Project site. Therefore, substantial adverse effects to the local population of this species are not anticipated and impacts are considered less than significant.

Allen's hummingbird may forage within sugar gum and other landscaping trees at or near the Project site. Although six ornamental trees are located within the construction footprint north of Lake Vista Drive, construction activity would protect in place all but one tree, a small Peruvian pepper tree. Therefore, habitat loss for Allen's hummingbird would be minimal and not affect the local population.

- b. Arroyo willow thickets and cattail marsh found at the Project site may be considered riparian habitat. Due to the small area affected (0.07 acres in total), highly linear (mostly less than 15 feet wide) and fragmented nature of the affected habitat, impacts to riparian habitat are considered less than significant. In any case, the affected areas are anticipated to be recolonized following construction by riparian vegetation by expansion of adjacent areas and growth of seeds and other propagules (willow stems and twigs) transported from upstream areas by storm flows.

- c. Review of the U.S. Fish & Wildlife Service National Wetlands Inventory indicates Medea Creek and Malibou Lake within the Project site support wetlands (lacustrine, limnetic, unconsolidated bottom, permanently flooded, diked/impounded). The proposed Project would affect approximately 0.5 acres of wetlands as defined by the U.S. Fish & Wildlife Service, including approximately 0.1 acres of vegetated areas and 0.4 acres of open water of Malibou Lake.

Wetland impacts would be approximately 0.1 acres under the Los Angeles Regional Water Quality Control Board definition and 0.06 acres under the Corps of Engineers definition and would be temporary. Affected wetland areas are anticipated to be recolonized following construction by expansion of adjacent areas and growth of seeds and other propagules (willow stems and twigs) transported from upstream areas by storm flows. Due to the small area affected and temporary nature of Project impacts, wetland impacts are considered less than significant.

- d. Malibou Lake is surrounded by large mostly protected open space areas including Paramount Ranch and Malibu Creek State Park, such that wildlife movement is not anticipated to be focused along discrete corridors. The Project site is surrounded by development including the Malibou Lake Mountain Club to north and west, residences to the east and Malibou Lake to the south. Substantial wildlife movement is not anticipated to occur through the Project site. The proposed Project does not include any above-grade structures or other features that may disrupt wildlife movement.
- e. The proposed Project would not result in the removal of protected trees, sensitive habitat identified in the Santa Monica Mountains North Area Plan or adversely affect any other biological resources protected under Los Angeles County policies or ordinances.
- f. The Project site is not subject to a habitat conservation plan or other conservation plan. Therefore, no adverse impacts related to compliance with habitat conservation plans are anticipated.

3.4.3 Mitigation Measures and Residual Impacts

MM BIO-1. Dewatering of the lakebed following installation of the cofferdams shall be monitored by a qualified biologist. The dewatering pump intake shall have a 0.5-inch (or smaller) mesh screen to prevent entrainment of two-striped garter snake. A qualified biologist shall use a seine (or appropriate hand-held nets) to capture any two-striped garter snakes in the dewatered area and relocate them to suitable habitat along the lake shoreline at least 500 feet from the work area.

Implementation of this measure would reduce impacts to two-striped garter snake to a level of less than significant.

3.5 CULTURAL RESOURCES

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

3.5.1 Setting

Archaeological Context. Proposed improvements are located within the former Chumash territory that extended well inland from the coast and Channel Islands to include all of Santa Barbara, most of Ventura, and parts of San Luis Obispo, Kern, and Los Angeles counties. Locally, sites related to Late Prehistoric period occupation dating from approximately A.D. 500 to historic contact, yield abundant evidence regarding the lifeways of these indigenous native people before the arrival of foreign explorers.

Early Period (about 8,000 to 3,350 years ago). Reliable evidence of Holocene (post-10,000 years ago) settlement in the region begins about 8,000 years ago. The earliest sites were located on terraces and mesas; however, settlement gradually shifted to the coast (Wlodarski, 1988). Site assemblages dating to this period often contained substantial amounts of milling stones and manos, crude choppers, and core tools (W&S, 1997). Prehistoric peoples used these tools to harvest terrestrial and sea mammals, shellfish, and fish. Mortars and pestles appear toward the end of the period, suggesting a shift towards a greater reliance on acorns.

Middle Period (about 3,350 to 800 years ago). Archaeological material dating to the Middle Period represents a significant evolution in hunter-gatherer technology. The presence of chipped stone tools increases and diversifies, projectile points became more common, and fishhooks and plank canoes (*tomol*) appear (Wlodarski, 1988; W&S, 1997). Burials dating to this period provide evidence of wealth and social stratification indicating a transition to ranked society. Excavation data from the Santa Monica Mountains demonstrate expansion to the inland region allowing trade and ceremonial exchange patterns to develop.

Late Period (about 800 to 150 years ago). The cultural complexity initiated during the Middle Period intensified in the Late Period. This period is also referred to as the Chumash Era as Chumash social and religious development peaked during this time. Villages became the main population centers with satellite camps geared toward the seasonal harvest of plants, seeds, game, and material resources (Wlodarski, 1988). The Chumash became expert craftsman of baskets, stone vessels, shell beads, *tomol*, and fishing technology. It is also likely that communication and trade with non-Chumash tribes and villages accelerated during this period.

Ethnographic Context. The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover, 1986). The Chumash living in the Project region formed the *Ventureño* dialect group of the Chumash language family (Golla, 2007). This group was named for their association with the Spanish Mission San Buenaventura, founded in 1782.

The Chumash political organization comprised a named village and the surrounding resource areas governed by a chief, known as the *Wot* (Sampson, 2013). Some higher status chiefs controlled large chiefdoms containing several villages. It is likely the Project area was included in the chiefdom *Lulapin*, whose limits extended from Malibu to just beyond modern Santa Barbara. The village *Muwu*, at modern Point Mugu approximately 23 miles west of the Project site, was the main headquarters for this chiefdom (Whitley and Clewlow, 1979; Whitley and Beaudry, 1991). Other villages included *Shimiyi* (from which Simi is derived), *Hu'wam* located at the base of Escorpión Peak, and *Ta'apu* located approximately 13 miles north of the PS/PRS site. According to ethnographic studies, inhabitants from different villages bonded through trade, joint ceremonies, and intermarriage (Sampson, 2013).

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

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

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

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

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

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

Spanish Period. The Spanish period of history in California begins with the exploration of the coast in the 16th century. Spanish explorer Juan Rodríguez Cabrillo was the first to chart and name the coastal harbors and islands of California. Spanish occupation of California began in 1769 with the establishment of Mission San Diego. The Franciscans subsequently established a chain of twenty-one missions that were linked by El Camino Real. Calabasas was located along this important transportation route, as well as the Anza Trail. To encourage the settlement of Alta California, the Spanish government also granted large tracts of land called ranchos. During the Spanish period of history, Calabasas was positioned between Rancho Las Virgenes and Mission San Fernando (C.A. Joseph & Associates, 2009).

Early Exploration. Juan Rodríguez Cabrillo led the first European expedition to explore what is now the west coast of the United States. Cabrillo departed from the port of Navidad, Mexico, on June 27, 1542. 103 days into the journey, Cabrillo's ships entered San Diego Bay. He probably landed at Ballast Point where he claimed the land for Spain. Cabrillo described the bay as "a closed and very good harbor," which he called San Miguel. The name San Miguel was changed to San Diego sixty years later by another explorer, Sebastián Vizcaíno.

