

MITIGATED NEGATIVE DECLARATION

Malibu Mesa Water Reclamation Plant Refurbishment

Prepared for

County of Los Angeles Department of Public
Works

March 2021

Jacobs

2600 Michelson Drive, Suite 500
Irvine, CA 92612



MITIGATED NEGATIVE DECLARATION

Project Proponent: County of Los Angeles Department of Public Works
Sewer Maintenance Division
900 S. Fremont Avenue
Alhambra, California 91803

Project Description: The Malibu Mesa Water Reclamation Plant Refurbishment (Proposed Project) includes installation of temporary filters, demolition of existing filter equipment, installation of a Parshall flume, pump station with diversion structure, fine screens, anoxic/aerobic bioreactors, membrane tanks, and permeate pumps; membrane thickening tank, new UV system, installation of new structural members in the existing building to support new electrical equipment; installation of a new standby generator, new process equipment and pump replacement; demolition of the existing generator and fuel tank; refurbishment of the existing round activated sludge process structure, refurbishment of the existing building; relocation of Southern California Edison equipment; and a paved parking area. The Proposed Project would not increase the treatment capacity.

The Proposed Project would provide adequate treatment with two treatment trains to comply with all water recycling and discharge limits. During construction, a temporary filtration unit would be required to maintain continuous operation.

Project Location: Malibu Mesa Water Reclamation Plant
3863 Malibu Country Drive
Malibu, CA 90265

Finding: Pursuant to the provisions of the California Environmental Quality Act (CEQA), the County of Los Angeles Department of Public Works has determined that the Proposed Project would not have a significant impact on the environment. Following an Initial Study and assessment of possible adverse impacts, the Proposed Project was determined not to have a significant impact on the environment because of the inclusion of mitigation measures that would reduce potential adverse impacts to below a level of significance. Therefore, the County of Los Angeles Department of Public Works has prepared a Mitigated Negative Declaration in accordance with the provisions of CEQA.

Mitigation Measures: See attached sheet.

Copies of the Initial Study/Mitigated Negative Declaration are available for viewing at:

<https://pw.lacounty.gov/smd/SMD/MalibuMesaDraftMND.pdf>.

Date: 4-19-21

Signature: Martin Moreno

Martin Moreno, P.E., Principal Engineer, County of Los Angeles Department of Public Works

Staff: _____

Date Filed with County Clerk: _____

MITIGATION MEASURES

The implementation of these mitigation measures would eliminate identified impacts or reduce impacts to a less-than-significant level. The mitigation measures listed below are the same mitigation measures presented in the Initial Study.

Mitigation Measure	Description
BIO-1	Preconstruction nesting bird surveys should be performed during the nesting season (typically February 1 to August 31) to avoid potential impacts to nesting birds.
CUL-1	<p>In the event historical, cultural, archaeological, or tribal cultural resources are inadvertently discovered during the course of ground disturbing activities, construction shall cease within 60 feet of the discovery until a qualified archaeologist, meeting the Secretary of the Interior’s professional qualification standards, can assess the nature of the discovery and determine if it qualifies as a significant historical resource, unique archaeological resource, or tribal cultural resource under CEQA. Tribes that requested consultation under AB52 will be contacted for consultation if potential Native American resources are discovered during Project construction activities. If a resource is determined to be significant, mitigation measures will be developed to reduce impacts to the resource and other unknown resources. Mitigation may include avoidance, preservation in place, recordation, additional archaeological testing, and data recovery, among other options. The archaeologist shall complete all relevant California State Department of Parks and Recreation (DPR) 523 Series forms to document the find and submit this documentation to the applicant, Lead Agency, and consulting Tribes.</p> <p>For discovered Native American burials and funerary objects, project-related work within a 100-foot buffer of the find will cease. Los Angeles County Public Works (including contractors), shall relinquish ownership of the resource through one of the following methods:</p> <ol style="list-style-type: none"> a) Preservation in place by accommodating the process for onsite reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed. b) A curation agreement with an appropriate qualified repository within Los Angeles County that meets federal standards per 36 CFR Part 79, and therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Los Angeles County, to be accompanied by payment of the fees necessary for permanent curation.
CUL-2	If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner will be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission, which will then notify the Most Likely Descendant.
CUL-3	The Lead Agency and/or applicant shall, in good faith, consult with Tribes that requested consultation under AB52 on the disposition and treatment of any tribal cultural resource encountered during ground disturbing activities.
GEO-1	The structural design and construction of the facilities shall at a minimum be in accordance with the requirements of the most recent Uniform Building Code, including the latest supplements for Groundshaking Zone 4 and the recommendations of the project geotechnical engineer.
HYDRO-1	All construction staging and maintenance will take place within the Proposed Project site. In addition, construction equipment will be maintained as part of standard construction practices and routinely inspected to prevent contaminant leaks.
HYDRO-2	County of Los Angeles Department of Public Works will require that the construction contractor prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies best management practices (BMPs) designed to prevent construction pollutants from contacting stormwater and with the intent of keeping products of erosion from moving offsite into receiving waters. The SWPPP will include a Spill Prevention and Cleanup Plan that identifies the methods of containment, cleanup, transport, and proper disposal of hazardous chemicals or materials released

Mitigation Measure	Description
NOI-1	during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but are not limited to, the following: <ul data-bbox="391 306 1321 474" style="list-style-type: none"><li data-bbox="391 306 607 327">• Use of silt fences<li data-bbox="391 333 1008 354">• Use of temporary stormwater desilting or retention basins<li data-bbox="391 361 1040 382">• Use of water bars to reduce the velocity of stormwater runoff<li data-bbox="391 388 1073 409">• Use of wheel washers on construction equipment leaving the site<li data-bbox="391 415 1321 474">• Washing or sweeping of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from site onto public roads
NOI-2	Construction activities will not occur during the weekday hours of 7:00 p.m. and 7:00 a.m., and will not be performed at any time on Sundays or holidays, consistent with the County of Los Angeles noise ordinance.
NOI-3	All construction vehicles and fixed or mobile mechanical equipment will be equipped with properly operating and maintained sound attenuating devices, such as mufflers.
NOI-3	Building design and construction, including for the proposed blowers and standby generator, will include sufficient insulation to attenuate noise levels during operations below the County of Los Angeles standard of 50 decibels Community Noise Equivalent Level.

INITIAL STUDY

Malibu Mesa Water Reclamation Plant Refurbishment

Prepared for

County of Los Angeles Department of Public
Works

March 2021

Jacobs

2600 Michelson Drive, Suite 500
Irvine, CA 92612



Contents

Section	Page
Acronyms and Abbreviations	iii
1. Introduction	1-1
1.1 Purpose of an Initial Study	1-1
1.2 Purpose	1-1
1.3 Statutory Requirements and Authority	1-1
1.4 Permits and Approvals	1-2
1.5 Agency Consultation and Coordination	1-2
2. Project Description	2-1
2.1 Project Background and Location	2-1
2.2 Project Elements	2-1
2.3 Project Construction	2-2
2.3.1 Construction Schedule	2-2
2.3.2 Traffic Control	2-2
2.3.3 Excavation/Disposal	2-2
2.3.4 Construction Equipment	2-2
2.4 Project Operation	2-3
3. Initial Study Checklist	3-1
3.1 Impact Categories in Initial Study Checklist	3-1
3.2 Resource Areas	3-1
4. Lead Agency and Consultants	4-1
4.1 Lead Agency	4-1
4.2 Consultants	4-1
5. References.....	5-1

Appendixes

- A Emission Calculations
- B Technical Memorandum: Biological Reconnaissance Surveys for Malibu Mesa Water Reclamation Plant Refurbishment

Tables

- 1-1 List of Agency Permits and Approvals Potentially Applicable to Proposed Project
- 2-1 Construction Equipment
- 3-1 Worst-case Daily Construction Emissions
- 3-2 Greenhouse Gas Emissions

Figures

- 2-1 Project Location
- 2-2 Preliminary Site Plan
- 3-1 CNDDDB Plant and Wildlife Occurrences

Acronyms and Abbreviations

AB	Assembly Bill
ADT	average daily traffic
BMP	best management practice
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	<i>California Code of Regulations</i>
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CIP	clean-in-place
CMP	Los Angeles County Congestion Management Program
CNDDDB	California Natural Diversity Database
CO ₂ e	carbon dioxide equivalent
dBA	A-weighted decibel(s)
EPA	U.S. Environmental Protection Agency
FIRM	Flood Insurance Rate Map
FY	fiscal year
GHG	greenhouse gas
lb/day	pound(s) per day
LOS	level of service
Metro	Los Angeles Metropolitan Transportation Authority
MMWRP	Malibu Mesa Water Reclamation Plant
msl	mean sea level
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
PCH	Pacific Coast Highway
PM _{2.5}	particulate matter with diameter equal to or smaller than 2.5 micrometers
PM ₁₀	particulate matter with diameter equal to or smaller than 10 micrometers
PRC	Public Resources Code
Proposed Project	Malibu Mesa Water Reclamation Plant Refurbishment
RWQCB	Los Angeles Regional Water Quality Board
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison

ACRONYMS AND ABBREVIATIONS

SFM	Single-Family Medium
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
TSO	Time Schedule Order
VMT	vehicle miles traveled
VOC	volatile organic compound

Introduction

This section presents introductory information on the Initial Study purpose, statutory requirements and authority, permits and approvals, and agency consultation and coordination.

1.1 Purpose of an Initial Study

The California Environmental Quality Act (CEQA) was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of proposed projects; identifying means of avoiding environmental damage; and disclosing to the public the reasons behind a project's approval even if it leads to significant environmental impacts. County of Los Angeles Department of Public Works has determined that the Malibu Mesa Water Reclamation Plant Refurbishment (Proposed Project) is subject to CEQA and that no exemptions apply. Therefore, the preparation of an Initial Study is required.

This Initial Study has been prepared in accordance with CEQA, as amended January 1, 2019 (State of California Public Resources Code sections 21000 to 21189.57) and the Guidelines for CEQA, as amended January 1, 2019 (State of California *Code of Regulations* Title 14, Division 6, Chapter 3 sections 15000 to 15387). The Initial Study examines the direct, indirect, growth-inducing, irreversible, short-term, long-term, and cumulative environmental effects associated with the construction and operation of the Proposed Project.

1.2 Purpose

Pursuant to Section 15063(a) of CEQA Guidelines, the County of Los Angeles Department of Public Works, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine if the Proposed Project would have a significant effect on the environment. The purpose of this Initial Study is to: (1) identify potential environmental impacts, (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report or Negative Declaration, (3) enable the Lead Agency to modify the Proposed Project (through mitigation of adverse impacts), (4) facilitate assessment of potential environmental impacts early in the design of the Proposed Project, and (5) provide documentation for the potential finding that the Proposed Project would not have a significant effect on the environment or can be mitigated to a level of insignificance. This Initial Study is an informational document providing an environmental basis for subsequent discretionary actions that may be required from other responsible agencies.

1.3 Statutory Requirements and Authority

The State of California CEQA Guidelines Section 15063 identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the proposed project, including the location of the project site; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the proposed project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

1.4 Permits and Approvals

Public agencies may use this Initial Study as the basis for their decision to issue permits or approvals applicable to the Proposed Project. Table 1-1 provides a list of permits and approvals that may be required for the Proposed Project.

Table 1-1. List of Agency Permits and Approvals Potentially Applicable to Proposed Project

Agency	Permit or Approval
<i>Federal</i>	
Not Applicable	None Identified
<i>State</i>	
State Water Resources Control Board (with SWPPP oversight by the Los Angeles Regional Water Quality Control Board)	National Pollutant Discharge Elimination System General Construction Stormwater permit, including Stormwater Pollution Prevention Plan (SWPPP)
South Coast Air Quality Management District	Permit to Construct and Operate
California Coastal Commission/City of Malibu	Review of Coastal Development Permit
<i>Local</i>	
County of Los Angeles	Building Permits; Compliance with Applicable Rules and Regulations

1.5 Agency Consultation and Coordination

The agencies listed in Table 1-1 may require the County of Los Angeles Department of Public Works to obtain approvals for the Proposed Project. Coordination with other agencies would be required to determine the specific nature of any future permits or approvals that may be required. Agencies would be notified pursuant to CEQA and any subsequent comments would be considered accordingly. In addition, this document is intended to provide agencies and the general public with an environmental basis under CEQA to facilitate the dissemination of information deemed necessary to the discretionary approvals process and the approval or conditional approval of any aspect of the Proposed Project within their jurisdiction.

Project Description

The Malibu Mesa Water Reclamation Plant (MMWRP) refurbishment includes installation of temporary filters, demolition of existing filter equipment, installation of a Parshall flume, pump station with diversion structure, fine screens, anoxic/aerobic bioreactors, membrane tanks, and permeate pumps; membrane thickening tank, new UV system, installation of new structural members in existing building to support new electrical equipment; installation of a new standby generator, new process equipment and pump replacement; demolition of the existing generator and fuel tank; refurbishment of the existing round activated sludge process structure, refurbishment of the existing building; relocation of Southern California Edison (SCE) equipment; and a paved parking area (refer to Section 2.2). The Proposed Project would not increase the treatment capacity.

2.1 Project Background and Location

The MMWRP is located in the City of Malibu and treats domestic wastewater from 107 single-family homes from the Malibu Country Estates and Pepperdine University, which is located in the unincorporated county area. The Proposed Project site is located in an urbanized portion of the City of Malibu. The site location map of the MMWRP is shown on Figure 2-1 and the preliminary site plan is shown on Figure 2-2.

MMWRP was designed to treat a daily average flow of up to 200,000 gallons per day of combined wastewater from both Malibu Country Estates and Pepperdine University (peak of up to 400,000 gallons per day). All the wastewater generated at Pepperdine University is collected at Pepperdine's flow equalization station. A portion of the flow from the equalization station is diverted at a relatively constant rate to the MMWRP and the remaining flow is pumped to Tapia Water Reclamation Plant. Wastewater generated by the Malibu Country Estates flows directly to the plant. The treatment plant consists of headworks with comminutor, activated sludge and aeration, secondary clarification, coagulation, rapid mix, flocculation, sand filtration, and ultraviolet disinfection. The clarified effluent from the secondary clarifier is conveyed to the tertiary treatment facilities, which consist of coagulation, flocculation, filtration, and ultraviolet disinfection to produce Title 22 disinfected tertiary recycled water for all-purpose irrigation according to the State of California *Code of Regulations* (CCR).

The majority of the unit processes (headworks, aeration basin, secondary clarifier, aerobic digester, blowers) were built as part of the original plant construction, and are approaching the end of their useful life, needing extensive refurbishment. The existing MMWRP was originally constructed in 1978 and refurbished in the 1990s. Given the age of the facility, existing tanks and equipment need to be upgraded or replaced. Additionally, MMWRP utilizes a single treatment train and does not include nitrogen control. The MMWRP needs refurbishments to comply with the redundancy/reliability criteria of the CCR Title 22 recycle water criteria and the National Pollutant Discharge Elimination System (NPDES) limits for ammonia-N.

2.2 Project Elements

The MMWRP refurbishment includes installation of a temporary filter, demolition of existing filters and related equipment, installation of a Parshall flume, pump station with diversion structure, fine screens, anoxic/aerobic bioreactors, membrane tanks, and permeate pumps; membrane thickening tank, installation of new structural members in the existing building to support new electrical equipment; installation of a new standby generator, new process equipment and pump replacement; demolition of the existing generator and fuel tank; refurbishment of the existing round activated sludge process structure, refurbishment of the existing building, relocation of SCE equipment, and a paved parking area.

2.3 Project Construction

Proposed construction and temporary construction worker parking would take place within the project site boundary and would be constructed on land previously disturbed by development of the MMWRP. Access to the MMWRP during construction would continue to occur along Malibu Country Drive. Existing plant operation would continue during construction.