The expedition continued north to Monterey Bay and may have reached as far north as Point Reyes before storms forced the ships to turn back. Discouraged by foul weather, Cabrillo decided to winter in the Channel Islands. There, after a fall incurred during a brief skirmish with Indians, Cabrillo shattered a limb and died of complications on January 3, 1543. Following Cabrillo's death, the disheartened crew again sailed north -- this time under the leadership Bartolomé Ferrer. The expedition may have reached a latitude as far north as the Rogue River in Oregon but thrashing winter winds and spoiled supplies forced them to return to Mexico.

By the mid-18th century, the eastward push of Russian forts and the presence of traders at the mouth of the Columbia River insured that the settlement of Alta California was an important part of the massive reorganization of the northern frontier of New Spain launched in 1765. Under the direction of Visitador General José de Gálvez, the plans for a new chain of California missions were formulated. Don Gaspar de Portola, who had recently been appointed governor of Baja California, was put in charge of the expedition, while Father Junípero Serra was put in charge of the missionaries. Based in Baja California, four expeditions, two by land and two by sea, set off in 1769 to colonize Alta California. As the expedition traveled north, they discovered the San Fernando Valley and named it Valle de los Encinos, Valley of the Oaks. They continued north and eventually found San Francisco Bay. On their return trip, they again entered the San Fernando Valley and possibly camped in the Calabasas area (C.A. Joseph & Associates, 2009).

Between 1774 and 1776, Juan Bautista de Anza led two overland expeditions from Sonora to Alta California. In October 1775, Anza, by then a lieutenant colonel, guided a group of 240 people from his staging area in Tubac to California. The primary motive for the expedition was to establish a presidio and mission near San Francisco Bay. In June 1776, the colonists, led by Anza's second in command Lieutenant José Joaquín Moraga, continued their journey to San Francisco Bay.

Both expeditions entered Los Angeles County from the east past San Dimas and went on to Mission San Gabriel. During the 1775-76 journey, the colonists stayed at the mission for about six weeks while Anza and some soldiers went to San Diego to quell an Indian rebellion. Later, the colonists traveled west from the mission. From an account recorded by Father Pedro Font, scholars think the expedition followed the Los Angeles River through Griffith Park to the San Fernando Valley and to the Calabasas Creek vicinity.

On February 22, 1776 the colonists made camp in the Las Virgenes area. The exact location of the campsite is unknown, but is referred to in historical documents as "Agua Escondida" or Hidden Water. This could possibly be a destroyed spring in the Deer Springs tract off of Lost Hills Road in Calabasas. The park at 3701 Lost Hills Road is named Juan Bautista de Anza Park (C.A. Joseph & Associates, 2009).

Spanish Land Grants. To further encourage the settlement of California, the Spanish government granted large tracts of land called ranchos. Rancho Las Virgenes, or El Rancho de Nuestra Señora La Reina de Las Virgenes as it was first called, was originally granted to Miguel Ortega in 1801 or 1802. Ortega was married to Maria Rosa, a Chumash Indian and was appointed a council member of Los Angeles in January 1797 by Mayor Manuel Ramirez Arrellano. The grant included the area from Liberty Canyon on the east to the edge of present-day Westlake Village on the west, north to the Simi grant, and south to the Malibu Tapia grant. The Rancho Las Virgenes grant passed to Doña María and Antonia Machado Del Reyes. They built an adobe, now referred to as the Reyes Adobe in the District of Agoura Hills (C.A. Joseph & Associates, 2009).

Mission San Fernando. Father Lasuén, who succeeded Serra as Father Presidente of the Alta California missions, founded Mission San Fernando Rey de España on September 8, 1797. It was the seventeenth mission in the chain. Situated directly on the highway leading to the fast-growing community of Los Angeles, it soon became the most popular stopping off place for travelers on El Camino Real. The number of overnight visits at the prosperous mission increased so steadily that the padres kept adding to the convento, or "hotel" facilities.

Spanish colonization led to modification in Indian cultural practices and religious beliefs but did not result in the complete acculturation and conversion process the Franciscans had hoped for. Indians selectively adopted elements of Spanish culture and Catholic beliefs and ignored others. The demise of cultural practices and religion is unfortunately related to the high mortality rate among mission neophytes. At the beginning of the mission period, Franciscans were able to recruit new Indians to replace the acculturated ones who died. By 1810, recruitment began to decline.

The decline in the neophyte population at Mission San Fernando coincided with the decreasing productivity of the mission. Soon there were frequent times when the padres were barely able to supply the produce demanded by the military headquarters in Los Angeles. Further misfortune occurred during the earthquake of 1812 when a considerable amount of rebuilding was necessary to ensure the safety of the buildings. From that time forward the padres at Mission San Fernando fought a losing fight against the encroachment of new settlers (C.A. Joseph & Associates, 2009).

American Period. After California was admitted to the Union as the thirty-first state, increasing numbers of European settlers made their homes in the Calabasas area. Basque is a geographical region on the border of France and Spain with its own language and culture. While Basques, such as Juan Bautista de Anza, were involved in early Spanish exploration, their discernible presence in the region dates from the California Gold Rush in 1849.

Miguel Leonis was one of many Basque settlers in the Calabasas area. Leonis arrived in Los Angeles in 1858 and went to work as a shepherd for Joaquín Romero, who owned half of Rancho El Escorpión. Under Leonis' ownership, the rancho prospered, and his livestock increased in number. Leonis had over 100 employees, most of whom were Mexican and Indian. He ruled like a feudal lord and was known throughout California as the "King of Calabasas" (C.A. Joseph & Associates, 2009).

Cultural Records Search. On behalf of Padre Associates, Mary Maki of Conejo Archaeological Consultants completed an in-person records search at the South Central Coast Information Center of the California Historical Resources Information System at the California State University, Fullerton on January 26, 2023.

Padre emailed a request for a Sacred Lands File search to the Native American Heritage Commission (NAHC) on January 5, 2023, to request information about sacred or traditional cultural properties that may be located within the Project site. The NAHC responded on January 19, 2023 stating that the Sacred Lands File search was negative, indicating none occur in the Project vicinity.

The records search included a review of all recorded historic-era and prehistoric archaeological sites within a 0.25-mile radius of the Project site as well as a review of known cultural resource surveys and technical reports. The State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Points of Historic Interest, and the California Office of Historic Preservation Archaeological Determinations of Eligibility also were analyzed.

The records search identified one previously recorded cultural resource within the Project site and one additional previously recorded cultural resource within the 0.25-mile search radius. Table 4 lists and describes these resources. The Malibu Lake Bridge (cultural resource P-19-187550) is located within the Project site and was constructed in 1923, with alterations in 1945 and 1968. A 2003 survey by JRP Historical Consulting determined that the bridge did not appear to meet the criteria for listing on the National Register of Historical Places nor does it appear to be a historical resource for purposes of CEQA.

Tribal Consultation. See Section 3.18.

Table 4. Previously Recorded Cultural Resources

Primary No.	Trinomial No.	Description
P-19-187550	-	Historic Medea Creek Bridge (53C-0935), constructed in 1923
P-19-191857	-	Historic Paramount Ranch

Source: South Central Coast Information Center, 2023

Note: Resources located within the Project site are listed in **bold**.

3.5.2 Impact Analysis

Section 15064.5 of the State CEQA Guidelines states that a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. Adverse changes may include demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. For the purposes of this document, a substantial adverse change to a historically significant resource is considered a significant impact. Material impairment occurs when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;

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

A cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Public Resources Code Section 5024.1) including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Is associated with the lives of persons important in our past;
 - Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - Has yielded, or may be likely to yield, information important in prehistory or history.
- a. The Malibu Lake Bridge is not considered a historic resource. In any case, the proposed Project would not adversely affect this bridge.
 - b. The cultural resources record search did not identify any archaeological resources within or immediately adjacent to the Project site. The Sacred Lands File search did not identify any tribal cultural resources near the Project site. The Project includes excavation of the Medea Creek streambanks which could result in damage or destruction of unreported cultural deposits (artifacts, burials, middens, Native American occupied sites).
 - c. Although highly unlikely, disturbance of human remains could occur during Project-related excavation.

3.5.3 Mitigation Measures and Residual Impacts

MM CR-1. The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and shall be incorporated into the Project to prevent significant impacts, should resources be found during excavation.

- A worker cultural resources sensitivity program shall be implemented prior to construction at the Project site. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected contractors, subcontractors, and other workers, with subsequent training sessions to accommodate new personnel becoming involved in Project construction. The sensitivity program shall address the cultural sensitivity of the area and how to identify these cultural resources, specific procedures to be followed in the event of an inadvertent discovery, and consequences in the event of non-compliance.
- Should any buried archaeological materials be uncovered during Project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.
- If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

Implementation of the above measures would reduce impacts to archaeological resources to a level of less than significant.

3.6 ENERGY

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

3.6.1 Setting

Energy is provided to the Project area in the form of electricity from Southern California Edison and natural gas from the Southern California Gas Company.

3.6.2 Impact Analysis

- a. Project-related construction activities would consume non-renewable energy in the form of fuels and lubricants for vehicles and equipment. This energy use would not be wasteful, inefficient or unnecessary.
- b. The proposed Project would not conflict with any State or local plan for renewable energy or energy efficiency.

3.6.3 Mitigation Measures and Residual Impacts

None required.

3.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.7.1 Setting

The Project region is encompassed within the Transverse Ranges geomorphic province of southern California. The Transverse Ranges province is oriented generally east-west, which is oblique to the general north-northwest structural trend of California mountain ranges. The Transverse Ranges province extends from the Los Angeles Basin westward to Point Arguello and is composed of Cenozoic-to Mesozoic-age sedimentary, igneous, and metamorphic rocks.

Soils. Soils of the Project site (banks and shoreline) have been mapped as Cotharin-Talepop-Urban Land complex, 0 to 50 percent slopes. The Cotharin soil series is composed of loams and the Talepop soil series is composed of gravelly loams.

Local Geology. The geology of the immediate Project area is mostly composed of Conejo Volcanics (basaltic flows and breccia). However, the area west of the Lake Vista Drive bridge (Malibou Lake Mountain Club) is underlain by Quaternary alluvial gravel, sand and clay of floodplains.

Geologic Hazards. Earthquake Faults. The entire Southern California region, including the Project area, is located within a seismically active area. The nearest fault is the Malibu Coast Fault, located approximately 4.9 miles to the south of the Project site. This fault is considered active as evidence of movement in the late Quaternary period has been reported (Treiman, 1994).

Seismic Ground Shaking. Ground shaking is the cause of most damage during earthquakes. The Project area has a 10 percent chance of exceeding a peak ground acceleration of 0.47 g (alluvium conditions) in 50 years (California Department of Conservation, 2001).

Liquefaction. Liquefaction occurs when strong, cyclic motions during an earthquake cause water-saturated soils to lose their cohesion and take on a liquid state. Liquefied soils are unstable and can subject overlying structures to substantial damage. The occurrence of liquefaction is highly dependent on local soil properties, depth to groundwater, and the strength and duration of a given ground-shaking event. Areas on both sides of the Lake Vista Drive bridge are located within a liquefaction hazard zone as designated by the California Department of Conservation (2001).

Seiche and Tsunami Hazards. Tsunamis are seismically induced sea waves that can be of sufficient size to cause substantial damage to coastal areas. The last major tsunami in Southern California was in 1812, generated by an earthquake in the Santa Barbara Channel. The largest tsunami wave amplitude recorded by modern instrumentation in the region was 8.8 feet, associated with the Chilean earthquake of 1960. In 2010, an earthquake in Chile generated a tsunami which caused minor damage to structures and vessels in the Ventura Harbor. A tsunami generated by a volcanic eruption in Tonga in January 2022 caused minor damage to a few boats in the Ventura Harbor. The nearest tsunami inundation hazard area is located approximately 5.3 miles south of the Project site (California Office of Emergency Services, 2021, maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation).

Seiches are oscillating waves that occur in enclosed or semi-enclosed bodies of water such as lakes and bays. Seiches are commonly caused by earthquakes. There is no record of a seiche occurring in the region. Malibou Lake is subject to a seiche given a sufficiently large and nearby seismic event.

Landslides/Mudflow Hazard. Areas of high landslide or mudflow potential are typically hillside areas with slopes of greater than 10 percent. Areas on both sides of the Lake Vista Drive bridge have been designated a seismically-induced landslide hazard area (California Department of Conservation, 2001).

Expansive Soils Hazards. Expansive soils are primarily clay-rich soils subject to changes in volume with changes in moisture content. Alluvial soils west of the Lake Vista Drive bridge may be expansive.

3.7.2 Impact Analysis

- a. The proposed replacement siphon and associated tie-in pipes and manholes have been designed to accommodate the local geologic environment and would be constructed according to applicable building and plumbing codes. The proposed pipe material (HDPE) is flexible and resistant to damage from seismic events. The existing siphon is damaged and subject to failure in a seismic event, possibly resulting in environmental impacts. The proposed replacement siphon would eliminate this risk. Overall, the proposed Project would not result in any new seismic hazards and would not increase the number of persons or property exposed to existing seismic hazards.
- b. Areas affected by excavation related to siphon replacement would be backfilled and restored to pre-project topographic contours, including the lakebed and streambanks. Therefore, substantial soil erosion or loss of topsoil is not anticipated.
- c. Project components (including the replacement siphon and associated tie-in pipes and manholes) have been designed to withstand and avoid increasing the potential for landslides, lateral spreading, liquefaction or collapse.
- d. Expansive soils may be encountered during Project construction activities; however, Project components have been designed and would be constructed to withstand anticipated effects of expansive soils. Overall, the proposed Project would not expose the public or other structures to substantial adverse effects related to expansive soils.
- e. Septic waste disposal systems are not proposed as part of the Project; therefore, no impacts would result.
- f. The online collections database of the University of California Museum of Paleontology indicates Miocene era marine invertebrates (gastropods and bivalves) and an Oligocene era primitive mammal (*Eutheria*) have been collected in the Malibu Canyon area. Intact geologic formations that may contain fossils would not be affected by Project-related earthwork; therefore, impacts to paleontological resources are not anticipated. No unique geologic features have been identified in the Project area, and none would be adversely affected by Project implementation.