2.3.1 Construction Schedule

Construction is assumed to begin in September 2023 and occur over 46 months. Construction would occur on weekdays between the hours of 7:00 a.m. and 7:00 p.m. and on Saturdays, per the Los Angeles County Code of Ordinances. No construction activities would occur outside permitted hours or on Sundays or federal holidays unless a temporary waiver is granted by an authorized agency representative.

Phase 1 of the Proposed Project would be the first major construction activity and includes the initial site work for the proposed electrical area and new parking area. Phase 2 includes the installation of the new outdoor electrical system and the temporary filter installation. Phase 3 involves the demolition of the existing electrical system and the existing filters. Phase 4 includes the construction of the new process tankage, installation of the new process equipment, installation of the new MCC, and construction of the new server room and blower room. This phase includes the startup and commissioning of the new treatment facilities. Phase 5 is the demolition of the existing process equipment, headworks, and existing MCC and control room. Phase 6 includes the installation of rehabilitation of the existing tankage to the new storage tank and the construction and certification of the laboratory space. Once the new lab has been completed, Phase 7 will include the demolition of the existing lab, restroom, and control room to complete the new supervisor office, break room, locker room, restroom, and shower facilities. This phase will conclude with the painting and cleaning of the building and all remaining construction closeout procedures.

2.3.2 Traffic Control

The Proposed Project would require the delivery of materials and equipment during construction. Delivery and parking of vehicles would be coordinated to minimize impacts to local traffic. Vehicles entering and exiting the Proposed Project site during construction would use Malibu County Drive.

2.3.3 Excavation/Disposal

Construction of the Proposed Project would include approximately 2,650 cubic yards of excavation. Excavation would occur to a maximum depth of approximately 18 feet below ground surface and be limited to the property boundary of the existing MMWRP. Approximately 1,000 cubic yards of excavated soils produced during construction activities would be used for backfill at the Proposed Project site and approximately 1,650 cubic yards of excavated soil would be exported to appropriate local recycle and/or waste facilities. Stockpiles would be covered and maintained consistent with applicable regulations.

Disposal needs during construction would be limited to non-hazardous solid waste such as trash, soil, and debris. Solid waste generated during construction would be disposed of consistent with existing practices in an approved facility consistent with applicable regulations. Construction and demolition debris would be recycled in accordance with County of Los Angeles requirements.

2.3.4 Construction Equipment

The estimated number and types of equipment and operating hours are listed in Table 2-1. Approximately 25 construction workers may be onsite on any given day. The worker commutes would

occur during the morning and the afternoon. Additionally, a maximum of five truck trips delivering materials and equipment would occur throughout the day.

Table 2-1. Construction Equipment

Activity	Equipment Number and Type	Hours of Operation/Day*	Number of Working Days
Demolition	1 Concrete Saw	8	850
	2 Backhoe/Loader	8	850
	1 Man Lifts/Scissor Lifts	8	850
Facility Installation	1 Small Crane	8	260
	1 Forklift	8	850
	1 Loader	8	850
	1 Welder	8	780
	1 Water Truck	8	780
	1 Concrete Pumper Truck	8	370
Paving	1 Paver	8	30
	1 Roller	8	30

Note: * = Per the County of Los Angeles noise ordinance, allowable construction activities would occur during the weekday hours of 7:00 a.m. and 7:00 p.m. and on Saturdays. For weekdays, this is a 12-hour construction period and there are no restrictions on Saturdays. However, it is unlikely equipment will be used for the full duration of each day's allowable construction period. Hours of equipment operation are assumed to be, on average, 8 hours of use per day.

2.4 Project Operation

With the refurbishment, MMWRP would operate with minimal change in operational activities. Onsite staff requirements would include facility oversight, inspection, and scheduled maintenance. Two full-time staff are required for current MMWRP operation. There would be no increase in the number of workers required for Proposed Project operation.


Vehicles entering and exiting the MMWRP would continue as existing and use Malibu Country Drive. Project operation and equipment and material deliveries will be similar to existing facilities and does not create additional offsite disposal requirements.



Aerial Imagery Source: ESRI World Imagery



LEGEND

-  Malibu Mesa Water Reclamation Plant Property

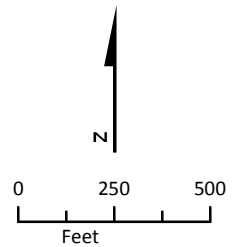
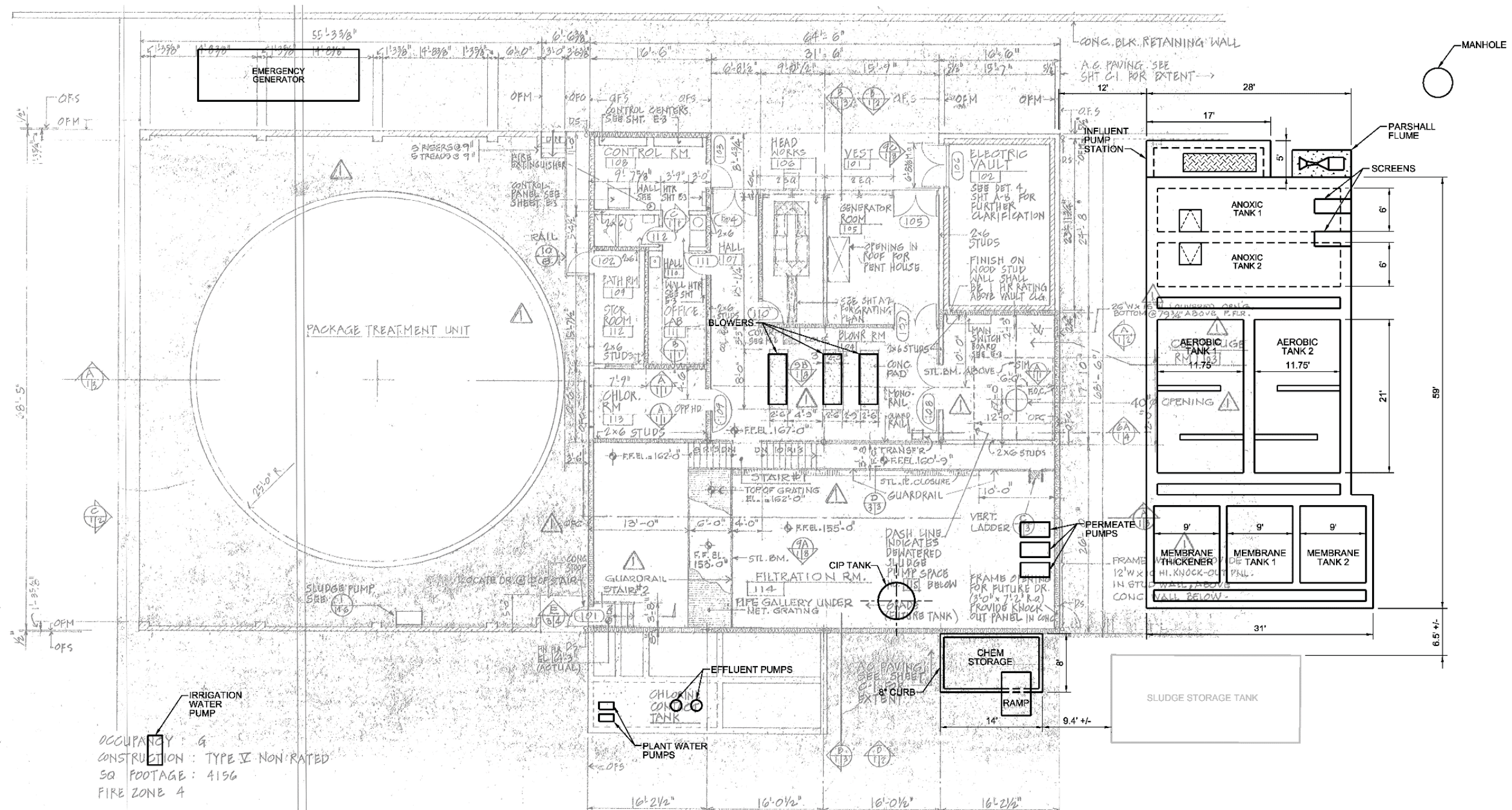


Figure 2-1
Project Location
 County of Los Angeles Public Works
 Malibu Mesa Water Reclamation Plant





N
 PLAN
 1/8"=1'-0"

Figure 2-2
Preliminary Site Plan
 County of Los Angeles Public Works
 Malibu Mesa Water Reclamation Plant

Initial Study Checklist

This section documents the screening process used to identify and focus on environmental impacts that could result from the Proposed Project. The Initial Study Checklist presented in this section closely follows the form prepared by the Governor’s Office of Planning and Research.

3.1 Impact Categories in Initial Study Checklist

Impacts are separated into the following categories in the Initial Study Checklist:

- **No Impact.** This category applies when a project would not create an impact in the specific environmental issue area. A “No Impact” finding does not require an explanation when the finding is adequately supported by the cited information sources (e.g., exposure to a tsunami is clearly not a risk for projects not near the coast). A finding of “No Impact” is explained where the finding is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- **Less-Than-Significant Impact.** This category is identified when the project would result in impacts below the threshold of significance and would therefore be less than significant impacts.
- **Less-Than-Significant with Mitigation Incorporated.** This category is identified when the project would have a substantial adverse impact on the environment but could be reduced to a less-than-significant level with incorporation of mitigation measure(s).
- **Potentially Significant Impact.** This category is applicable if there is substantial evidence that a significant adverse effect might occur, and no feasible mitigation measures are foreseen to reduce impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report is required.

3.2 Resource Areas

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>
<p>The Proposed Project would be located on the existing MMWRP property (Figure 2-1), which is designated Institutional (I) in the <i>City of Malibu Local Coastal Program Land Use Plan</i> (City of Malibu, California, and Quality Code Publishing, 2015).</p> <p>a) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility and would occur within the existing MMWRP boundary. Park, open space, and residential uses occur within the vicinity of the facility. During construction, trenching, excavation stockpiles, and material storage would be temporary in nature and occur within the boundary of the property. The Proposed Project site is not within an area designated as a scenic vista. The adjacent Pacific Coast Highway (PCH) is considered a Scenic Corridor, per the <i>City of Malibu General Plan</i> (City of Malibu, California, and Quality Code Publishing, 2017) and <i>City of Malibu Local Coastal Program Land Use Plan</i> (City of Malibu, California, and Quality Code Publishing, 2015); however, the Proposed Project site is on the inland side of PCH and would not impact views of the ocean from the highway. Therefore, the Proposed Project would have no impact on a scenic vista.</p> <p>b) Less-Than-Significant Impact – The Proposed Project site is adjacent to PCH, a scenic highway designated by the City of Malibu. PCH is not a scenic highway designated by the California Department of Transportation (Caltrans) under the <i>California Scenic Highways Mapping System</i> (Caltrans, 2017). The highway is considered an eligible State Scenic Highway; however, MMWRP is located on the inland side of the highway and would have no impact on views of the ocean.</p> <p>Approximately 2,500 square feet of paved parking would be constructed within the property on the northern extent along the entrance road. To provide adequate space for the paved parking area, the removal of on-site trees may be required. These trees are located on the northern portion of the property and do not provide a visual buffer between the City designated scenic highway, PCH, and the existing MMWRP facility. Per Appendix B of this Initial Study, no species subject to sensitive plant or animal protection occur on-site. The Proposed Project does not contain any rock outcroppings, historic buildings of significance, or other features that have been identified as scenic resources by the county or state.</p> <p>SCE electrical equipment would be relocated from its current location in the existing main building to an area along the southern perimeter of the site. A new 450 kW standby electrical generator, approximately 12 feet in height (including enclosure), will be placed in the south portion of the property (refer to Figure 2-2). The pad for the relocated SCE electrical equipment and new standby generator will be approximately 2,250 square feet and will require approximately 150 cubic yards of grading and a retaining wall with a height of approximately 6 feet and length of approximately 150 feet. The existing berm, which parallels PCH, and vegetation will screen the new retaining wall, relocated SCE electrical equipment, and new standby generator from PCH.</p> <p>A new 6-foot tall chain link fence will be constructed around the perimeter of the facility for security and public safety. The security fencing is needed for preventing unauthorized entry and preventing injury to both authorized and unauthorized personnel. The chain link fence will use colors and materials designed to blend in with natural surroundings.</p> <p>Due to the site being located inland and elevated from PCH, potential tree removals being located on the northern portion of the property and in compliance with the Native Tree Protection Ordinance, adequate screening by vegetation and existing topography, and the use of fencing colors and materials designed to blend in with natural surroundings, the Proposed Project would have less than significant impacts on the area’s visual quality and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.</p> <p>c) No Impact – The Proposed Project is located within the existing MMWRP boundary and involves refurbishment to the existing water reclamation facility. The MMWRP property is within an urbanized area and designated Institutional (I) in the 2017 City of Malibu Local Coastal Program. The zoning for the Proposed Project site is Institutional (I) which conditionally allows for public and quasi-public uses and facilities. The Proposed Project is considered a quasi-public land use and would not conflict with existing general plan designations or zoning ordinances.</p> <p>Within the Institutional (I) district, development standards restrict building height to 18 feet above finished grade (with the exception of chimneys, rooftop antenna, and light standards). The most visible component of the Proposed Project would be the new standby generator enclosure with a height of approximately 12 feet and the fine screens with a maximum height of approximately 9 feet. These Project components would be similar in height and appearance of existing MMWRP structures (existing structures are approximately 15 feet in height).</p> <p>Because the Proposed Project is compatible with existing land use, zoning designations, and development standards, the Proposed Project would not conflict with applicable zoning and other regulations governing scenic quality.</p>				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d) Less-Than-Significant – The existing MMWRP is equipped with interior and exterior lighting and the existing structures are finished in neutral, non-reflective finishes and materials that do not produce glare.				
<p>In accordance with the allowable construction hours per the County of Los Angeles noise ordinance, the proposed construction activities would primarily occur during daylight hours, however, temporary outdoor lighting may be needed. Temporary outdoor lighting would be focused at the construction site and would be turned off at the conclusion of the workday.</p> <p>The proposed facilities would include new interior and exterior lighting for security and operational needs. These light sources would have minimal impacts due to the existing lighting at MMWRP and surrounding properties which include open space, tennis facilities on Pepperdine University property, public roads, and residential properties. Exterior lighting would comply with the Los Angeles County’s Department of Regional Planning Dark Sky Ordinance. Furthermore, the Project site contains vegetation and topography which screens the surrounding environment from much of the facility, including exterior lighting. Therefore, the Proposed Project would have less-than-significant impact on day or nighttime views by creating a new source of substantial light or glare.</p> <p>The Proposed Project would incorporate down-facing lighting requirements. MMWRP operations cease by 5:00 p.m. and nighttime lighting is restricted to security or during emergency repairs.</p>				

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

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

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would be located on the existing MMWRP property, which has a zoning and general plan land use designation of Institutional (I) per the *City of Malibu Local Coastal Program Land Use Plan* (City of Malibu, California, and Quality Code Publishing, 2015) and *City of Malibu General Plan* (City of Malibu, California, and Quality Code Publishing, 2017). Neither the

Proposed Project site nor adjacent areas contain Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The site is designated as Urban and Built Up Land (California Department of Conservation, 2017).

a) No Impact – The Proposed Project would not be located in, or immediately adjacent to, any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Proposed Project would not involve converting farmland to non-agricultural use and the refurbishment would be located within the existing MMWRP property. The Proposed Project would have no impact on any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

b) No Impact – The Proposed Project would not be located in, or immediately adjacent to, any areas zoned for agricultural use or associated with a Williamson Act contract (California Department of Conservation, Division of Land Resource Protection. Los Angeles County Williamson Act Fiscal Year [FY] 2015/2016. 2016). The Proposed Project site is zoned Institutional and adjacent land is zoned Single-Family Medium (SFM) and public streets (PCH and John Tyler Drive). Unincorporated property across John Tyler Drive is zoned Agricultural-1; however, this area is currently used for open space and tennis courts by Pepperdine University. The Proposed Project would have no impact on any areas zoned for agricultural use or associated with a Williamson Act contract, as the refurbishment would be located within the existing MMWRP property.

c) No Impact – The Proposed Project would not be located in, or immediately adjacent to, any areas zoned for forest, timberland, or timberland zoned Timberland Production areas. The Proposed Project site is zoned Institutional and surrounding properties are zoned SFM and public streets (PCH and John Tyler Drive). The Proposed Project would be located within the existing MMWRP property and would have no impact on any areas zoned for forest, timberland, or timberland zoned Timberland Production areas.

d) No Impact – The Proposed Project would not be located in, or immediately adjacent to, any forest land. The Proposed Project would have no impact on forest land, including the loss of forest land or conversion of forest land to non-forest use, as the refurbishment would be located within the existing MMWRP property.

e) No Impact – The Proposed Project would not be located in, or immediately adjacent to, Farmland. The refurbishment would be located within the existing MMWRP property and would not involve changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

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

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

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Less-Than-Significant Impact – Air quality plans include strategies designed to reduce air pollutant emissions and comply with federal and state air quality standards. The Proposed Project site is located in the City of Malibu within the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is the local agency responsible for ensuring that national and state ambient air quality standards are attained and maintained in the South Coast Air Basin.

The Proposed Project is located in an area that is designated non-attainment for the ozone and particulate matter with diameter equal to or smaller than 2.5 micrometers (PM_{2.5}) and is in maintenance area for particulate matter with diameters less than or equal to 10 micrometers (PM₁₀), nitrogen dioxide, and carbon monoxide under the National Ambient Air Quality Standards. The area is designated as non-attainment for the California Ambient Air Quality Standards for ozone, PM₁₀ and PM_{2.5}. The area is in attainment or unclassified for all other pollutants under National Ambient Air Quality Standards and California Ambient Air Quality Standards (U.S. Environmental Protection Agency [EPA], 2017a; CARB, 2017a). SCAQMD has developed air quality plans for ozone, PM₁₀, and PM_{2.5} to set out strategy to attain the air quality standards. The latest regional air quality plan, the *2016 Air Quality Management Plan*, was adopted by SCAQMD in March 2017.

Construction emissions are expected to occur as a result of engine exhaust from the off-road construction equipment and vehicle trips. These emissions would primarily consist of carbon monoxide, nitrogen oxide, PM₁₀, PM_{2.5}, sulfur oxide, and volatile organic compounds (VOCs). In addition, site preparation and disturbance would result in fugitive dust emissions. Given that construction activities would be temporary, long-term air quality impacts would not occur. Construction emissions were estimated based on Proposed Project construction phasing and equipment usage using emission factors from CalEEMod (California Air Pollution Control Officers Association [CAPCOA], 2017) and EMFAC2014 (CARB, 2014). Detailed emission calculations are in Appendix A.

The Proposed Project would be constructed in compliance with the applicable SCAQMD regulations and policies, and best management practices (BMPs) would be implemented to reduce emissions from both construction and operation. In addition, construction emissions and operational emissions estimated for the Proposed Project would be below the SCAQMD CEQA significance thresholds. Refer to Table 3-1 below for worst-case daily construction emissions. Therefore, the Proposed Project operation would not conflict with or obstruct implementation of the air quality plans.

Table 3-1. Worst-case Daily Construction Emissions

	Reactive Organic Gas	Nitrogen Oxide	Carbon Monoxide	Sulfur Oxide	PM ₁₀	PM _{2.5}
	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Construction 2023	1.10	11.69	12.27	0.03	7.31	3.99
Construction 2024	2.35	24.74	16.25	0.06	7.69	4.32
Construction 2025	2.14	21.40	15.51	0.06	0.99	0.82
Construction 2026	1.90	17.57	14.75	0.06	0.83	0.68
Construction 2027	1.77	15.09	14.36	0.06	0.75	0.60
SCAQMD Thresholds	75	100	550	150	150	55
Exceed Thresholds?	No	No	No	No	No	No

lb/day = pound(s) per day

b) Less-Than-Significant Impact – The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Proposed Project region is non-attainment under an applicable federal or state ambient air quality standard.

According to Appendix D, “Cumulative Impact Analysis Requirements Pursuant to CEQA” in SCAQMD white paper *Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD, 2003), projects that do not exceed the significance thresholds are generally not considered to be cumulatively significant. The emissions of non-attainment pollutants during the Proposed Project construction phase (PM₁₀, PM_{2.5}, and ozone precursors [nitrogen oxide and VOCs]) would not exceed the SCAQMD Air Quality Significance Thresholds. Therefore, the cumulative impact from the Proposed Project construction would be less than significant.

c) Less-Than-Significant Impact – The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

The Proposed Project would be located on the existing facility property which has residential areas north of the facility and open space south of the facility. Exhaust emissions from equipment operating during Proposed Project construction would contain toxic air contaminants (TACs), such as diesel particulate matter. However, TAC emissions during construction would be temporary, and therefore, are not expected to cause long term impacts to nearby receptors. TAC emissions from Proposed Project operation would not increase because the Project would not increase the treatment capacity and would use new equipment for the treatment process. The Proposed Project would not increase TAC emissions in comparison to the existing treatment process. In addition, as discussed in previous sections, Proposed Project construction and operation would not represent a substantial source of criteria pollutants. Therefore, the Proposed Project would have a less-than-significant impact on sensitive receptors.

d) Less-Than-Significant Impact – The Proposed Project would not create objectionable odors affecting a substantial number of people.

The use of diesel construction equipment may generate odors that could potentially be a nuisance. However, odor effects from construction activities would be temporary. Because the refurbishment of the facility would not increase the treatment capacity of the facility, the Proposed Project is not expected to generate additional odors in comparison to the existing facility. Therefore, impacts from the Proposed Project operation would be less than significant.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
<p>The Proposed Project is located in an urbanized portion of the City of Malibu and near Pepperdine University, where it treats domestic wastewater from 107 single-family homes from the Malibu Country Estates and Pepperdine University. The Proposed Project site has been leveled, graded, and developed with structures and various water reclamation plant equipment and paved access roads. The vegetation onsite consists of ornamental landscaping. No natural communities such as riparian habitat, wetlands, coastal sage scrub, or others are present within the Proposed Project site.</p> <p>a) No Impact – The Proposed Project site is developed and within/adjacent to existing urbanized areas. No impacts would occur to any sensitive plant or animal species as a result of the Proposed Project. A search of the California Natural Diversity Database (CNDDDB) for the Proposed Project, using a 3.0-mile radius, showed no occurrences of any federally or state listed species within the Proposed Project site (California Department of Fish and Wildlife, 2017). Although occurrences of the San Diego woodrat are shown on Figure 3-1 (CNDDDB Plant and Wildlife Occurrences), located at the end of Section 3, this species is not listed as candidate, sensitive, or special-status in any local or regional plan.</p> <p>Additionally, a site visit on November 13, 2017, confirmed the absence of any suitable habitats for sensitive plant or animal species. The results of the site visit are attached in Appendix B. During the site visit, the biologist noted a potential for migratory, nesting birds. However, because the Proposed Project site does not contain suitable habitat for any sensitive plant or animal species, no impact would occur.</p> <p>b) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility and would occur within the existing facility boundary. The Proposed Project site does not support any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. A City of Malibu Local Coastal Program designated environmentally sensitive habitat area (ESHA) is located in Bluffs Park which is located across PCH approximately 230 feet southeast of the Project site. However, the Project is not expected to result in any impacts to ESHA designated areas, including those located within Bluffs Park. Therefore, no impact to these resources would occur.</p>				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
c) No Impact – The refurbishment to the MMWRP would be constructed on land previously disturbed by development of the existing MMWRP and in areas devoid of biological resources, where no riparian habitat or wetlands would be impacted by construction activities. Therefore, no impact to these resources would occur.				
d) No Impact – The Proposed Project site is located within a developed urban area and does not support native habitat or any migratory fish or wildlife species. Furthermore, the Proposed Project site is not located within a migratory wildlife corridor or native wildlife nursery site. Therefore, no impacts to these resources would occur.				
e) No Impact – Per Appendix B of this Initial Study, no species subject to sensitive plant or animal protection occur on-site. Therefore, there would be no impact on any policies or ordinances protecting biological resources.				
f) No Impact – The MMWRP is not located within any Habitat Conservation Plan or Natural Community Conservation Plan areas.				
Mitigation Measures				
The Proposed Project would not result in a significant adverse impact to biological resources. Due to the presence of potential nesting bird habitat, preconstruction nesting bird surveys should be performed during the nesting season (typically February 1 to August 31) to avoid potential impacts to nesting birds. No other mitigation measures are proposed.				
BIO-1: Preconstruction nesting bird surveys should be performed during the nesting season (typically February 1 to August 31) to avoid potential impacts to nesting birds.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) Less Than Significant Impact with Mitigation Incorporated – A Sacred Land File Search with the Native American Heritage Commission (NAHC) was completed on February 9, 2018 and results were negative for tribal cultural resources within or near the project. A California Historical Resources Information System (CHRIS) search was also completed in February 2018 and did not identify previously recorded cultural resources within the project area. Portions of the project area have also been part of five previously conducted cultural resources investigations completed between 1976 and 2001.				
The Proposed Project site does not contain any features or structures with qualities that would be considered historical resources. The current nature of the site is disturbed/developed from past MMWRP facility construction. The Proposed Project would be located within previously disturbed areas, including the paved parking area along the entrance road. Therefore, no substantial adverse changes in the significance of a historical resource, as defined in §15064.5, is expected. Due to ground disturbing activities, unexpected historical resource discoveries are possible. With implementation of CUL-1, CUL-2, and CUL-3, impacts would be less than significant.				
b) Less Than Significant Impact with Mitigation Incorporated – A Sacred Land File Search with the Native American Heritage Commission (NAHC) was completed on February 9, 2018 and results were negative for tribal cultural resources within or near the project. A CHRIS search was also completed in February 2018 and did not identify any previously recorded cultural resources within the project area. Portions of the project area have also been part of five previously conducted investigations completed between 1976 and 2001.				
The Proposed Project site is located on developed land and would impact previously disturbed areas. The Proposed Project would not involve any excavation into undeveloped lands, including the paved parking area along the entrance road and grading				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
for the relocated SCE electrical equipment and standby generator. Therefore, the Proposed Project is not expected to cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5. Due to ground disturbing activities, unexpected archaeological resource discoveries are possible. With implementation of CUL-1, CUL-2, and CUL-3, impacts would be less than significant.				
c) Less-Than-Significant Impact with Mitigation Incorporated – A Sacred Land File Search with the Native American Heritage Commission (NAHC) was completed on February 9, 2018 and results were negative for tribal cultural resources within or near the project. A CHRIS search was also completed in February 2018 and did not identify any previously recorded cultural resources within the project area. Portions of the project area have also been part of five previously conducted investigations completed between 1976 and 2001.				
The Proposed Project site is located on developed land and would impact previously disturbed areas. The Proposed Project would not involve any excavation into undeveloped lands. Therefore, the Proposed Project would not disturb any known human remains, including those interred outside of formal cemeteries. However, In the event of the discovery of human remains during construction, there would be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. Mitigation Measures CUL-1, CUL-2, and CUL-3 as noted below would be implemented.				
Mitigation Measures				
CUL-1 In the event historical, cultural, archaeological, or tribal cultural resources are inadvertently discovered during the course of ground disturbing activities, construction shall cease within 60 feet of the discovery until a qualified archaeologist, meeting Secretary of the Interior’s professional qualification standards, can assess the nature of the discovery and determine if it qualifies as a significant historical resource, unique archaeological resource, or tribal cultural resource under CEQA. Tribes that requested consultation under AB52 will be contacted for consultation if potential Native American resources are discovered during Project construction activities. If a resource is determined to be significant, mitigation measures will be developed to reduce impacts to the resource and other unknown resources. Mitigation may include avoidance, preservation in place, recordation, additional archaeological testing, and data recovery, among other options. The archaeologist shall complete all relevant California State Department of Parks and Recreation (DPR) 523 Series forms to document the find and submit this documentation to the applicant, Lead Agency, and consulting Tribes.				
For discovered Native American burials and funerary objects, Project-related work within a 100-foot buffer of the find will cease. Los Angeles County Public Works (including contractors), shall relinquish ownership of the resource through one of the following methods:				
a) Preservation in place by accommodating the process for onsite reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.				
b) A curation agreement with an appropriate qualified repository within Los Angeles County that meets federal standards per 36 CFR Part 79, and therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Los Angeles County, to be accompanied by payment of the fees necessary for permanent curation.				
CUL-2 If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner will be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission, which will then notify the Most Likely Descendant.				
CUL-3 The Lead Agency and/or applicant shall, in good faith, consult with Tribes that requested consultation under AB52 on the disposition and treatment of any tribal cultural resource encountered during ground disturbing activities.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. Energy. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
<p>a) Less-Than-Significant – Construction of the Proposed Project would result in the consumption of energy resources, including fossil fuels. The consumption of energy is necessary to efficiently construct the Proposed Project consistent with established standards, such as the California Building Code. Although construction activities would consume energy, the scale and timeframe of the Proposed Project’s construction is such that any minor inefficient energy consumption would not significantly impact the environment.</p> <p>Operation of the Proposed Project would result in the consumption of energy resources, including the use of fossil fuels for activities such as water transport, maintenance equipment, and water treatment. These operational activities are similar in nature to current operations and would not significantly impact the environment.</p> <p>b) Less-Than-Significant – Construction and operation of the Proposed Project would result in the consumption of both renewable and non-renewable energy resources. The consumption of non-renewable resources during construction are temporary in nature. Operation of the Proposed Project would result in the consumption of energy resources, including the use of fossil fuels for activities such as water transport, maintenance equipment, and water treatment. These operational activities are similar in nature to current operations and would not significantly impact the environment.</p> <p>The refurbishment of on-site equipment is designed, in part, to improve efficiency of the operation. The Proposed Project would reduce non-renewable energy use by providing a localized treatment for wastewater produced in the immediate vicinity.</p> <p>The Proposed Project would not have a significant conflict with a state or local plan for renewable energy or energy efficiency.</p>				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would be located on the existing MMWRP property. The Proposed Project site is located on a graded parcel in urbanized portion in the City of Malibu and near Pepperdine University, at an elevation of approximately 105 feet above mean sea level (msl). The site is within the Malibu Coast fault.

a(i) Less-Than-Significant Impact with Mitigation Incorporation – The Proposed Project is located within an Alquist-Priolo Special Study Zone and could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, from the rupture of a known earthquake fault. To reduce potential substantial adverse effects, mitigation measure GEO-1 would be implemented. Therefore, impacts associated with surface fault rupture would be less than significant with mitigation incorporated.

a(ii) Less-Than-Significant Impact with Mitigation Incorporation – The Proposed Project would be designed and constructed in conformance with applicable building codes and seismic engineering standards as well as other applicable regulatory requirements for facility design. However, to reduce potential adverse effects associated with the exposure of persons or structures to potential substantial adverse effects, including risk of loss, injury, or death, from strong seismic ground-shaking, mitigation measure GEO-1 would be implemented. Therefore, impacts associated with strong seismic ground shaking would be less than significant with mitigation incorporated.

a(iii) Less-Than-Significant Impact with Mitigation Incorporation – The Proposed Project site is located within a fault zone but not within a liquefaction zone. The Proposed Project would be designed and constructed in conformance with applicable building codes and seismic engineering standards as well as other applicable regulatory requirements for facility design. However, to reduce potential adverse effects associated with the exposure of persons or structures to potential substantial adverse effects, including risk of loss, injury, or death from seismic-related ground failure, including liquefaction, mitigation measure GEO-1 would be implemented. Therefore, impacts associated with seismic-related ground failure, including liquefaction, would be less than significant with mitigation incorporated.

a(iv) Less-Than-Significant Impact with Mitigation Incorporation – The Proposed Project site is characterized by relatively flat terrain on a graded parcel. Areas that are most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. To reduce potential adverse effects associated with the landslides, mitigation measure GEO-1 would be implemented. Therefore, impacts associated with landslides would be less than significant with mitigation incorporated.

b) No Impact – The Proposed Project site is located on developed land and would impact previously disturbed areas. No important soil resources are present in the Proposed Project area. The site has been graded, leveled, and developed with structures and equipment, as well as paved roads and gravel areas. The Proposed Project would not alter the existing drainage system or patterns nor increase stormwater flows from the site. Therefore, the construction of Proposed Project would not result in substantial soil erosion or the loss of topsoil.

c) Less-than-Significant –The Proposed Project is not located in a susceptible subsidence zone. Therefore, the site is not located on a geologic unit that has the potential to result in on- or off-site subsidence. To reduce potential adverse effects associated with offsite landslide, lateral spreading, subsidence, liquefaction or collapse, the Proposed Project would be designed and constructed in conformance with applicable building codes and seismic engineering standards and applicable regulatory requirements.

d) No Impact – The Proposed Project is located on the existing MMWRP site and would not create substantial risks to life or property due to onsite expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994).

e) No Impact – The Proposed Project is a refurbishment to an existing water reclamation plant. No septic tanks or alternative wastewater disposal systems would serve the Proposed Project. Therefore, the Proposed Project would not result in impacts related to septic tanks or alternative wastewater disposal systems.

f) No Impact – The Proposed Project site is located on developed land and would impact previously disturbed areas. No known unique paleontological or geologic resources are present in the project area. The project site has been graded, leveled, and developed with structures and equipment, as well as paved roads and gravel areas. Therefore, construction of the Proposed Project would not result in direct or indirect impacts to a unique paleontological resource or site or unique geologic feature.