3.7.3 Mitigation Measures and Residual Impacts

None required.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Setting

Climate change, often referred to as “global warming” is a global environmental issue that refers to any significant change in measures of climate, including temperature, precipitation, or wind. Climate change refers to variations from baseline conditions that extend for a period (decades or longer) of time and is a result of both natural factors, such as volcanic eruptions, and anthropogenic, or man-made, factors including changes in land-use and burning of fossil fuels. Anthropogenic activities such as deforestation and fossil fuel combustion emit heat-trapping GHGs, defined as any gas that absorbs infrared radiation within the atmosphere.

2022 was the sixth-warmest year on record based on global temperature data. The 2022 surface temperature was 1.55 °F warmer than the 20th-century average of 57.0 °F and 1.90 °F warmer than the pre-industrial period (1880-1900). The 10 warmest years in the historical record have all occurred since 2010.

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

- Carbon Dioxide (CO₂): natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic degassing; anthropogenic sources of CO₂ include burning fuels such as coal, oil, natural gas, and wood.
- Methane (CH₄): natural sources include wetlands, permafrost, oceans and wildfires; anthropogenic sources include fossil fuel production, rice cultivation, biomass burning, animal husbandry (fermentation during manure management), and landfills.
- Nitrous Oxide (N₂O): natural sources include microbial processes in soil and water, including those reactions which occur in nitrogen-rich fertilizers; anthropogenic sources include industrial processes, fuel combustion, aerosol spray propellant, and use of racing fuels.
- Chlorofluorocarbons (CFCs): no natural sources, synthesized for use as refrigerants, aerosol propellants, and cleaning solvents.
- Hydrofluorocarbons (HFCs): no natural sources, synthesized for use in refrigeration, air conditioning, foam blowing, aerosols, and fire extinguishing.

- Sulfur Hexafluoride (SF₆): no natural sources, synthesized for use as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF₆ has a long lifespan and high global warming potential.
- Ozone: unlike the other GHGs, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Due to the nature of ozone, and because this Project is not anticipated to contribute a significant level of ozone, it is excluded from consideration in this analysis.
- Water Vapor: the most abundant and variable GHG in the atmosphere. It is not considered a pollutant and maintains a climate necessary for life. Because this Project is not anticipated to contribute significant levels of water vapor to the environment, it is excluded from consideration in this analysis.

The primary GHGs that would be emitted during construction and operation of the proposed Project are CO₂, CH₄ and N₂O. The Project is not expected to have any associated use or release of HFCs, CFCs or SF₆.

CO₂ is also used as a reference gas for climate change. To account for different GHG global warming potentials, emissions are often quantified and reported as CO₂ equivalents (CO₂E). Currently, the CO₂ global warming potential is set at a reference value of 1, CH₄ has a global warming potential of 27.9 (i.e., 1 ton of methane has the same global warming potential as 27.9 tons of CO₂), while nitrous oxide has a global warming potential of 273.

Climate change is having and will continue to have widespread impacts on California's environment, water supply, energy consumption, public health and economy. Many impacts already occur, including increased fires, floods, severe storms, and heat waves. Documented effects of climate change in California include increased average, maximum, and minimum temperatures; decreased spring runoff to the Sacramento River; shrinking glaciers in the Sierra Nevada; sea-level rise at the Golden Gate Bridge and San Francisco Bay; warmer temperatures in Lake Tahoe, Mono Lake, and other major lakes; and plant and animal species found at changed elevations (Governor's Office of Planning and Research, 2018).

The primary legislation affecting GHG emissions in California is the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). AB 32 (Nuñez; Chapter 488, Statutes of 2006) focuses on reducing GHG emissions in California and required the State to reduce GHG emissions to 1990 levels by 2020. CARB prepared a Draft Scoping Plan for Climate Change in 2008 pursuant to AB 32. The Climate Change Scoping Plan was updated in May 2014 and November 2017.

In 2016, the State met the AB 32 target, 4 years early. The State Legislature passed Senate Bill (SB) 32 (Pavley; Chapter 249, Statutes of 2016), which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation AB 197, which provides additional direction for developing the Scoping Plan. The 2017 update to the Scoping Plan focuses on strategies to achieve the 2030 target set by Executive Order B-30-15 and codified by SB 32.

Executive Order B-55-18, signed September 10, 2018, sets a goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of GHGs from the atmosphere, including through sequestration in forests, soils, and other natural landscapes. CARB finalized the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022 which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85 percent below 1990 levels no later than 2045.

3.8.2 Impact Analysis

The District has not adopted any GHG emissions significance thresholds. To date, GHG thresholds of significance have not been adopted by Los Angeles County or SCAQMD. On December 5, 2008, the SCAQMD governing board adopted an interim GHG significance threshold of 10,000 metric tons per year CO₂ equivalent (including amortized construction emissions) for industrial projects and a screening threshold of 3,000 metric tons per year CO₂ equivalent for commercial and residential projects. The proposed Project is limited to replacement of an existing wastewater pipeline and would not result in any long-term GHG emissions. Due to the lack of any other applicable threshold, the industrial project threshold is used in this analysis to determine the significance of the contribution of the Project to global climate change.

- a. The proposed Project would not result in long-term GHG emissions. However, Project construction would generate GHG emissions, primarily in the form of CO₂ exhaust emissions from the use of off-road construction equipment and on-road vehicles. Table 5 provides a summary of total construction GHG emissions and a comparison to the annual significance threshold. Project GHG emissions would be substantially less than the significance threshold (see Table 5). Therefore, construction-related GHG emissions are considered a less than significant impact on global climate change.

Table 5. Construction GHG Emissions Summary (metric tons)

Source	CO ₂	CH ₄	N ₂ O	CO ₂ E
Heavy equipment	203.8	1.08	0.25	205.2
Motor vehicles	24.4	<0.01	<0.01	24.9
Total Construction	228.2	1.08	0.25	230.1
Construction GHG Emissions Amortized over 30 Years				7.7
<i>Annual Significance Threshold</i>				<i>10,000</i>

- b. The proposed Project would not involve any sources of greenhouse gases that are regulated under the State cap and trade program, or other plans or policies regulating these emissions.

3.8.3 Mitigation Measures and Residual Impacts

None required.

3.9 HAZARDS AND HAZARDOUS MATERIALS/RISK OF UPSET

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.9.1 Setting

The Project site has not supported any past land uses that may involve the use, transportation, disposal or spillage of hazardous materials. Based on a review of the State Water Resources Control Board's Geotracker data base, a leaking underground gasoline storage tank at the Los Angeles County's Agoura Road Yard (1.1 miles west of the Project site) was reported leaking in 1998. The tank and contaminated soil was removed and the case was closed by the State Water Resources Control Board on June 19, 2008.