Mitigation Measure

GEO-1 The structural design and construction of the facilities shall at a minimum be in accordance with the requirements of the most recent Uniform Building Code, including the latest supplements for Groundshaking Zone 4 and the recommendations of the project geotechnical engineer.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas (GHG) 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 GHG emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Less-than-Significant – GHG emissions from the Proposed Project would not have a significant impact on the environment. GHG emissions would occur during Proposed Project construction and would include emissions from fuel combustion in construction equipment, haul trucks, and worker commute vehicles. GHG emissions from construction equipment and vehicles were estimated using CalEEMod (CAPCOA, 2017) for the proposed equipment usage and vehicle miles traveled. Estimated GHG emissions for Proposed Project construction are reported in terms of carbon dioxide equivalent (CO₂e) emissions in metric tons per year, as presented in Table 3-2. CO₂e is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential. During Proposed Project operation, GHG emissions from the new standby generator would be negligible from the infrequent routine maintenance and testing. Direct emission increase of GHG from treatment system is not expected because the Proposed Project would not increase the treatment capacity, and the aerobic wastewater treatment process used at the facility does not generate methane. Indirect GHG emissions would occur due to the increased power demand. The Proposed Project would use electricity from the California’s power grid that meets the Renewables Portfolio Standard, consistent with the Assembly Bill 32 GHG and Senate Bill 32 GHG emission reduction goals and the latest strategies for achieving the GHG reduction goals in the *2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California’s 2030 Greenhouse Gas Target* (CARB, 2017b). The annual GHG emissions from electricity purchasing and the construction emissions amortized over 30 years, are less than the SCAQMD interim GHG significance threshold of 10,000 metric tons per year for industrial projects. Details of the emission calculations are provided in Appendix A. Therefore, the Proposed Project would result in a less-than-significant impact from GHG emissions.

Table 3-2. Greenhouse Gas Emissions

Emission	Carbon Dioxide Equivalent
GHG Construction Emissions Total (metric ton)	1,693
Amortized GHG Construction Emissions (metric ton per year)	56
SCAQMD Threshold (metric ton per year)	10,000

b) Less-Than-Significant – The Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

The Proposed Project would not conflict with an applicable plan, policy, or regulation adopted to reduce GHG emissions. On June 1, 2005, EO S-3-05 was signed and set a goal to reduce California’s GHG emissions to (1) year 2000 levels by 2010, (2) year 1990 levels by the 2020, and (3) 80 percent below year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32. In 2016, the Legislature passed Senate Bill 32, which established a new target for GHG emissions reductions in the state at 40 percent of 1990 levels by 2030. On January 20, 2017, CARB released the *2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California’s 2030 Greenhouse Gas Target* (CARB, 2017b). This Scoping Plan Update establishes a proposed framework of action for the state to meet Senate Bill 32 GHG reduction goals.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
The Proposed Project would result in GHG emissions lower than the SCAQMD significance threshold, as discussed previously; therefore, it would not hinder or otherwise conflict with the Assembly Bill 32 or the Assembly Bill 32 Scoping Plan or Plan Update for reducing GHG emissions.				

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

VIX. Hazards and Hazardous Materials. Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project result in a safety hazard or excessive noise for people residing or working in the Proposed 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, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Proposed Project would be located within the existing MMWRP property, which stores and uses chemicals, such as polymers for current wastewater treatment processes. The transport use and storage of hazardous materials are controlled by state and federal regulations and permits for the use of such substances require adequate containment of the chemicals to reduce the potential for release to the environment.

The Proposed Project activities would be located within a fenced and gated facility of the MMWRP and chemicals would be transported, stored, and disposed of in accordance with state and federal regulations, with the exception of a temporary construction parking by the facility entrance.

a) Less-Than-Significant – Construction of the Proposed Project would require that petroleum materials and other potentially hazardous materials be transported to, and used at, the Proposed Project site. Construction activities would be conducted

consistent with hazardous waste management and disposal regulations, and uncontrolled releases of hazardous substances to the environment would not be anticipated.

Hazardous material would be transported, used, and disposed of in accordance with standard regulations and BMPs to avoid a significant risk or health hazard associated with the use, generation, and disposal of hazardous materials and wastes. Standard regulations such as Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection, would be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction to protect human health and the environment from upsets or accidents. Adherence to regulatory requirements would avoid impacts related to transport, use, or disposal of hazardous materials. Therefore, construction of the Proposed Project would result in a less-than-significant impact.

In addition, hazardous materials necessary to MMWRP operations would be stored and used according to manufacturers' specifications and applicable federal, state, and locally mandated procedures. In the event of an accidental spill or release of hazardous materials, the spill would be contained and cleaned up in accordance with federal and state regulations. Therefore, operation of the Proposed Project would result in a less-than-significant impact related to the transport, use, or disposal of hazardous materials.

b) Less-Than-Significant – Construction activities would be conducted consistent with hazardous waste management and disposal regulations, and uncontrolled releases of hazardous substances to the environment, though not anticipated, would be contained and cleaned up in accordance with standard regulations. As previously discussed in the response to (a) above, hazardous materials would be transported, used, and disposed of in accordance with standard regulations and BMPs to avoid 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.

Additionally, during operation, potentially harmful materials would be stored and used according to manufacturers' specifications and applicable federal, state, and locally mandated procedures, and are detailed in a site-specific operation Health and Safety Plan. In the event of an accidental spill or release of potentially hazardous materials, facility-specific safety procedures would be followed. Therefore, the Proposed Project would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident condition. Impacts involving the release of hazardous materials to the environment would be less than significant.

c) Less-Than-Significant – The Proposed Project is located on the existing MMWRP property. Pepperdine University is within 0.25-mile of the existing MMWRP. Construction activities would be conducted consistent with hazardous waste management and disposal regulations, and uncontrolled releases of hazardous substances to the environment, though not anticipated, would be contained and cleaned up in accordance with standard regulations. As previously discussed in the response to (a) above, hazardous materials would be transported, used, and disposed in accordance with standard regulations and BMPs to avoid 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.

Additionally, during operation, potentially harmful materials would be stored and used according to manufacturers' specifications and applicable federal, state, and locally mandated procedures, and are detailed in a site-specific operation Health and Safety Plan. In the event of an accidental spill or release of potentially hazardous materials, facility-specific safety procedures would be followed. Therefore, the Proposed Project would have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) Less-Than-Significant – The Proposed Project would be located within the existing MMWRP property, which is not listed on the Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese List), for contamination associated with abandoned landfill sites. A review of data provided by EPA in the Enviro-mapper (EPA, 2017b) was also completed. Enviro-mapper indicated that no known hazardous materials sites exist on or near the Proposed Project site.

If lead-based paint is encountered, the construction contractor would handle and remove the lead-containing materials in accordance with standard regulations. In addition, excavations should be monitored for changes in soil coloration and/or odor that might indicate contamination. If contaminated soils are encountered, the handling and removal of contaminated soil would be completed in accordance with standard regulations.

e) No Impact – The Proposed Project site is not located within an area subject to an Airport Land Use Plan and is not within 2 miles of a public airport or public-use airport. Therefore, the Proposed Project would not result in airport-related safety hazards or excessive noise to people residing or working in the Proposed Project area.

f) No Impact – During construction of the Proposed Project, roads adjacent to the Proposed Project site would remain open, eliminating any potential impact related to access for emergency vehicles. Therefore, the Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan and no impact would occur.

g) No Impact – The Proposed Project is located within the existing MMWRP property, which has been developed with existing facilities. The Proposed Project site is within and adjacent to a Very High Fire Hazard Severity Zone and is under County of Los Angeles fire jurisdiction. During construction, contractors would have and retain applicable construction Health and Safety Plans and a site-specific operation Health and Safety Plan in place. The Proposed Project would not involve the construction of residences or habitable structures. Proposed Project construction and operation would not increase the risk of wildfire.

Therefore, the construction and operation of the Proposed Project would have a less-than-significant impact to direct or indirect exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

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

The Proposed Project would be located on the existing MMWRP property, which is located approximately 0.3-mile from the Pacific Ocean at an elevation of over 105 feet above MSL.

The existing MMWRP and Proposed Project site is not located within a 100-year floodplain, according to data shown on Flood Insurance Rate Map (FIRM) 06037C1537F, Panel 1537 of 2350. The Proposed Project site is designated Zone D, which is designated for areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted.

a) Less-Than-Significant Impact with Mitigation Incorporated – The Proposed Project would improve the reliability of treatment and would provide adequate treatment with two treatment trains to comply with all water recycling and discharge limits.

Temporary impacts to surface water quality could occur during construction in association with grading and excavation, trenching, and equipment operation. Earthmoving equipment operation and maintenance activities would increase the potential for sediment and pollutant loading to stormwater runoff to onsite drainages.

To reduce the potential for impacts to surface water quality associated with potential sediment loading and residual contaminate runoff, mitigation measures HYDRO-1 and HYDRO-2 would be implemented.

With implementation of these measures, the potential for the Proposed Project to violate water quality standards, water discharge requirements, or otherwise substantially degrade surface or groundwater quality, would be reduced and therefore impacts would be less than significant with mitigation incorporated.

b) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility with process and equipment design that would be incorporated into existing operations. The Proposed Project does not propose the installation of a new water production well or other devices to extract groundwater. The Proposed Project would not result in the use of groundwater. Therefore, no impact to groundwater supplies or substantial interference with groundwater recharge, such that the Proposed Project may impede sustainable groundwater management of the basin, would occur.

c(i) Less-Than-Significant Impact – The Proposed Project would occur within the existing MMWRP property, which is currently developed with adequate stormwater drainage to accommodate project-related construction and operation. Operation of the Proposed Project would be integrated with the existing MMWRP and due to the location and size of the proposed facilities, no substantial alteration of the existing storm drain facilities are required. The existing MMWRP and Proposed Project site and surrounding areas do not contain hydraulic defined features such as streams or rivers and the associated potential for erosion or siltation on- or off-site would be limited. Therefore, impacts would be less than significant.

c(ii) Less-Than-Significant Impact – The Proposed Project would occur within the existing MMWRP property, which is currently developed with adequate stormwater drainage to accommodate project-related construction and operation. Operation of the Proposed Project would be integrated with the existing MMWRP. The facility refurbishments would not increase the runoff rate of stormwater to a substantial level. The existing MMWRP and Proposed Project site and surrounding areas do not contain hydraulic defined features such as streams or rivers and the potential for flooding, on- or off-site is minimal. Therefore, surface runoff which could result in flooding would be less than significant.

c(iii) Less-Than-Significant Impact with Mitigation Incorporated – The Proposed Project would occur within the existing MMWRP property, which is currently developed with adequate stormwater drainage to accommodate project-related construction and operation. Operation of the Proposed Project would be integrated with the existing MMWRP. The facility refurbishments would not increase the runoff rate of stormwater to a substantial level. The existing MMWRP and Proposed Project site and surrounding areas do not contain hydraulic defined features such as streams or rivers, and the potential for substantial additional sources of polluted runoff is minimal. Therefore, with the implementation of mitigation measures HYDRO-1 and HYDRO-2, surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less than significant.

c(iv) Less-Than-Significant Impact – The Proposed Project would occur within the existing MMWRP property, which is currently developed with adequate stormwater drainage to accommodate project-related construction and operation. Operation of the Proposed Project would be integrated with the existing MMWRP. The facility refurbishments would not impede or redirect flood flows to a substantial level. The existing MMWRP and Proposed Project site and surrounding areas do not contain hydraulic defined features such as streams or rivers, and the potential for flooding, on- or off-site is minimal. Therefore, impacts to flood flows would be less than significant.

d) No Impact – The Proposed Project is located outside of the 100-year floodplain (according to data shown on FIRM 06037C1537F, Panel 1537 of 2350), flood hazard zone, tsunami inundation zone, and it is not likely that it would be inundated by a seiche. Therefore, no impact from a release of pollutants due to Proposed Project inundation would occur.

e) Less-Than-Significant Impact with Mitigation Incorporated – The Proposed Project is a refurbishment to an existing water reclamation facility with process and equipment design that would be incorporated in to the existing MMWRP. The Proposed Project would not impact groundwater; therefore, would not impact a sustainable groundwater management plan.

The Proposed Project would occur within the existing MMWRP property, which is currently developed with adequate stormwater drainage to accommodate project-related construction and operation. Operation of the Proposed Project would be integrated with the existing MMWRP. The existing MMWRP and Proposed Project site and surrounding areas do not contain hydraulic defined features such as streams or rivers, and the associated potential for negative water quality impacts would be limited. Therefore, with the implementation of mitigation measures HYDRO-1 and HYDRO-2, impacts to a water quality control plan would be less than significant.

Mitigation Measures

HYDRO-1 All construction staging and maintenance will be contained within the Proposed Project site. In addition, construction equipment will be maintained as part of standard construction practices and routinely inspected to prevent contaminant leaks.

HYDRO-2 County of Los Angeles Department of Public Works will require that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies best management practices (BMPs) designed to prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP will include a Spill Prevention and Cleanup Plan that identifies the methods of containment, cleanup, transport, and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include, but are not limited to, the following:

- Use of silt fences

- Use of temporary stormwater desilting or retention basins
- Use of water bars to reduce the velocity of stormwater runoff
- Use of wheel washers on construction equipment leaving the site
- Washing or sweeping of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from site onto public roads

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

The Proposed Project would be located on the existing MMWRP property, which is designated Institutional (I) land use in the 2017 Malibu Local Coastal Program. The I land use designation accommodates public and quasi-public uses and facilities. The zoning for the Proposed Project site is also Institutional (I), which conditionally allows for public utility facilities.

The Proposed Project site is surrounded by SFM (north and west), Public Open Space (south), and Public and Semi-Public (west) land uses. The Proposed Project site is surrounded by SFM (north and west), Public Open Space (south), and Agricultural-1 (west) zoning districts.

a) No Impact – The Proposed Project involves refurbishment of an existing facility, within the existing property boundary. Construction would be temporary and localized. The Proposed Project would be located on the existing MMWRP property, which is designated Institutional (I) in the 2017 City of Malibu Local Coastal Program. The zoning for the Proposed Project site is Institutional (I) which conditionally allows for public and quasi-public uses and facilities. The Proposed Project would not result in an expansion outside of the current site boundaries or change in or intensification of land use. Therefore, the Proposed Project would not physically divide an established community.

b) No Impact – The Proposed Project involves refurbishment of an existing facility, within the existing property boundary. Construction would be temporary and localized. The Proposed Project would be located on the existing MMWRP property, which is designated Institutional (I) in the 2017 City of Malibu Local Coastal Program. The zoning for the Proposed Project site is Institutional (I), which conditionally allows for public and quasi-public uses and facilities. No expansion outside of the current site boundaries would occur off the Proposed Project site.

Across PCH to the south of the Proposed Project site, the Santa Monica Mountains Conservancy and the Mountains Recreation and Conservation Authority operate 77 acres of environmentally sensitive habitat areas within Malibu Bluffs Park. The Proposed Project site is not within or immediately adjacent to any area subject to a habitat conservation plan or natural community conservation plan. Therefore, the Proposed Project would not conflict with any applicable land use plan, policy, or regulation and, therefore, would have no impact to land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<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"/>

The Proposed Project site and surrounding area are designated MRZ-3 (significance of mineral deposits undetermined), according to the State Department of Conservation’s Mineral Land Classification Map – Malibu Beach Quadrangle, Special Report 143, Plate 2.13 (State of California, 1979).

a) No Impact – The Proposed Project involves refurbishment of an existing water reclamation facility and would not require the use of mineral resources and, therefore, would not affect the availability of any known mineral resources. The Proposed Project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state.

b) No Impact – The Proposed Project site is not located in an area where mineral resources of regional or statewide significance are known to occur. As mineral resources have not been identified onsite, the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on the State Department of Conservation’s Mineral Land Classification Map – Malibu Beach Quadrangle, Special Report 143, Plate 2.13 (State of California, 1979).

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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"/>

The Proposed Project is surrounded by residences, open space, and Pepperdine University. The nearest noise-sensitive receptor to the Proposed Project is a residence located approximately 100 feet west of the existing MMWRP property.

Onsite wastewater processing and operations activities must meet the County of Los Angeles noise standards at the nearest property line shared with any adjacent uses.

As specified in Section 12.08.440 *Construction Noise* of the County of Los Angeles Municipal Code, operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health office is prohibited.

a) Less-Than-Significant Impact with Mitigation Incorporated – A temporary increase in noise levels would be expected during the construction phase of the Proposed Project. Project-related construction noise would be associated with the operation of equipment and vehicles required for site preparation and building construction activities. However, construction noise would be in accordance with County of Los Angeles noise standards. In addition, mitigation measures NOI-1 and NOI-2 would be implemented to reduce noise-related construction impacts to less-than-significant.

The Proposed Project operations would be integrated with the current wastewater processing activities at the existing MMWRP and involve refurbishment to the existing facilities currently in operation. New equipment would be housed in structures for protection against potentially damaging environmental forces. These structures would also attenuate noise levels during operations, to some degree.

The new 450 kW standby generator, which would replace an existing on-site generator, would require infrequent but routine testing and maintenance. The standby generator would be equipped with a side-mounted silencer and located within a sound enclosure approximately 100 feet from the adjacent residential property line to the west, as shown in Figure 2-2. An approximate 7 foot tall berm provides a topographic barrier between the standby generator and the adjacent residential property, and would further attenuate noise produced the standby generator testing.

Per County of Los Angeles Municipal Code Section 12.08.390, exterior noise measured at residential property lines shall not exceed 50 dBA (7:00 am to 10:00 pm). In the event existing ambient noise exceeds 50 dBA, the existing ambient noise level

becomes the exterior noise level standard. Emergency use of the standby generator would be exempt from noise standards, per County of Los Angeles Municipal Code Section 12.08570(A).

With the implementation of mitigation measures NOI-1, NOI-2, and NOI-3, noise-related construction and operational impacts would be less than significant with mitigation incorporated.

b) Less-Than-Significant Impact with Mitigation Incorporated – Construction of the Proposed Project would be temporary and short-term (occur over a 41-months plus 3 months for the testing and startup period) and may require pile-driving or other activities commonly known to produce excessive ground-borne vibration or ground-borne noise. The nearest noise-sensitive receptor to the Proposed Project is a residential structure located approximately 100 feet west of the existing MMWRP property boundary. Heavy equipment can generate noise levels ranging from about 76 to 89 A-weighted decibels (dBA) when measured at 50 feet, and 70 to 83 dBA when measured at 100 feet, without implementation of noise-reduction measures. As with all construction equipment noise, these noise levels would diminish rapidly with distance from the construction site, with a decrease of approximately 6 dBA per doubling of distance. With the implementation of mitigation measures NOI-1 and NOI-2, impacts from ground-borne vibration or ground-borne noise would be less than significant.

c) No Impact – The Proposed Project site is not located within the vicinity of a private airstrip or an airport land use plan and is not within 2 miles of a public airport or public-use airport. Therefore, no associated impact would occur.

Mitigation Measures

NOI -1 Construction activities will not occur during the weekday hours of 7:00 p.m. and 7:00 a.m., and will not be performed at any time on Sundays or holidays, consistent with the County of Los Angeles noise ordinance.

NOI -2 All construction vehicles and fixed or mobile mechanical equipment will be equipped with properly operating and maintained sound attenuating devices, such as mufflers.

NOI -3 Building design and construction, including for the proposed blowers and standby generator, will include sufficient insulation to attenuate noise levels during operations to comply with County of Los Angeles Municipal Code Section 12.08.390.

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

The Proposed Project would not increase treatment capacity of the existing MMWRP. Construction and operation of the Proposed Project would not generate new permanent job opportunities that could attract people to the Proposed Project area. The Proposed Project would create approximately 25 short-term construction employment opportunities. However, these jobs would not be of sufficient number or duration to induce substantial population growth by attracting people for permanent residence.

a) No Impact – The Proposed Project would not increase the treatment capacity of the existing MMWRP. Therefore, the Proposed Project would not directly or indirectly induce substantial unplanned population growth in the area.

b) No Impact – The Proposed Project would not displace existing people or housing or necessitate the construction of replacement housing. No residential units exist onsite. The Proposed Project has no potential to displace any existing people or housing or require the relocation of people.

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

XV. Public Services.

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 following public services?

a) Fire protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would not increase treatment capacity of the existing MMWRP. The existing MMWRP maintains equipment onsite to respond to small scale emergencies, such as incipient stage fires, until the fire department equipment arrives and onsite emergency equipment would continue to be provided as part of the proposed operations. The MMWRP is located within a fenced area and the site is gated and locked.

a-e) No Impact – The Proposed Project would be located within the existing MMWRP property within the City of Malibu and is within the County of Los Angeles Fire Department and California Department jurisdiction. Station #88 is located approximately 1 mile from the Proposed Project site at 23720 Malibu Road, Malibu, CA 90265. Emergency response from fire agencies would not be affected by the Proposed Project.

The Los Angeles County Sheriff's Department has jurisdiction over the Proposed Project area and nearby unincorporated areas. Patrols and emergency response would not be impacted by the Proposed Project.

The nearest educational facility is Pepperdine University, which is located approximately 150 feet west of MMWRP, immediately west of John Tyler Drive would not be affected by the Proposed Project or ongoing operations and maintenance. Our Lady of Malibu School and Webster Elementary School are both located approximately 0.7-mile from the Proposed Project site and would not be affected by the Proposed Project or ongoing operations and maintenance.

Malibu Bluffs Park is the nearest public park and is located approximately 150 feet south of MMWRP, immediately south of PCH, and would not be affected by the Proposed Project. Other schools and parks within the vicinity would not be affected by the Proposed Project.

No other public facilities would be affected by the Proposed Project.

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

XVI. Recreation. Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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"/>

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<p>The Proposed Project would be located on the existing MMWRP property. No recreational facilities exist onsite. Malibu Bluffs Park is the nearest public park and is located approximately 150 feet south of MMWRP, immediately south of PCH, and would not be affected by the Proposed Project. The Proposed Project would not generate new jobs nor induce people to move to the Proposed Project area and would not result in the increased use of existing neighborhood and regional parks. The Proposed Project does not propose any new recreational facilities nor would it impact any existing recreational facilities.</p> <p>a) No Impact – The Proposed Project would not affect the physical condition or the use of existing neighborhood and regional parks or other recreational facilities.</p> <p>b) No Impact – The Proposed Project does not include recreational facilities and would not require the construction or expansion of recreational facilities. The Proposed Project would not have an adverse physical effect on the environment related to recreational facilities.</p>				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
<p>XVII. Transportation. Would the project:</p>				
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict 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"/>

The Proposed Project is located on the northwest corner of PCH and John Tyler Drive within the City of Malibu. The Proposed Project can be accessed from the east and from the west from a driveway on Malibu Country Drive, via John Tyler Drive from either direction on PCH. Proposed construction would take place within the property boundary of the existing MMWRP and would be constructed on land previously disturbed by development of the MMWRP. Access to the MMWRP during construction would continue to occur along Malibu Country Drive. A description of the regional and local road network is provided below.

Regional and Local Roadways

PCH (Highway 1), is a four-lane divided east-west state highway along the Pacific Coast. PCH is the only major arterial within the city and has average daily traffic (ADT) volumes of 29,500 to 36,500 vehicles per day (Caltrans, 2016) near Malibu Country Drive. PCH has a posted speed limit between 45 and 55 miles per hour and is designated as a Modified Major Arterial in the *City of Malibu General Plan* (City of Malibu, California, and Quality Code Publishing, 2017). PCH primarily serves commuters during the weekday peak hours, but it also serves as the main access route for recreational travel to the beaches. Project access is provided via the signalized intersection at PCH and John Tyler Drive.

John Tyler Drive is a north-south local road that provides the main access to Pepperdine University. John Tyler Drive is four lanes between PCH and Malibu Country Drive and narrows to two lanes north of Malibu Country Drive.

Malibu Country Drive is a two-lane residential street providing access to the Malibu Country Estates. Access to the site is provided immediately off Malibu Country Drive, immediately west of the intersection at John Tyler Drive.

Transit, Bicycle, and Pedestrian Facilities

One bus line operated by the Los Angeles Metropolitan Transportation Authority (Metro) serves the study area. Metro route 534 is an east-west line that operates between downtown Santa Monica and Zuma County Beach, daily. Within the vicinity of the site, route 534 travels along PCH with a stop located on the north and south sides of PCH at John Tyler Drive (Metro, 2017).

PCH is a designated bicycle route in the *City of Malibu General Plan* (City of Malibu, California, and Quality Code Publishing, 2017); however, within the vicinity of the site, bike lanes and paths are not present. Sidewalks are provided on most of the local streets in the area. There are no sidewalks on PCH.

Regulatory Standards

Level of service (LOS) is a qualitative description of traffic operating conditions that range from LOS A (free-flow conditions with little or no delay) to LOS F (forced-flow conditions with extreme delays). LOS is the standard method for assessing performance. The Circulation and Infrastructure Element of the *City of Malibu General Plan* (City of Malibu, California, and Quality Code Publishing, 2017) states where LOS at signalized intersections and roadways is below LOS C, the City shall ensure that proposed development maintains the then current LOS. Where LOS at signalized intersections and roadways is at LOS C or better, the City shall ensure that proposed development (1) does not cause a degradation of LOS greater than or equal to two percent and (2) does not degrade LOS below LOS C.

PCH is also part of the Los Angeles County Congestion Management Program (CMP) network, which establishes a LOS standard of LOS D or better (Metro, 2010).

In addition to the LOS standards, both the City and the CMP require a traffic study be prepared to analyze traffic conditions where the Proposed Project would add 50 or more trips during either the AM or PM weekday peak hours. If the traffic study identifies no location where this would occur, no further traffic analysis is required.

Evaluation

The following impact analysis focuses on the potential Proposed Project impacts during the construction phase. Construction activities would result in a temporary increase in traffic due to construction workers commutes and equipment and materials deliveries. Up to 25 construction workers would have the potential to be onsite on any given day, which would generate a maximum of 50 construction worker trips per day (travel to and from the site). It is assumed that the construction workers would arrive during the morning peak hour (25 AM peak hour trips) and depart during the afternoon peak hour (25 PM peak hour trips). Additionally, up to 5 truck trips (10 trips total) would be required daily for delivery of materials and equipment. The truck trips are assumed to occur throughout the day. Construction is expected to occur over 41 months plus 3 months for the testing and startup period.

Minor changes in traffic patterns may occur with regards to Pepperdine University students and staff accessing the school via John Tyler Drive. This may result a minor increase in ingress and egress at Pepperdine University's Malibu Canyon Road gate as university traffic avoids construction vehicles.

With the refurbishment, MMWRP would operate with minimal change in operational activities. Project operation would not require additional equipment or material deliveries or create additional offsite disposal requirements. Onsite staff requirements would be related to facility oversight, inspection, and routine/scheduled maintenance. Once constructed, there would be no increase in the number of existing permanent staff and very minimal, if any, increase in the number of trucks currently required for operations and maintenance activities. Vehicles entering and exiting the MMWRP would continue as existing and use Malibu Country Drive. No impacts due to operations and maintenance activities are anticipated and are thus not analyzed further.

a) No Impact – Temporary traffic impacts were evaluated by considering the volume of traffic associated with construction activities, and the surrounding roadway network. PCH currently carries up to 36,500 ADT near the site with approximately 4,600 peak hour trips. The 50 Proposed Project-added daily trips and 25 peak hour trips represent a 0.5 percent or less increase in traffic on PCH. This increase in traffic would be temporary and would not represent a substantial contribution to the traffic volume on the existing highway or result in reduced capacity or congestion at intersections.

Traffic volumes are not available for the local roadways; however, the Proposed Project trips would only travel on John Tyler Drive for less than 500 feet before turning into the Project driveway. Arrival and departure of vehicles would be coordinated with the City of Malibu to minimize impacts to local traffic and parking for the Project would be provided entirely onsite. Construction would occur during permitted hours identified in the Los Angeles County Building Code and construction activities would comply with the Los Angeles County's requirements. No construction activities would occur outside these hours or on Sundays or federal holidays, unless a temporary waiver is granted by an authorized agency representative.

Since there are less than 50 trips added (temporarily) during the weekday peak hours, the City and CMP requirements for a traffic study are not applicable. Therefore, there are no identified changes to LOS. The Project would have no impact on the transit route or bus stop located on PCH, roadways, bicycles, and pedestrian facilities. There would also be no permanent changes related to transportation. Therefore, the Proposed Project would not be expected to conflict with adopted policies, plans, ordinances, or programs supporting the circulation system, and there would be no impact for this criterion.

b) Less-Than-Significant Impact – CEQA Guidelines 15064.3(b) provide guidance for the evaluation of vehicle miles traveled (VMT). Section (3) allows for qualitatively analysis of VMT impacts, considering factors such as "the availability of transit, proximity to other destinations, etc." Further guidance is that "for many projects, a qualitative analysis of construction traffic may

be appropriate.” The California Office of Planning and Research published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). That guidance indicates that “projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.” Because the temporary trip generation associated with construction activity is below that threshold, there is a less-than-significant impact related to VMT, and the Proposed Project would have a less-than-significant impact per CEQA Guidelines section 15064.3(b).

c) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility with process and equipment design that would be incorporated into existing MMWRP operations. The Proposed Project would not involve any physical changes to the access routes at or near the Project site during construction. Access to the site would be provided from the existing driveway on Malibu Country Road and no change in land use is proposed. Therefore, the Proposed Project would not increase hazards on area roadways due to a geometric design feature or incompatible use. There would be no impact.

d) No Impact – The Proposed Project would not involve any physical changes to the access routes at or near the Proposed Project site during either construction or operations. Emergency access to the site would continue to be provided from existing routes and emergency access would be maintained always. Therefore, the Proposed Project is not expected to affect emergency access or result in inadequate emergency access. There would be no impact.