3.9.2 Impact Analysis

- a. The proposed Project would not use, transport or dispose of hazardous materials; however, diesel fuel may be brought to the Project site using a maintenance truck to fuel construction equipment. No storage of diesel fuel would occur on-site. Therefore, significant hazards to the public or environment related to hazardous materials would not occur.
- b. There are no sites with contaminated soil or groundwater that may be disturbed by Project construction and result in an environmental hazard.
- c. The nearest school is Agoura High School located approximately 2.8 miles north of the Project site. The proposed Project would not involve the use of hazardous materials, hazardous waste or result in hazardous emissions.
- d. No hazardous materials sites compiled pursuant to Government Code Section 65962.5 are located in the Project area. The proposed Project would not affect any such sites or result in a related hazard to the public or the environment.
- e. The nearest airport is the Santa Monica Airport, located approximately 18.2 miles to the southeast. The proposed Project does involve any change in land use or other features that could increase safety or noise hazards resulting from airport proximity.
- f. The proposed Project would require closure of Lake Vista Drive for short periods during construction. However, all land uses would continue to have access to Mulholland Highway for emergency response or evacuation purposes. In the long-term, the proposed Project would not involve any change in land use or impair the use of the affected roadways for emergency response or evacuation.
- g. Project components would either be buried (HDPE pipe) or composed of non-flammable materials (steel, concrete, asphalt, gravel) and would not involve any habitable structures or increase the risk of loss, injury or death from wildland fires.

3.9.3 Mitigation Measures and Residual Impacts

None required.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:				
1. Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.10.1 Setting

Description of Surface Waters. The Project site is located at the confluence of Medea Creek and Malibou Lake. Medea Creek flows south from its headwaters on the south slope of Simi Peak into Malibou Lake, which is the confluence with Triunfo Canyon Creek. Malibu Creek begins at the outlet of Malibou Lake and discharges to the Pacific Ocean. Malibou Lake was formed by a dam constructed in 1922 and is operated by the Malibou Lake Mountain Club. The Lake is periodically dredged of excess sediment, most recently in 2019.

Groundwater Environment. The Project site is not located within a designated groundwater basin. The Russell Valley Groundwater Basin is located approximately 2.2 miles to the north. Potable water consumed by the Malibou Lake community is composed of imported water (State Water Project) supplied by the Las Virgenes Municipal Water District.

Groundwater Management. The 2014 Sustainable Groundwater Management Act requires establishment of a groundwater sustainability agency within two years from the date in which the basin was designated medium or high priority, and adoption of a groundwater sustainability plan within 5 years of the date of said designation. The Russell Valley Groundwater Basin has been designated a very low priority basin and preparation of groundwater sustainability plan is not required.

Clean Water Act. In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Consistent with the requirements of Clean Water Act Section 303(d) (approved 2020-2022 Integrated Report), the State Water Resources Control Board has identified Medea Creek and Malibou lake as impaired waters because identified beneficial uses are not consistently supported. Impairments for Medea Creek upstream of Malibou Lake to its confluence with Lindero Canyon Creek are associated with algae, benthic community effects, indicator bacteria, sedimentation/siltation, selenium and trash. Impairments for Malibou Lake are associated with algae, dieldrin, eutrophic conditions and organic enrichment/low dissolved oxygen.

Total Maximum Daily Loads (TMDLs) have been developed (as required by the Clean Water Act) for many of the impairments in the watershed. The TMDL is a number that represents the assimilative capacity of a receiving water to absorb a pollutant and is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources plus an allotment for natural background loading, and a margin of safety. TMDLs can be expressed in terms of mass per time (the traditional approach) or in other ways such as toxicity or a percentage reduction or other appropriate measure relating to a water quality objective. A TMDL is implemented by reallocating the total allowable pollution among the different pollutant sources (through the permitting process or other regulatory means) to ensure that the water quality objectives are achieved. TMDLs have not been developed for Medea Creek. TMDLs in effect in all or parts of Malibu Creek include those for nutrients, and nutrients and sediment for benthic community impairment (primarily the lagoon).

Water Quality Control Plan, Los Angeles Region. The California Porter-Cologne Act assigns the State Water Resources Control Board and Regional Water Quality Control Boards with the responsibility of protecting surface water and ground water quality in California. The Project component sites is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). Per the requirements of the Clean Water Act and the California Porter-Cologne Act, LARWQCB has prepared a Water Quality Control Plan for the watersheds under its jurisdiction, last updated in 2014. The Water Quality Control Plan has been designed to support the intentions of the Clean Water Act and the Porter-Cologne Act by (1) characterizing watersheds within the Los Angeles Region; (2) identifying beneficial uses that exist or have the potential to exist in each water body; (3) establishing water quality objectives for each water body to protect beneficial uses or allow their restoration, and; (4) providing an implementation program that achieves water quality objectives. Implementation program measures include monitoring, permitting and enforcement activities.

The Water Quality Control Plan establishes regional qualitative and/or quantitative water objectives that apply to all inland surface waters, estuaries and enclosed bays in the Los Angeles Region. The regional objectives pertain to the following water quality parameters: ammonia, bacteria (coliform), bioaccumulation, bio-chemical oxygen demand, bio-stimulatory substances (e.g., nutrients), chemical constituents, chlorine, color, exotic vegetation, floating material, methylene blue activated substances, mineral quality, nitrogen, oil and grease, dissolved oxygen, pesticides, pH, polychlorinated biphenyls, priority pollutants, radioactive substances, solids, suspended or settleable materials, taste and odor, temperature, toxicity and turbidity.

The Water Quality Control Plan also provides water quality objectives for specific beneficial uses such as municipal water supply, agricultural supply, water contact recreation, non-water contact recreation, cold freshwater aquatic life habitat, fish spawning habitat and shellfish harvesting. Beneficial uses established for Medea Creek are municipal water supply (potential), groundwater recharge (intermittent), warm freshwater habitat (intermittent), cold freshwater habitat (potential), wildlife habitat, rare, threatened or endangered species habitat, wetlands, water contact recreation (intermittent) and non-water contact recreation (intermittent). Beneficial uses established for Malibou Lake are municipal water supply (potential), navigation, warm freshwater habitat, wildlife habitat, rare, threatened or endangered species habitat, wetland habitat, water contact recreation and non-water contact recreation.

Water quality parameters of concern and numeric objectives vary considerably depending on the nature of the beneficial use. For example, objectives for municipal water supply and fish spawning habitat are much more stringent and apply to a greater number of parameters than those for agricultural or industrial water supply. Depending on the type of beneficial use, objectives can apply to parameters such as specific organic chemicals, heavy metals, inorganic ions, nutrients, pH, bacteria levels, temperature, dissolved oxygen, etc. In cases where multiple beneficial uses are designated for a given water body (as is the case for local water bodies), a combination of objectives apply, some of which are for the same parameters. In these cases, the most stringent objective for each water quality parameter applies to the water body.

Storm Water Management. Storm water (wet weather) and non-storm water (dry weather) discharges from municipal separate storm sewer systems (MS4), or storm drain systems within the coastal watersheds of Los Angeles County are regulated under Order No. R4-2012-0175 issued by the LARWQCB (as amended by State Water Resources Control Board Order WQ 2015-0075). The permit effectively prohibits non-storm discharges into the MS4 and receiving waters with certain exceptions. It also requires that treatment controls to be designed to meet certain performance criteria, that each Permittee implement programs and measures to comply with the TMDLs' waste load allocations for the MS4 specified in the permit, and that regular inspections of various types of commercial facilities be undertaken. A monitoring program must also be implemented.