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

XVIII. Tribal Cultural Resources. Would the project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register or historical resources as defined in PRC section 5020.1(k), or

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 In applying the criteria set forth in subdivision (c) of PRC 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"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

a(i) Less Than Significant Impact with Mitigation Incorporated – The MMWRP property has been previously leveled, graded and developed with structures and various water reclamation plant equipment, paved access roads, and open areas covered in gravel. The site is fenced and gated and located in an area that is developed with residential uses. In addition, there would be no potential for the loss of an important example of history or prehistory or other cultural resources from the Proposed Project as the only structures which exist onsite are those associated with the existing MMWRP.

The Proposed Project does not involve a known significant tribal cultural resource, as defined in PRC section 21074, or a known object with cultural value to a California Native American Tribe. No known cultural resources exist at the MMWRP site, including those listed or eligible for listing in the California Register of Historical Resources or in a local register of historic resources, as defined in PRC section 5020.1(k). Due to ground disturbing activities, unexpected tribal cultural resource discoveries are possible.

Under AB52, Tribal consultation between the County of Los Angeles Public Works Department and Jairo F. Avila of the Fernandeano Tataviam Band of Mission Indians was completed in March 2020. As part of the consultation, Mr. Avila provided suggested mitigation measures for the Project that have been incorporated into CUL-1, CUL-2, and CUL-3. With implementation of CUL-1, CUL-2, and CUL-3 (refer to Section V. Cultural Resources), impacts would be less than significant.

a(ii) No Impact – The MMWRP property has been previously leveled, graded and developed with structures and various water reclamation plant equipment, paved access roads, and open areas covered in gravel. The site is fenced and gated and located in an area that is developed with residential uses. In addition, there would be no potential for the loss of an important example of

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
history or prehistory or other cultural resources from the Proposed Project as the only structures which exist onsite are those associated with the existing MMWRP.				
Consistent with AB 52, local California Native American tribes were formally notified of the Proposed Project on March 7, 2018 by the County of Los Angeles Public Works Department. Tribes notified include the Desert Cahuila Indians, Barbareño/Ventureño Band of Mission Indians, Santa Ynez Band of Chumash Indians, San Gabriel Band of Mission Indians, Gabrieleño Band of Mission Indians-Kizh Nation, and the Fernandeño Tataviam Band of Mission Indians. The California Native American tribes were given 30 days to request formal consultation regarding possible significant effects that implementation of the Proposed Project may have on tribal cultural resources. Jairo F. Avila of the Fernandeño Tataviam Band of Mission Indians requested consultation, which was completed in March 2020.				
A Sacred Land File Search with the Native American Heritage Commission (NAHC) was completed on February 9, 2018 and results were negative for tribal cultural resources within or near the project. A California Historical Resources Information System (CHRIS) search was also completed in February 2018 and did not identify any previously recorded tribal cultural resources within the project area. Portions of the project area have also been part of five previously conducted cultural resources investigations completed between 1976 and 2001. The Proposed Project does not involve a known significant tribal cultural resource, as defined in PRC section 21074, or a known object with cultural value to a California Native American Tribe. No cultural resource, as determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1, is known to exist at the MMWRP site. Therefore, the Proposed Project would have no impact to known cultural resources.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of new water or expanded water, wastewater treatment or stormwater 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Less Than Significant Impact – The Proposed Project would not expand the total treatment capacity of the MMWRP, but rather refurbish an existing water reclamation facility and would occur within the existing facility boundary. The Proposed Project would improve the reliability of treatment and enhance the ability of the water reclamation plant to comply with the requirements of the Los Angeles Regional Water Quality Control Board (RWQCB). The discharge of wastewater is regulated by the Los Angeles Regional Water Quality Control Board. No new land development would occur. Therefore, no impact to water or wastewater treatment facilities would occur.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
The Proposed Project includes the relocation of SCE equipment from a location in the existing main building to a location along the southern perimeter of the property. No outages effecting local customers would occur, therefore, impacts from the relocation would be less than significant.				
b) No Impact –The MMWRP is operated by the Consolidated Sewer Maintenance District as part of the Los Angeles County Department of Public Works. Construction and operation of the Proposed Project would not require the provision of new water supplies or increased water usage. Water supplies including entitlements and resources would not be impacted by the Proposed Project. Therefore, no impact to water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years would occur.				
c) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility. Therefore, no impact would occur to the wastewater treatment provider.				
d) Less-Than-Significant Impact – Disposal needs during construction would be limited to non-hazardous solid waste such as trash and debris. Solid waste generated during construction would be disposed of consistent with existing practices in an approved facility consistent with applicable regulations. Based on the small quantity of waste material anticipated to be produced during construction, the Proposed Project is not expected to affect the capacity of existing landfills, exceed state or local standards, or impair the attainment of solid waste reduction goals. The Proposed Project operations would be integrated with existing MMWRP operations and no changes in waste disposal needs would be anticipated. Therefore, impacts to landfills would be less than significant impact.				
e) Less-Than-Significant Impact – The Proposed Project would comply federal, state, and local management and reduction statutes and regulations related to solid waste disposal during construction and operational activities. Therefore, impacts to regulations related to solid waste disposal would be less than significant.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XX. Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<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 pollution concentrations from a wildfire or the uncontrolled spread of wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (i.e., roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including 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"/>

a) No Impact –The Proposed Project is a refurbishment to an existing water reclamation facility and would be located on the existing MMWRP property. Construction and operation of the Proposed Project would not substantially impair emergency response plans or emergency evacuation plans. Existing emergency responses and evacuations would not change from existing conditions. Therefore, the Project has no impact on an adopted emergency response plan or emergency evacuation plan.

b) No Impact –The Proposed Project is a refurbishment to an existing water reclamation facility and would be located on the existing MMWRP property. Existing slopes, prevailing winds, and other factors would not change and exacerbate wildfire risks

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
beyond the current facility. Therefore, the Proposed Project would not expose project occupants to pollution concentrations from a wildfire or the uncontrolled spread of wildfire.				
c) No Impact –The Proposed Project is a refurbishment to an existing water reclamation facility and would be located on the existing MMWRP property. The installation and maintenance of associated infrastructure would not change and exacerbate fire risk or result in temporary or ongoing impacts to the environment.				
d) No Impact – The Proposed Project is a refurbishment to an existing water reclamation facility and would be located on the existing MMWRP property. Existing slopes and drainage would not change and exacerbate wildfire risk beyond the existing conditions. Therefore, the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of post-fire slope instability or drainage changes.				

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVIII. Mandatory Findings of Significance. Would the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that 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) No Impact – The Proposed Project site is developed and within/adjacent to existing urbanized areas. No impacts would occur to any sensitive plant or animal species as a result of the Proposed Project. A search of the CNDDDB for the Proposed Project, using a 3.0-mile radius, showed no occurrences of any federally or state listed species within the Proposed Project site (California Department of Fish and Wildlife, 2017). Although occurrences of the San Diego woodrat are shown on Figure 3-1 (CNDDDB Plant and Wildlife Occurrences), located at the end of Section 3, this species is not listed as candidate, sensitive, or special-status in any local or regional plan.

The Proposed Project site does not support any riparian habitat, wetlands or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The Proposed Project site does not support native habitat or any migratory fish or wildlife species. Furthermore, the Proposed Project site is not located within a migratory wildlife corridor or native wildlife nursery site.

Additionally, a site visit on November 13, 2017, confirmed the absence of any suitable habitats for sensitive plant or animal species. The results of the site visit are attached in Appendix B. During the site visit, the biologist noted a potential for migratory, nesting birds.

The Proposed Project site has been previously leveled, graded and developed with structures and various water reclamation plant equipment, paved access roads, and open areas covered in gravel. The site is fenced and gated and located in an area that is developed with residential uses. In addition, there would be no potential for the loss of an important example of history or

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

prehistory or other cultural resources from the Proposed Project as the only structures which exist onsite are those associated with the existing MMWRP. Therefore, no impact would occur.

b) **Less-Than-Significant Impact** – Potential impacts associated with the Proposed Project have been determined to be less than significant in the case of biology, cultural, geology and soils, hydrology and water quality, and noise. Mitigation measures have been proposed to reduce the impact to a less than significant level. The Proposed Project is not anticipated to result in any significant adverse impacts after mitigation. Similarly, other projects would be required to address the potential for significant adverse impacts with standard environmental analysis, review requirements, and propose mitigation to address these impacts. As required by applicable laws, ordinances, regulations, and standards, including BMPs, the Proposed Project would not be anticipated to result in any significant adverse cumulative impacts. Therefore, impacts would be less than significant.

c) **Less-Than-Significant Impact with Mitigation Incorporated** – Potential Project impacts associated with biology, cultural resources, geology and soils, hydrology and water quality, and noise would be mitigated to a less-than-significant level as with the implementation of BIO-1, CUL-1, CUL-2, CUL-3, GEO-1, HYDRO-1, HYDRO-2, NOI-1, NOI-2, and NOI-3. In addition, the Proposed Project would be implemented consistent with applicable laws, ordinances, regulations, and standards, including BMPs to avoid both direct and indirect adverse effects on human beings. Therefore, impacts would be less than significant with mitigation incorporated.



Aerial Imagery Source: ESRI World Imagery

LEGEND

- | | |
|--|---|
| Malibu Mesa Water Reclamation Plant | San Diego desert woodrat |
| 3-mile Buffer | Santa Monica dudleya |
| CNDDDB Plant and Wildlife Occurrences | |
| American peregrine falcon | Southern California Coastal Lagoon |
| Blochman's dudleya | Southern California Steelhead Stream |
| Braunton's milk-vetch | Southern Coastal Salt Marsh |
| Coulter's goldfields | arroyo chub |
| Coulter's saltbush | decumbent goldenbush |
| Davidson's saltscale | golden eagle |
| Lyon's pentachaeta | monarch - California overwintering population |
| Parry's spineflower | steelhead - southern California DPS |
| San Bernardino ringneck snake | tidewater goby |
| | white-veined monardella |

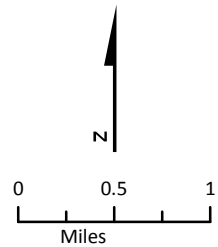


Figure 3-1
CNDDDB Plant and Wildlife Occurrences
 County of Los Angeles Public Works
 Malibu Mesa Water Reclamation Plant



Lead Agency and Consultants

4.1 Lead Agency

County of Los Angeles Department of Public Works

4.2 Consultants

Fred Soroushian – Project Manager

Carmen Quan – Design Manager

Tyler Kirkendall – Project Engineer

Matt Gordon – CEQA Senior Reviewer

Joe Aguirre – Planner

Loren Bloomberg – Traffic Specialist

Melissa Williams – Biologist

Hong Zhuang – Air Quality and Greenhouse Gas Specialist

Pauline Sullivan – Technical Editor

References

- California Air Pollution Control Officers Association (CAPCOA). 2017. CalEEMod. California Emission Estimator Model (CalEEMod). <http://www.caleemod.com>.
- California Air Resources Board (CARB). 2014. EMFAC2014.
- California Air Resources Board (CARB). 2017a. *California Ambient Air Quality Standards*.
- California Air Resources Board (CARB). 2017b. *2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target*.
- California Department of Conservation. 1997. *California Agricultural Land Evaluation and Site Assessment Model*.
- California Department of Conservation, Division of Land Resource Protection. 2017. *Farmland Mapping and Monitoring Program*. "Farmland of Local Importance." July. Accessed December 2017. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/los16.pdf>.
- California Department of Fish and Wildlife. 2017. California Natural Diversity Database (CNDDDB). RareFind5. Electronic database. <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Sacramento, California.
- California Department of Transportation (Caltrans). 2016. *Traffic Census Program. 2016 Traffic Volumes*. Accessed December 2017. <http://www.dot.ca.gov/trafficops/census/volumes2016/>.
- California Department of Transportation (Caltrans). 2017. *California Scenic Highways Mapping System*. Accessed December 2017. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.
- City of Malibu, California, and Quality Code Publishing. 2015. *City of Malibu Local Coastal Program Land Use Plan*. Adopted September 13. Originally adopted September 13, 2002. Current through Supplement No. 7, December 2015, up to and including LCPA 12-001, certified on November 4, 2015. <https://www.malibucity.org/DocumentCenter/View/4422>.
- City of Malibu, California, and Quality Code Publishing. 2017. *City of Malibu General Plan*. "Chapter 4.0: Circulation and Infrastructure Element." Originally adopted November 1995. Current through Resolution No. 15-42 and the December 2017 code supplement. <http://qcode.us/codes/malibu-general-plan/>.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2010. *2010 Congestion Management Program*.
- Los Angeles County Metropolitan Transportation Authority (Metro). 2017. *Maps and Time Tables*. Accessed December 2017. <https://www.metro.net/riding/maps/500-599/>.
- South Coast Air Quality Management District (SCAQMD). 2003. *Potential Control Strategies to Address Cumulative Impacts from Air Pollution*.
- U.S. Environmental Protection Agency (EPA). 2017a. *National Ambient Air Quality Standards*.
- U.S. Environmental Protection Agency (EPA). 2017b. *Enviro-mapper*.

Appendix A

Emission Calculations

Construction Emission Summary - Criteria Pollutants

Construction Year	Sources	Maximum Daily Emissions						Annual Emissions					
		ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
		lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
2020	equipment	3.10	30.37	22.93	0.05	1.42	1.32	0.02	0.23	0.20	0.00	0.01	0.01
	vehicle	0.12	2.51	2.66	0.02	0.19	0.08	0.00	0.03	0.03	0.000	0.002	0.001
	fugitive dust	NA	NA	NA	NA	6.56	3.37	NA	NA	NA	NA	0.069	0.035
	Total 2020	3.22	32.89	25.59	0.07	8.17	4.77	0.03	0.26	0.23	0.001	0.082	0.047
2021	equipment	2.83	26.55	22.30	0.05	1.21	1.13	0.27	2.45	2.31	0.005	0.118	0.110
	vehicle	0.11	2.28	2.50	0.02	0.19	0.08	0.01	0.28	0.31	0.002	0.024	0.010
	fugitive dust	NA	NA	NA	NA	6.56	3.37	NA	NA	NA	NA	0.815800	0.419
	Total 2021	2.94	28.83	24.80	0.07	7.96	4.58	0.28	2.74	2.62	0.007	0.957	0.539
2022	equipment	2.52	22.24	21.63	0.05	0.98	0.92	0.24	2.08	2.25	0.005	0.095	0.090
	vehicle	0.10	2.05	2.36	0.02	0.19	0.08	0.01	0.25	0.29	0.002	0.024	0.010
	fugitive dust	NA	NA	NA	NA	6.56	3.37	NA	NA	NA	NA	0.816	0.419
	Total 2022	2.62	24.29	23.98	0.07	7.73	4.37	0.25	2.33	2.55	0.01	0.93	0.52
2023	equipment	2.36	20.15	21.39	0.05	0.86	0.80	0.22	1.88	2.23	0.005	0.083	0.077
	vehicle	0.08	1.13	2.18	0.02	0.19	0.08	0.01	0.14	0.27	0.002	0.023	0.010
	fugitive dust	NA	NA	NA	NA	6.56	3.37	NA	NA	NA	NA	0.816	0.419
	Total 2023	2.44	21.28	23.57	0.07	7.60	4.24	0.23	2.02	2.51	0.01	0.92	0.51
2024	equipment	2.60	22.05	26.00	0.06	0.93	0.87	0.08	0.64	0.81	0.002	0.027	0.025
	vehicle	0.08	1.11	2.09	0.02	0.19	0.08	0.00	0.05	0.09	0.001	0.008	0.003
	fugitive dust	NA	NA	NA	NA	6.56	3.37	NA	NA	NA	NA	0.272	0.140
	Total 2024	2.68	23.16	28.08	0.08	7.67	4.31	0.08	0.68	0.90	0.00	0.31	0.17
Worst Case Emissions		3.22	32.89	28.08	0.08	8.17	4.77	0.28	2.74	2.62	0.007	0.957	0.539
SCAQMD Thresholds		75	100	550	150	150	55	NA	NA	NA	NA	NA	NA
Exceed Thresholds?		No	No	No	No	No	No	NA	NA	NA	NA	NA	NA

Construction Emission Summary - GHG

Construction Year	Sources		
		CO ₂ e	CO ₂ e
		tons	metric tons
2020	equipment	40.8	37.0
	vehicle	18.59	16.9
2021	equipment	488.16	442.9
	vehicle	215.5	195.5
2022	equipment	488.38	443.1
	vehicle	210.12	190.6
2023	equipment	488.64	443.3
	vehicle	201.96	183.2
2024	equipment	173.57	157.5
	vehicle	66.12	60.0
Total Construction GHG		2391.8	2169.9
Amortized GHG for 30 years		79.7	72.3

Onsite Equipment Emissions

Onsite Equipment Information and Emission Factors

	Equipment	Number	Operation Data			Emission Factor Year	CalEEMod Default Load Factor	CalEEMod Emission Factors (100% load)								
			HP	Days	Hours per day			ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	CO _{2e}
			per equipment	per equipment	per equipment			g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr
Demolition 2020	Concrete Saw	1	81	21	8	2020	0.73	0.401	3.163	3.535	0.006	0.190	0.190	568.299	0.036	569.307
	Backhoe/Loader	2	97	21	8	2020	0.37	0.331	3.326	3.601	0.005	0.210	0.193	475.154	0.154	479.466
	Man lifts/scissor lifts	1	63	21	8	2020	0.31	0.115	1.869	3.177	0.005	0.042	0.038	472.114	0.153	476.398
Facility Installation 2020	Small Crane	1	231	6	8	2020	0.29	0.384	4.563	1.790	0.005	0.188	0.173	472.949	0.153	477.233
	Forklift	1	89	21	8	2020	0.2	0.459	4.133	3.760	0.005	0.308	0.283	471.529	0.153	475.813
	Loader	1	97	21	8	2020	0.37	0.331	3.326	3.601	0.005	0.210	0.193	475.154	0.154	479.466
	Welder	1	46	19	8	2020	0.45	0.261	2.143	1.093	0.006	0.066	0.066	568.299	0.023	568.943
	Water Truck	1	402	19	8	2020	0.38	0.246	2.347	1.414	0.005	0.086	0.079	474.579	0.153	478.863
	Concrete Pumper Truck	1	402	9	8	2020	0.38	0.246	2.347	1.414	0.005	0.086	0.079	474.579	0.153	478.863
Demolition 2021	Concrete Saw	1	81	249	8	2021	0.73	0.369	2.913	3.523	0.006	0.166	0.166	568.299	0.033	569.223
	Backhoe/Loader	2	97	249	8	2021	0.37	0.296	2.995	3.571	0.005	0.177	0.162	475.362	0.154	479.674
	Man lifts/scissor lifts	1	63	249	8	2021	0.31	0.109	1.744	3.176	0.005	0.033	0.031	472.114	0.153	476.398
Facility Installation 2021	Small Crane	1	231	76	8	2021	0.29	0.349	4.104	1.678	0.005	0.167	0.153	472.906	0.153	477.190
	Forklift	1	89	249	8	2021	0.2	0.412	3.756	3.720	0.005	0.267	0.245	471.529	0.153	475.813
	Loader	1	97	249	8	2021	0.37	0.296	2.995	3.571	0.005	0.177	0.162	475.362	0.154	479.674
	Welder	1	46	228	8	2021	0.45	0.243	1.836	1.081	0.006	0.057	0.057	568.299	0.021	568.887
	Water Truck	1	402	228	8	2021	0.38	0.225	1.954	1.338	0.005	0.072	0.066	474.542	0.153	478.826
	Concrete Pumper Truck	1	402	108	8	2021	0.38	0.225	1.954	1.338	0.005	0.072	0.066	474.542	0.153	478.826
Demolition 2022	Concrete Saw	1	81	249	8	2022	0.73	0.343	2.686	3.514	0.006	0.144	0.144	568.299	0.031	569.167
	Backhoe/Loader	2	97	249	8	2022	0.37	0.260	2.647	3.536	0.005	0.142	0.131	475.898	0.154	480.210
	Man lifts/scissor lifts	1	63	249	8	2022	0.31	0.105	1.627	3.176	0.005	0.030	0.028	472.114	0.153	476.398
Facility Installation 2022	Small Crane	1	231	76	8	2022	0.29	0.316	3.541	1.602	0.005	0.147	0.135	472.983	0.153	477.267
	Forklift	1	89	249	8	2022	0.2	0.362	3.360	3.675	0.005	0.223	0.205	471.529	0.153	475.813
	Loader	1	97	249	8	2022	0.37	0.260	2.647	3.536	0.005	0.142	0.131	475.898	0.154	480.210
	Welder	1	46	228	8	2022	0.45	0.231	1.598	1.074	0.006	0.050	0.050	568.299	0.020	568.859
	Water Truck	1	402	228	8	2022	0.38	0.196	1.490	1.247	0.005	0.054	0.050	474.714	0.154	479.026
	Concrete Pumper Truck	1	402	108	8	2022	0.38	0.196	1.490	1.247	0.005	0.054	0.050	474.714	0.154	479.026
Demolition 2023	Concrete Saw	1	81	249	8	2023	0.73	0.320	2.478	3.507	0.006	0.123	0.123	568.300	0.028	569.084
	Backhoe/Loader	2	97	249	8	2023	0.37	0.239	2.426	3.525	0.005	0.120	0.110	476.431	0.154	480.743
	Man lifts/scissor lifts	1	63	249	8	2023	0.31	0.100	1.548	3.170	0.005	0.027	0.025	472.114	0.153	476.398
Facility Installation 2023	Small Crane	1	231	76	8	2023	0.29	0.297	3.229	1.553	0.005	0.135	0.124	472.974	0.153	477.258
	Forklift	1	89	249	8	2023	0.2	0.327	3.057	3.647	0.005	0.189	0.174	471.529	0.153	475.813
	Loader	1	97	249	8	2023	0.37	0.239	2.426	3.525	0.005	0.120	0.110	476.431	0.154	480.743
	Welder	1	46	228	8	2023	0.45	0.220	1.404	1.071	0.006	0.044	0.044	568.299	0.019	568.831
	Water Truck	1	402	228	8	2023	0.38	0.187	1.324	1.221	0.005	0.048	0.044	475.049	0.154	479.361
	Concrete Pumper Truck	1	402	108	8	2023	0.38	0.187	1.324	1.221	0.005	0.048	0.044	475.049	0.154	479.361
Demolition 2024	Concrete Saw	1	81	83	8	2024	0.73	0.300	2.315	3.500	0.006	0.106	0.106	568.299	0.027	569.055
	Backhoe/Loader	2	97	83	8	2024	0.37	0.227	2.288	3.532	0.005	0.105	0.097	476.731	0.154	481.043
	Man lifts/scissor lifts	1	63	83	8	2024	0.31	0.100	1.528	3.173	0.005	0.026	0.024	472.114	0.153	476.398
Facility Installation 2024	Small Crane	1	231	25	8	2024	0.29	0.281	2.966	1.502	0.005	0.123	0.114	472.964	0.153	477.248
	Forklift	1	89	83	8	2024	0.2	0.300	2.814	3.629	0.005	0.163	0.150	471.529	0.153	475.813
	Loader	1	97	83	8	2024	0.37	0.227	2.288	3.532	0.005	0.105	0.097	476.731	0.154	481.043
	Welder	1	46	76	8	2024	0.45	0.210	1.234	1.068	0.006	0.038	0.038	568.299	0.018	568.803
	Water Truck	1	402	76	8	2024	0.38	0.184	1.235	1.206	0.005	0.044	0.041	475.220	0.154	479.532
	Concrete Pumper Truck	1	402	36	8	2024	0.38	0.184	1.235	1.206	0.005	0.044	0.041	475.220	0.154	479.532
Paving 2024	Paver	1	130	30	8	2024	0.42	0.191	1.809	3.004	0.005	0.084	0.078	472.661	0.153	476.945
	Roller	1	80	30	8	2024	0.38	0.272	2.843	3.451	0.005	0.150	0.138	474.007	0.153	478.291

Assumptions:

1. CO_{2e} were calculated using the following global warming potential (GWP, 100-year GWP from IPCC Fifth Assessment Report, 2014)

CO₂ 1

CH₄ 28

N₂O 265

4. Load factor and emission factors are from CalEEMod Appendix D: Table 3.4 Offroad Equipment Emission Factors (g/hp-hr) and Table 3.3 OFFROAD Default Horsepower and Load Factors (October 2017)

Onsite Equipment Emissions

Onsite Equipment Emissions

	Onsite Equipment	Maximum Daily Emissions							Annual Emissions						
		ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO _{2e}	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO _{2e}
		lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
Demolition 2020	Concrete Saw	0.42	3.30	3.69	0.01	0.20	0.20	593.71	0.00	0.03	0.04	0.00	0.00	0.00	6.23
	Backhoe/Loader	0.42	4.21	4.56	0.01	0.27	0.24	606.99	0.00	0.04	0.05	0.00	0.00	0.00	6.37
	Man lifts/scissor lifts	0.04	0.64	1.09	0.00	0.01	0.01	164.09	0.00	0.01	0.01	0.00	0.00	0.00	1.72
Facility Installation 2020	Small Crane	0.45	5.39	2.12	0.01	0.22	0.20	563.84	0.00	0.02	0.01	0.00	0.00	0.00	1.69
	Forklift	0.14	1.30	1.18	0.00	0.10	0.09	149.37	0.00	0.01	0.01	0.00	0.00	0.00	1.57
	Loader	0.21	2.11	2.28	0.00	0.13	0.12	303.49	0.00	0.02	0.02	0.00	0.00	0.00	3.19
	Welder	0.10	0.78	0.40	0.00	0.02	0.02	207.71	0.00	0.01	0.00	0.00	0.00	0.00	1.97
	Water Truck	0.66	6.32	3.81	0.01	0.23	0.21	1,290.14	0.01	0.06	0.04	0.00	0.00	0.00	12.26
	Concrete Pumper Truck	0.66	6.32	3.81	0.01	0.23	0.21	1,290.14	0.00	0.03	0.02	0.00	0.00	0.00	5.81
Demolition 2021	Concrete Saw	0.38	3.04	3.67	0.01	0.17	0.17	593.62	0.05	0.38	0.46	0.00	0.02	0.02	73.91
	Backhoe/Loader	0.37	3.79	4.52	0.01	0.22	0.21	607.25	0.05	0.47	0.56	0.00	0.03	0.03	75.60
	Man lifts/scissor lifts	0.04	0.60	1.09	0.00	0.01	0.01	164.09	0.00	0.07	0.14	0.00	0.00	0.00	20.43
Facility Installation 2021	Small Crane	0.41	4.85	1.98	0.01	0.20	0.18	563.79	0.02	0.18	0.08	0.00	0.01	0.01	21.42
	Forklift	0.13	1.18	1.17	0.00	0.08	0.08	149.37	0.02	0.15	0.15	0.00	0.01	0.01	18.60
	Loader	0.19	1.90	2.26	0.00	0.11	0.10	303.62	0.02	0.24	0.28	0.00	0.01	0.01	37.80
	Welder	0.09	0.67	0.39	0.00	0.02	0.02	207.69	0.01	0.08	0.04	0.00	0.00	0.00	23.68
	Water Truck	0.61	5.26	3.60	0.01	0.19	0.18	1,290.04	0.07	0.60	0.41	0.00	0.02	0.02	147.06
	Concrete Pumper Truck	0.61	5.26	3.60	0.01	0.19	0.18	1,290.04	0.03	0.28	0.19	0.00	0.01	0.01	69.66
Demolition 2022	Concrete Saw	0.36	2.80	3.66	0.01	0.15	0.15	593.56	0.04	0.35	0.46	0.00	0.02	0.02	73.90
	Backhoe/Loader	0.33	3.35	4.48	0.01	0.18	0.17	607.93	0.04	0.42	0.56	0.00	0.02	0.02	75.69
	Man lifts/scissor lifts	0.04	0.56	1.09	0.00	0.01	0.01	164.09	0.00	0.07	0.14	0.00	0.00	0.00	20.43
Facility Installation 2022	Small Crane	0.37	4.18	1.89	0.01	0.17	0.16	563.88	0.01	0.16	0.07	0.00	0.01	0.01	21.43
	Forklift	0.11	1.05	1.15	0.00	0.07	0.06	149.37	0.01	0.13	0.14	0.00	0.01	0.01	18.60
	Loader	0.16	1.68	2.24	0.00	0.09	0.08	303.96	0.02	0.21	0.28	0.00	0.01	0.01	37.84
	Welder	0.08	0.58	0.39	0.00	0.02	0.02	207.68	0.01	0.07	0.04	0.00	0.00	0.00	23.68
	Water Truck	0.53	4.01	3.36	0.01	0.15	0.13	1,290.58	0.06	0.46	0.38	0.00	0.02	0.02	147.13
	Concrete Pumper Truck	0.53	4.01	3.36	0.01	0.15	0.13	1,290.58	0.03	0.22	0.18	0.00	0.01	0.01	69.69
Demolition 2023	Concrete Saw	0.33	2.58	3.66	0.01	0.13	0.13	593.47	0.04	0.32	0.46	0.00	0.02	0.02	73.89
	Backhoe/Loader	0.30	3.07	4.46	0.01	0.15	0.14	608.60	0.04	0.38	0.56	0.00	0.02	0.02	75.77
	Man lifts/scissor lifts	0.03	0.53	1.09	0.00	0.01	0.01	164.09	0.00	0.07	0.14	0.00	0.00	0.00	20.43
Facility Installation 2023	Small Crane	0.35	3.82	1.83	0.01	0.16	0.15	563.87	0.01	0.14	0.07	0.00	0.01	0.01	21.43
	Forklift	0.10	0.96	1.14	0.00	0.06	0.05	149.37	0.01	0.12	0.14	0.00	0.01	0.01	18.60
	Loader	0.15	1.54	2.23	0.00	0.08	0.07	304.30	0.02	0.19	0.28	0.00	0.01	0.01	37.89
	Welder	0.08	0.51	0.39	0.00	0.02	0.02	207.67	0.01	0.06	0.04	0.00	0.00	0.00	23.67
	Water Truck	0.50	3.57	3.29	0.01	0.13	0.12	1,291.48	0.06	0.41	0.37	0.00	0.01	0.01	147.23
	Concrete Pumper Truck	0.50	3.57	3.29	0.01	0.13	0.12	1,291.48	0.03	0.19	0.18	0.00	0.01	0.01	69.74
Demolition 2024	Concrete Saw	0.31	2.41	3.65	0.01	0.11	0.11	593.44	0.01	0.10	0.15	0.00	0.00	0.00	24.63
	Backhoe/Loader	0.29	2.90	4.47	0.01	0.13	0.12	608.98	0.01	0.12	0.19	0.00	0.01	0.01	25.27
	Man lifts/scissor lifts	0.03	0.53	1.09	0.00	0.01	0.01	164.09	0.00	0.02	0.05	0.00	0.00	0.00	6.81
Facility Installation 2024	Small Crane	0.33	3.50	1.77	0.01	0.15	0.13	563.86	0.00	0.04	0.02	0.00	0.00	0.00	7.05
	Forklift	0.09	0.88	1.14	0.00	0.05	0.05	149.37	0.00	0.04	0.05	0.00	0.00	0.00	6.20
	Loader	0.14	1.45	2.24	0.00	0.07	0.06	304.49	0.01	0.06	0.09	0.00	0.00	0.00	12.64
	Welder	0.08	0.45	0.39	0.00	0.01	0.01	207.66	0.00	0.02	0.01	0.00	0.00	0.00	7.89
	Water Truck	0.50	3.33	3.25	0.01	0.12	0.11	1,291.95	0.02	0.13	0.12	0.00	0.00	0.00	49.09
	Concrete Pumper Truck	0.50	3.33	3.25	0.01	0.12	0.11	1,291.95	0.01	0.06	0.06	0.00	0.00	0.00	23.26
Paving 2024	Paver	0.18	1.74	2.89	0.00	0.08	0.08	459.28	0.00	0.03	0.04	0.00	0.00	0.00	6.89
	Roller	0.15	1.52	1.85	0.00	0.08	0.07	256.44	0.00	0.02	0.03	0.00	0.00	0.00	3.85
Maximum 2020		3.10	30.37	22.93	0.05	1.42	1.32	5169.49	0.02	0.23	0.20	0.00	0.01	0.01	40.81
Maximum 2021		2.83	26.55	22.30	0.05	1.21	1.13	5169.52	0.27	2.45	2.31	0.01	0.12	0.11	488.16
Maximum 2022		2.52	22.24	21.63	0.05	0.98	0.92	5171.64	0.24	2.08	2.25	0.01	0.10	0.09	488.38
Maximum 2023		2.36	20.15	21.39	0.05	0.86	0.80	5174.35	0.22	1.88	2.23	0.01	0.08	0.08	488.64
Maximum 2024		2.60	22.05	26.00	0.06	0.93	0.87	5891.51	0.08	0.64	0.81	0.00	0.03	0.03	173.57

Note:

It was assumed that demolishing and facility installation overlap throughout the construction phase.