Flood Hazard. The Project site is located within a special flood hazard area, with a 1% annual chance flood hazard and base elevation of 737 feet (Flood Insurance Rate Map panel 06037C1507G, effective 4/4/18). This flood hazard area includes portions of the Malibou Lake Mountain Club facilities (picnic area, boat launch, swimming pool) west of the Lake Vista Drive bridge.

3.10.2 Impact Assessment

- a. The proposed Project would not result in direct discharges that may affect surface water or groundwater quality. Wastewater in the existing siphon would be pumped out before pipe removal and discharged to the existing sewer manhole. Surface water pumped from the siphon replacement work area in the lakebed may be turbid and exceed water quality objectives. Therefore, this water would be discharged to the District's sewer for treatment at the Tapia Water Reclamation Facility.

Storm water run-off from the Project site during construction may degrade surface water quality. The Project would disturb over one acre of land such that it would require coverage under the NPDES General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities (Water Quality Order 2009-0009-DWQ). As required by the conditions of the General Permit, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared, which would include best management practices to be implemented and a monitoring program. The intent of the SWPPP would be to prevent Project-related pollutants from contacting surface water and prevent products of erosion from moving off-site into receiving waters.

- b. The proposed Project would not result in any increase in groundwater usage or otherwise affect groundwater management of any groundwater basin.
- c. The Project would not alter existing drainage patterns or alter the course of a stream or river. Areas affected by excavation would be backfilled and restored to pre-project topographic contours, including the lakebed and banks of Medea Creek. Therefore, substantial soil erosion or siltation is not anticipated. The proposed access roads and manholes would result in an increase of approximately 0.08 acres of impervious surfaces. Stormwater run-off from these areas would drain directly to Medea Creek and would not cause local flooding or affect any existing drainage systems. The proposed siphon would be fully buried and would not impede or redirect flood flows.
- d. The proposed Project would not increase the risk of the release of pollutants (including untreated wastewater conveyed in the buried siphon) in the event of inundation by floodwaters or seiche waves. In contrast to the existing siphon, the proposed replacement siphon would be more resistant to damage from storm flows and reduce the risk of wastewater discharge during an extreme storm event.
- e. See the discussion under parts a. and b. above.

3.10.3 Mitigation Measures and Residual Impacts

None required.

3.11 LAND USE AND PLANNING

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

3.11.1 Setting

The Project site is located with the Los Angeles County Santa Monica Mountains North planning area and subject to the Santa Monica Mountains North Area Plan. The Project site is zoned as Open Space (O-S) within Medea Creek and Malibou Lake, Residential (R-R-1) west and northeast of the Lake Vista Drive Bridge, and Residential (R-1-20) southeast of the Lake Vista Drive Bridge.

3.11.2 Impact Analysis

- a. The proposed Project would not result in any change in land use or otherwise divide an established community.
- b. The proposed Project would be consistent with applicable Los Angeles County policies and regulations protecting environmental resources.
- c. The Project site is not subject to a habitat conservation plan or natural community conservation plan and would not conflict with any such plan.

3.11.3 Mitigation Measures and Residual Impacts

None required.

3.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Setting

Petroleum. One idle oil/gas well is located approximately 0.4 miles north of the Project site. The nearest active oil well is located in the Oak Park Oil Field, approximately 13.7 miles north of the Project site (California Department of Conservation Well Finder GIS application, accessed on January 31, 2023).

Aggregate. Non-petroleum mineral resources in the Project region are limited to construction-grade sand and gravel. The Project site has been assigned a Mineral Land Classification of MRZ-1 by the California Division of Mines and Geology (1994), meaning the area supports no significant aggregate deposits. The nearest aggregate production site is Tapo Rock and Sand, located approximately 15.3 miles north of the Project site.

3.12.2 Impact Analysis

- a. The proposed Project would not hamper the extraction of aggregate resources in the region. Therefore, no impacts to such resources would occur as result of Project implementation.
- b. The proposed Project would not adversely affect petroleum production or other mineral resource production sites, or the availability of these resources.

3.12.3 Mitigation Measures and Residual Impacts

None required.

3.13 NOISE

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.13.1 Setting

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

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Because decibels are logarithmic units, sound pressure level cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

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

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in noise impact assessments. Noise levels for impact assessments are typically reported in terms of A-weighted decibels or dBA.

As discussed above, doubling sound energy results in a three dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern one dB changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the midfrequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of one to two dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of three dB in typical noisy environments. Further, a five dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a three dB increase in sound, would generally be perceived as barely detectable.

Noise Descriptors. Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in community noise analysis.

- Equivalent Sound Level (Leq) represents an average of the sound energy occurring over a specified period. The one-hour A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a one-hour period.
- Percentile-Exceeded Sound Level represents the sound level exceeded for a given percentage of a specified period (e.g., L10 is the sound level exceeded 10% of the time, and L90 is the sound level exceeded 90% of the time).
- Maximum Sound Level is the highest instantaneous sound level measured during a specified period.
- Day-Night Level is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- Community Noise Equivalent Level (CNEL) is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a five dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

Sensitive Receptors. Consistent with the Santa Monica Mountains North Area Plan Noise Technical Report, sensitive receptors are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where individuals expect quiet to be an essential element of the location. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise and potential sleep disruptions. Additional land uses, such as parks, historic sites, cemeteries, and recreation areas, are also considered sensitive to exterior noise. Schools, places of worship, hotels, libraries, nursing homes, retirement residences, and other places where low interior noise levels are essential are also considered noise sensitive land uses/sensitive receptors.

Characteristics of Ground-borne Vibration and Noise. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

The effects of ground-borne vibration include detectable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion descriptors is zero. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that are experienced by buildings.

Project Area Noise Environment. The noise environment of the Project site is dominated by traffic noise on Lake Vista Drive, and more distant traffic noise on Mulholland Highway. Minor noise sources include air conditioners, bird calls, aircraft overflights and human voices.

Project Site Noise Measurements. Baseline ambient noise levels were measured at the Project site (east side of the Lake Vista Drive bridge) on August 8, 2018 as part of a Noise Technical Report prepared for the Santa Monica Mountains North Area Plan. Ambient noise data collected is summarized in Table 6.

Table 6. Summary of Ambient Noise Data Collected on August 8, 2018 (dBA)

Time Period	Noise Level (dBA Lmin)	Noise Level (dBA Lmax)	Noise Level (dBA Leq)
1:00 to 2:00 p.m.	38.8	70.3	51.4
8:00 to 9:00 p.m.	31.9	80.1	50.8

Noise Restrictions. Operation. Los Angeles County has developed exterior noise standards as part of its Noise Control Ordinance, which include a residential daytime standard of 50 dBA L50. Since the proposed Project would not involve any long-term or operational noise, these standards are not applicable.

Construction. Construction noise generated by mobile equipment at single-family residential structures shall not exceed 75 dBA Leq (except Sundays and legal holidays) from 7 a.m. to 8 p.m. and 60 dBA Leq from 8 p.m. to 7 a.m. including Sundays and legal holidays (Los Angeles County Code Section 12.08.440). Construction noise generated by stationary equipment at single-family residential structures shall not exceed 60 dBA Leq (except Sundays and legal holidays) from 7 a.m. to 8 p.m. and 50 dBA Leq from 8 p.m. to 7 a.m. including Sundays and legal holidays (Los Angeles County Code Section 12.08.440).

Vibration Concerns. Caltrans has published a Transportation and Construction Vibration Guidance Manual, which provides criteria for allowable vibration in terms of potential annoyance to people, as well as potential damage to buildings. The following thresholds for continuous/frequent intermittent sources such as construction equipment are provided by Caltrans (2013), expressed as the peak particle velocity (PPV, inch/seconds):

- Human effects: barely perceptible – 0.01; distinctly perceptible – 0.04; strongly perceptible – 0.10
- Damage to structures: fragile buildings - 0.1; older residential – 0.3; new residential and commercial – 0.5

3.13.2 Impact Analysis

- a. The proposed Project would not result in any long-term noise. A peak day construction scenario (siphon installation) was analyzed using the Roadway Construction Noise Model developed by the Federal Highway Administration to identify peak noise levels at the nearest residence (on Laguna Circle Drive, northeast of the Lake Vista Drive bridge). Equipment assumed to be operating during peak hour included the sewer bypass pump, generator powering the pump, two wheeled loaders, a dozer and excavator. The modeled construction noise level for this scenario is 77.5 dBA at the adjacent residence. This value exceeds the County's daytime construction noise restriction for mobile equipment of 75 dBA Leq.

The sewer bypass pump and generator would operate continuously throughout the construction period, including evening and nighttime hours. Noise associated with this equipment was estimated at the nearest residence using the Roadway Construction Noise Model. The modeled construction noise level for this scenario is 66.5 dBA at the adjacent residence. This value exceeds the County's construction noise restrictions for stationary equipment. Therefore, Project-related construction noise impacts are considered potentially significant.

- b. Heavy equipment associated with siphon installation would generate the highest ground-borne noise and vibration levels of Project construction activities. The peak day vibration level (PPV) was estimated for siphon installation using California Department of Transportation’s Transportation and Construction Vibration Guidance Manual. The estimated vibration level is 0.021 inches/second at the nearest structure (northeast residence), which would be barely perceptible and would not result in any structural damage. Overall, Project-related ground-borne noise and vibration would be short-term, not result in any damage to structures and considered less than significant.
- c. The Project site is not located in proximity to a public or private airport and would not increase the exposure of the public to aviation noise.

3.13.3 Mitigation Measures and Residual Impacts

MM N-1. A minimum 10-foot-tall temporary sound wall (with a sound transmission class of STC-30 or better, minimum sound transmission loss of 11 dB at 63 hertz) shall be installed along the top of the east bank of Medea Creek to reduce noise impacts to the adjacent residence. The sound wall shall extend from Lake Vista Drive approximately 200 feet to the north and located to not prevent access to the adjacent residence. The sound wall may be removed following completion of siphon installation (when equipment activity and noise levels are reduced) to allow construction of the eastern access road and connection manholes, and installation of tie-in pipes.

MM N-2. The sewer bypass pump shall be located below grade or surrounded with acoustic shielding. The electrical generator powering the pump shall be provided with a factory-supplied sound attenuated enclosure.

Implementation of the above measures would reduce construction noise impacts to a level of less than significant.

3.14 POPULATION AND HOUSING

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

3.14.1 Setting

Based on estimates provided by the California Department of Finance, the January 2022 population of Los Angeles County is 9,861,224 and the number of housing units is 3,635,136.

3.14.2 Impact Analysis

- a. The proposed Project does not involve any new land uses or extension of infrastructure. No increase in wastewater conveyance or treatment capacity would occur as a result of the Project. Therefore, the Project would not induce development or population growth.
- b. No people or housing would be displaced by proposed Project components and construction of replacement housing would not be necessary.

3.14.3 Mitigation Measures and Residual Impacts

None required.

3.15 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 Setting

The Los Angeles County Fire Department provides fire protection services to the Project site. The nearest fire station is Station no. 65, located at 4206 N. Cornell Road in Agoura Hills.

The Los Angeles County Sheriff’s Department provides police protection service to the Project site. The nearest Sheriff station is the Malibu/Lost Hills Sheriff’s Station located at 27050 Agoura Road in the City of Agoura Hills.

The nearest school is Agoura High School located 2.8 miles to the north of the Project site.

3.15.2 Impact Analysis

- a. The proposed Project would not provide or increase the demand for public services or facilities. Therefore, no impacts to schools, parks and other public facilities or increased demand for such facilities would occur.

3.15.3 Mitigation Measures and Residual Impacts

None required.

3.16 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 Setting

Recreational areas in proximity to the Project site include Malibu Creek State Park (to the east) and Paramount Ranch (part of the Santa Monica Mountains National Recreation Area, located to the north). Recreational facilities/activities (fishing, sailing, rowing, picnicking) within and adjacent to Malibou Lake are private and only available to residents.

3.16.2 Impact Analysis

- a. The proposed Project would not result in population growth and would not increase the use of existing neighborhood or regional parks, or any other recreational facilities. As such, the proposed Project would not result in the accelerated physical deterioration of any recreational facilities.
- b. The proposed Project would not involve the construction or expansion of any recreational facilities. Thus, the Project would not have any impacts on the physical environment associated with the construction or use of recreational facilities.

3.16.3 Mitigation Measures and Residual Impacts

None required.

3.17 TRANSPORTATION

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

3.17.1 Setting

The Project site is accessed from Mulholland Highway via Lake Vista Drive. Some motorists may access the Project site from Kanan Road via Cornell Road which becomes Lake Vista Drive south of the Mulholland Highway intersection.

3.17.2 Impact Analysis

- a. The proposed Project does not include any new land uses and would not create demand for transportation facilities and would not conflict with local or regional transportation planning.
- b. The proposed Project would generate temporary construction-related vehicle trips, vehicle miles traveled and associated climate change and air quality impacts. The proposed Project would generate up to 22 one-way vehicle trips per day associated with worker and equipment transportation and transportation of construction materials. No new long-term vehicle trips would be generated. Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact (Governor’s Office of Planning and Research, 2018). Therefore, the Project is consistent with Section 15064.3 of the State CEQA Guidelines.
- c. The proposed Project does not involve any roadway improvements or otherwise include features that could increase traffic hazards.
- d. The proposed Project would not require emergency services or create conditions that would impede emergency access for adjacent land uses.

3.17.3 Mitigation Measures and Residual Impacts

None required.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Setting

The cultural resources record search and Sacred Lands File search did not identify any tribal resources in the immediate project area. The District mailed formal notification of the proposed Project to traditionally and culturally affiliated tribes as required by Public Resources Code Section 21080.3.1(b) on February 17, 2023. The Fernandeno Tataviam Band of Mission Indians responded by email on February 27, 2023 requesting an on-line application form be completed to initiate consultation. The District completed the application form and submitted the form with a \$75 application fee on February 28, 2023. The District provided the internal draft Initial Study, and the results of the cultural resources record search and Sacred Lands File search to the tribal contact (Sarah Brunzell). Ms. Brunzell assigned the project a sensitivity level of “Medium” and requested a \$450 consultation fee. The District responded on March 7, 2023, indicating a willingness to consult but did not feel the tribe has the legal authority to charge a consultation fee. The tribe has not responded to date.

3.18.2 Impact Analysis

- a. No tribal resources were identified by the cultural resources record search and Sacred Lands File search, or by any traditionally and culturally affiliated tribes.

3.18.3 Mitigation Measures and Residual Impacts

None required.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Setting

Utility providers serving the Project area include:

- Water supply: Las Virgenes Municipal Water District
- Municipal wastewater collection and treatment: Las Virgenes Municipal Water District
- Solid waste collection: Waste Management, Inc.
- Solid waste disposal: Calabasas Landfill

3.19.2 Impact Analysis

- a. The proposed Project would not involve any new land uses that may require the construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas or telecommunications facilities.

- b. Small amounts of potable water would be used during construction of the proposed Project for soil compaction, concrete mixing and dust control. However, this temporary consumption would not affect the Las Virgenes Municipal Water District’s ability to meet the demand for existing and reasonably foreseeable development.
- c. The proposed Project would not generate municipal wastewater and would not affect the capacity of any wastewater treatment provider. Surface water pumped from the siphon replacement work area in the lakebed would be discharged to the District’s sewer and treated at the Tapia Water Reclamation Facility. This discharge would be a one-time event and would not affect the District’s ability to serve its customers.
- d. A small amount of solid waste would be generated by Project construction, including demolition-related materials (steel, concrete) and construction materials packaging. These materials would be recycled to the extent feasible and would not affect the capacity of local landfills or impair attainment of State-mandated municipal solid waste reduction goals. Any excess earth material generated by construction activities would be offered to contractors for use at other construction sites.
- e. The District complies with all federal, state and local statutes relating to solid waste, and would continue to do so during the construction of the proposed Project. As such, no impacts of this type are expected to result.

3.19.3 Mitigation Measures and Residual Impacts

None required.

3.20 WILDFIRE

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

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 Setting

The Project site is located within a Very High Fire Hazard Severity Zone as designed by the California Department of Forestry and Fire Protection.

3.20.2 Impact Analysis

- a. The proposed Project would not impair emergency response or evacuation.
- b. The proposed Project would not involve any new habitable structures or have any occupants and would not exacerbate existing wildfire risks.
- c. The proposed Project would not require any supporting infrastructure or increased maintenance of existing infrastructure supporting wildfire response.
- d. The proposed Project would not increase the risk of people or structures to wildfire-related flooding and landslides.

3.20.3 Mitigation Measures and Residual Impacts

None required.

4.0 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the State CEQA Guidelines, the lead agency (District) must identify cumulative impacts, determine their significance and determine if the effects of a project are cumulatively considerable.

4.1 DESCRIPTION OF CUMULATIVE PROJECTS

The following is a list of recently approved projects and projects currently under review in the Project area that may substantially contribute to significant impacts to the environment:

- City of Agoura Hills: 60 duplex residential units and church facility (under review)
- City of Agoura Hills: 60 multi-family townhouse units (under review)
- City of Agoura Hills: 20,000 square foot restaurant and play areas (under review)
- City of Agoura Hills: mixed use development with 78 multi-family residential units, office, retail and restaurant uses (under review)
- City of Agoura Hills: mixed use development with 15 residential units and retail uses (under review)
- City of Agoura Hills: 76 bed senior care facility (under review)
- City of Agoura Hills: two industrial buildings totaling 72,000 square feet (under review)
- City of Agoura Hills: seven industrial buildings totaling 103,000 square feet (approved)
- City of Agoura Hills: five office buildings totaling 23,000 square feet (approved)
- City of Calabasas: Mulholland Highway Safety Improvements, addresses 2.4 miles of Mulholland Highway, including widening the road shoulder, realigning the roadway centerline as needed to provide wider shoulders, slope grading to prevent erosion, slope stabilization improvements, a retaining wall and intersection improvements (under review).

4.2 DISCUSSION OF CUMULATIVE IMPACTS

4.2.1 Aesthetics

The proposed Project would not incrementally contribute to aesthetics impacts of the cumulative projects because none of the other cumulative projects would be visible from the same public viewing areas.

4.2.2 Air Quality

Construction-related air pollutant emissions associated with the Project would incrementally contribute to air pollutant emissions of the cumulative projects. However, the Project's incremental contribution (as mitigated) to cumulative air quality impacts would not be considerable.

4.2.3 Biological Resources

The proposed Project would not incrementally contribute to upland habitat loss and removal of oak trees that would occur with implementation of the cumulative projects. Overall, the Project's incremental contribution to cumulative biological resources impacts would not be considerable.

4.2.4 Cultural Resources

The proposed Project may incrementally contribute to cultural resources impacts of the cumulative projects. However, mitigation is provided to avoid significant impacts and the Project's incremental contribution to cumulative cultural resources impacts would not be considerable.

4.2.5 Geology and Soils

Impacts of the proposed Project related to geology and soils would be site specific and not incrementally contribute to impacts of the cumulative projects.

4.2.6 Greenhouse Gas Emissions

By their nature and potential global effects, greenhouse gas emissions are a cumulative issue. The Project would generate greenhouse gas emissions during construction, which would incrementally contribute to cumulative impacts. However, Project emissions would be much less than any adopted threshold and are considered less than significant on a cumulative basis.

4.2.7 Water Resources

Potential construction-related surface water quality degradation associated with the Project may incrementally contribute to water quality impacts of cumulative projects that drain to Medea Creek. Implementation of a stormwater pollution prevention plan required under the NPDES General Permit would minimize water quality impacts such that the incremental contribution to cumulative water quality impacts would not be considerable.

4.2.8 Noise

Construction-related noise associated with the cumulative projects would not be additive, because it would not affect the same noise receptors. The Project's noise impacts would be mitigated and the incremental contribution to cumulative noise impacts would not be considerable.

4.2.9 Transportation

Temporary construction-related vehicle trips and miles travelled would be minor and consistent with local transportation planning. No long-term vehicle trips or vehicle miles travelled would result from Project implementation. Therefore, the Project's incremental contribution to transportation impacts would not be cumulatively considerable.

5.0 MANDATORY FINDINGS OF SIGNIFICANCE

MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. Project impacts on wildlife habitat, rare or endangered plants would be less than significant. Impacts to two-striped garter snake may be significant; however, mitigation is provided to avoid significant impacts. The Project may adversely affect cultural resources, but mitigation is provided to avoid significant impacts.
- b. The incremental cumulative impacts of the Project would not be cumulatively considerable.
- c. The Project (with implementation of air quality and noise mitigation) would not result in significant impacts to humans such as degradation of air quality or water quality, or excessive noise or vibration.

6.0 DETERMINATION OF ENVIRONMENTAL DOCUMENT

On the basis of this evaluation:

- I find the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.
- I find that although the Project could have a significant impact on the environment, there will not be a significant effect with the implementation of mitigation measures described in this Initial Study. A MITIGATED NEGATIVE DECLARATION should be prepared.
- I find the Project, individually and/or cumulatively, MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

Signature of Person Responsible for Administering the Project

Date

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