Vehicle Emissions

Vehicle Emission Factors (EMFAC2014)

		ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂ e
		g/mile	g/mile	g/mile	g/mile	g/mile	g/mile	g/mile
Demolition and Facility Installation 2020	Worker Commute	0.017	0.074	0.815	0.003	0.047	0.020	316.942
	Delivery/Haul Trucks	0.131	4.189	0.743	0.015	0.115	0.053	1627.373
Demolition and Facility Installation 2021	Worker Commute	0.016	0.067	0.756	0.003	0.047	0.020	306.006
	Delivery/Haul Trucks	0.126	3.801	0.746	0.015	0.113	0.051	1609.944
Demolition and Facility Installation 2022	Worker Commute	0.014	0.061	0.706	0.003	0.047	0.020	294.436
	Delivery/Haul Trucks	0.120	3.410	0.744	0.015	0.111	0.049	1590.066
Demolition and Facility Installation 2023	Worker Commute	0.013	0.055	0.659	0.003	0.047	0.020	282.946
	Delivery/Haul Trucks	0.077	1.773	0.670	0.014	0.102	0.041	1528.470
Demolition, Facility Installation, and Paving 2024	Worker Commute	0.012	0.051	0.620	0.003	0.047	0.020	273.187
	Delivery/Haul Trucks	0.078	1.769	0.689	0.014	0.102	0.041	1524.942

Note:

Vehicle emission factors were obtained from EMFAC2014:

Region: SCAQMD

Speed and model year: aggregated

EMFACT2014 does not provide emissions of N2O and CH4 from vehicles. CO2e emissions were assumed to be the same as CO2.

Worker commute vehicles include auto and light duty trucks.

Delivery/Haul trucks include heavy heavy duty diesel trucks.

Vehicle Emissions

Onsite Equipment	Number	Trips/day	miles/trip	days	Maximum Daily Emissions							Annual Emissions						
					ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂ e	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂ e
					lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year	ton/year
Demolition and Facility Installation 2020	Worker Commute	25	50	21	0.047	0.205	2.247	0.009	0.129	0.054	873.406	0.000	0.002	0.024	0.000	0.001	0.001	9.171
	Delivery/Haul Trucks	5	50	21	0.072	2.308	0.409	0.008	0.063	0.029	896.921	0.001	0.024	0.004	0.000	0.001	0.000	9.418
Demolition and Facility Installation 2021	Worker Commute	25	50	249	0.043	0.185	2.085	0.008	0.129	0.054	843.270	0.005	0.023	0.260	0.001	0.016	0.007	104.987
	Delivery/Haul Trucks	5	50	249	0.069	2.095	0.411	0.008	0.062	0.028	887.315	0.009	0.261	0.051	0.001	0.008	0.004	110.471
Demolition and Facility Installation 2022	Worker Commute	25	50	249	0.039	0.167	1.945	0.008	0.129	0.054	811.387	0.005	0.021	0.242	0.001	0.016	0.007	101.018
	Delivery/Haul Trucks	5	50	249	0.066	1.880	0.410	0.008	0.061	0.027	876.359	0.008	0.234	0.051	0.001	0.008	0.003	109.107
Demolition and Facility Installation 2023	Worker Commute	25	50	249	0.035	0.152	1.816	0.008	0.129	0.054	779.724	0.004	0.019	0.226	0.001	0.016	0.007	97.076
	Delivery/Haul Trucks	5	50	249	0.042	0.977	0.369	0.008	0.056	0.022	842.411	0.005	0.122	0.046	0.001	0.007	0.003	104.880
Demolition, Facility Installation, and Paving 2024	Worker Commute	25	50	83	0.032	0.139	1.708	0.008	0.129	0.054	752.830	0.001	0.006	0.071	0.000	0.005	0.002	31.242
	Delivery/Haul Trucks	5	50	83	0.043	0.975	0.380	0.008	0.056	0.022	840.466	0.002	0.040	0.016	0.000	0.002	0.001	34.879
Maximum 2020					0.119	2.513	2.656	0.017	0.193	0.084	1770.327	0.001	0.026	0.028	0.000	0.002	0.001	18.588
Maximum 2021					0.112	2.280	2.496	0.017	0.191	0.082	1730.585	0.014	0.284	0.311	0.002	0.024	0.010	215.458
Maximum 2022					0.105	2.047	2.355	0.016	0.190	0.081	1687.747	0.013	0.255	0.293	0.002	0.024	0.010	210.124
Maximum 2023					0.078	1.129	2.185	0.016	0.185	0.076	1622.134	0.010	0.141	0.272	0.002	0.023	0.010	201.956
Maximum 2024					0.076	1.115	2.088	0.015	0.185	0.076	1593.296	0.003	0.046	0.087	0.001	0.008	0.003	66.122

Note:

1. Miles traveled by worker commute and haul trucks were assumed to be 50 miles per round trip

Fugitive Dust Emissions

A) Bulldozing - Demolition

Fugitive dust emissions from bulldozing

Activity	Number of Equipment	Maximum daily hours hours/day	Days/Year Days/Year	Emission Factor		Daily Emissions		Annual Emissions	
				PM ₁₀ lb/hr	PM _{2.5} lb/hr	PM ₁₀ lb/day	PM _{2.5} lb/day	PM ₁₀ ton/year	PM _{2.5} ton/year
Bulldozing 2020	1	8	21	0.753	0.414	6.02	3.31	0.06	0.03
Bulldozing 2021	1	8	249	0.753	0.414	6.02	3.31	0.75	0.41
Bulldozing 2022	1	8	249	0.753	0.414	6.02	3.31	0.75	0.41
Bulldozing 2023	1	8	249	0.753	0.414	6.02	3.31	0.75	0.41
Bulldozing 2024	1	8	83	0.753	0.414	6.02	3.31	0.25	0.14

Note:

Daily hours per bulldozer:

8 hours/day

PM emissions were calculated using the following equation and parameters (CalEEMod Appendix A):

Emission Factor (lb/hr) = $k \times (s)^{1.5} / (M)^{1.4}$ For PM₁₀ and $k \times 5.7 \times (s)^{1.2} / (M)^{1.3}$ for PM_{2.5}

k = Scaling Constant (0.75 for PM₁₀ and 0.105 for PM_{2.5})

s = Silt Content (assumed to be 6.9% - CalEEMod default for overburden)

M = Moisture Content = 7.9% (CalEEMod default)

B) Grading - Demolition

Fugitive dust emissions from grading

Activity	Number of Grading Equipment	# acres/equipment	Acreage Graded/Day acres	Days/Year Days/Year	Grader VMT		Emission Factors		Daily Emissions		Annual Emissions	
					miles/day	miles/year	PM ₁₀ lb/VMT	PM _{2.5} lb/VMT	PM ₁₀ lb/day	PM _{2.5} lb/day	PM ₁₀ ton/year	PM _{2.5} ton/year
Grading 2020	1	0.5	0.5	21	0.34	7.22	1.54	0.17	0.53	0.06	0.0056	0.0006
Grading 2021	1	0.5	0.5	249	0.34	85.59	1.54	0.17	0.53	0.06	0.0660	0.0071
Grading 2022	1	0.5	0.5	249	0.34	85.59	1.54	0.17	0.53	0.06	0.0660	0.0071
Grading 2023	1	0.5	0.5	249	0.34	85.59	1.54	0.17	0.53	0.06	0.0660	0.0071
Grading 2024	1	0.5	0.5	83	0.34	28.53	1.54	0.17	0.53	0.06	0.0220	0.0024

Note:

PM emissions were calculated using the following equation and parameters: (CalEEMod Appendix A)

Emission factor (lb/VMT) = $k \times 0.051 \times (S)^{2.0}$ for PM₁₀ and $k \times 0.040 \times (S)^{2.5}$ for PM_{2.5}

k = Scaling Constant (0.60 for PM₁₀ and 0.031 for PM_{2.5})

S = Mean Vehicle Speed, CalEEMod default = 7.1 miles/hour

VMT = $As / Wb \times 43,560$ (sqft/acre) / 5280 (ft/mile)

VMT: vehicle miles traveled

As: the acreage of the grading site (0.5 acres per grader)

Wb: blade width of the grader. CalEEMod default Wb = 12 ft.

Fugitive Dust Emissions

Earth Material Loading/Handling - 2019 and 2020

Dust from Soil Loading

	Material Amount		Emission Factors		Daily Emissions		Annual Emissions	
			PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}
	ton/day	ton/year	lb/ton	lb/ton	lb/day	lb/day	ton/year	ton/year
Material unloading 2020	63.2	758	0.00009	0.000014	0.0056	0.00085	0.000034	0.000005
Material unloading 2021	63.2	758	0.00009	0.000014	0.0056	0.00085	0.000034	0.000005
Material unloading 2022	63.2	758	0.00009	0.000014	0.0056	0.00085	0.000034	0.000005
Material unloading 2023	63.2	758	0.00009	0.000014	0.0056	0.00085	0.000034	0.000005
Material unloading 2024	63.2	758	0.00009	0.000014	0.0056	0.00085	0.000034	0.000005

Note:

Fugitive dust from materials unloading from trains and/or trucks are calculated using the following equations and parameters:

$$\text{Emission factor (lb/ton)} = (k)(0.0032)[(U/5)^{1.3}]/[(M/2)^{1.4}]$$

k = Particle Size Constant (0.35 for PM10 and 0.053 for PM2.5)

U = average wind speed = 2.2 m/s (4.92 mph) for SCAQMD (CalEEMod default)

M = moisture content = 12% (CalEEMod Default)

Parameters	Material Unloading for backfill	Unit
Total earth materials to be loaded	600	CY/year
Daily earth materials to be loaded (worst-case, assume 5 truck loads at 10 cy/load)	50	CY/day
Material density (CalEEMod default)	1.264	ton/CY
Materials to be loaded	758	tons/year
Daily tons loaded /unloaded (worst-case)	63.2	ton/day

Summary of Onsite Fugitive Emissions

Activities	Emissions lbs/day		Emissions ton/year	
	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}
Total 2020	6.56	3.37	0.07	0.04
Total 2021	6.56	3.37	0.82	0.42
Total 2022	6.56	3.37	0.82	0.42
Total 2023	6.56	3.37	0.82	0.42
Total 2024	6.56	3.37	0.27	0.14

Appendix B
Technical Memorandum: Biological
Reconnaissance Surveys for
Malibu Mesa Water
Reclamation Plant Refurbishment

Biological Reconnaissance Surveys for Malibu Mesa Water Reclamation Plant Refurbishment

PREPARED FOR: County of Los Angeles Public Works
PREPARED BY: Hannah Buckley/CH2M HILL Engineers, Inc. (CH2M)
DATE: November 13, 2017

Introduction

CH2M conducted biological reconnaissance surveys for biological resources for the Malibu Mesa Water Reclamation Plant (MMWRP) Refurbishment (Project) for the County of Los Angeles Department of Public Works (Project Proponent). The MMWRP treats domestic wastewater from 105 single-family homes in the Malibu Country Estates, located in the City of Malibu and Pepperdine University, which is located in the unincorporated county area. The Project site is located in an urbanized portion of the City of Malibu. Maps of the Project area are included as Figures 1 and 2. CH2M conducted a desktop analysis, habitat assessment, and reconnaissance surveys for the proposed Project area. This memorandum summarizes the results.

Project Description

The refurbishment includes installation of temporary disk filters, demolition of existing filter equipment, installation of parshall flume, pump station with diversion structure, fine screens, anoxic/aerobic bioreactors, membrane tanks, CIP tank and permeate pumps; membrane thickening tank, installation of new structural members in existing building to support new electrical equipment; installation of a new standby generator, new process equipment and pump replacement; demolition of existing generator and fuel tank; refurbishment of the existing round activated sludge process structure, and refurbishment of existing building. The proposed project would not increase the treatment capacity.

Methods

Desktop Analysis

CH2M conducted queries of the California Natural Diversity Database (CNDDDB) (CDFW, 2017) and U.S. Fish and Wildlife Service (USFWS) databases (USFWS, 2017a, 2017b, 2017c, 2017d) to generate a list of special-status wildlife species, and sensitive habitats potentially occurring in the Project area (Attachment 1). The queries of the CNDDDB and USFWS databases were conducted for the Project location, plus a 3-mile buffer. CH2M reviewed the results of these queries, aerial imagery, and other publicly available data. A list of special-status species with potential to occur within the regional vicinity of the Project area is included in Attachment 1.

Habitat Assessment and Reconnaissance Survey

On November 13, 2017, CH2M biologist Hannah Buckley conducted a habitat assessment and reconnaissance survey for the MMWRP (Survey Area). The potential for special-status wildlife to occur in the Survey Areas was assessed based on historical data and existing habitat. Conventional survey protocols, including guidelines provided by USFWS (1996), CBOC (1993) and CDFG (2012), were reviewed and implemented as appropriate. In general, a pedestrian survey was conducted by walking transects spaced approximately 20 feet apart throughout the Survey Area. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. Transects were reduced to

account for differences in terrain, vegetation density, and ground surface visibility. A total of 7 transects were completed, and the beginning of each transect was documented in the site photographs (Attachment 2). The biologist searched for special-status wildlife or sign (e.g., scat, tracks, burrows, etc.). The Survey Area was also surveyed for species protected by the Migratory Bird Treaty Act and California Fish and Game Code. Trees, shrubs, man-made structures, and ground surfaces were surveyed for bird nests. The survey also focused on observations of courtship and behavioral cues. Tall substrates and potential habitat observed in inaccessible areas were surveyed using binoculars.

Special-Status Plants and Wildlife. The potential for special-status plant and wildlife species to occur in the Survey Area was assessed based on historical data and existing habitat. The Study Area was surveyed for the presence of special-status species or sign (e.g., scat, tracks, and burrows).

Nesting Birds. The Survey Area was surveyed for special-status bird species and species protected by the Migratory Bird Treaty Act and California Fish and Game Code. Trees, shrubs, man-made structures, and ground surfaces were surveyed for bird nests. The survey also focused on observations of courtship and behavioral cues.

Other Potential Environmental Issues. Other potential environmental issues, including potential threats to air quality, water quality, cultural resources, and potentially hazardous debris, were observed incidentally and noted as appropriate.

Results

The weather conditions at the time of the field survey are presented in Table 1.

Table 1. Weather Conditions

Date	Time (24-hour)	Project Location	Temperature (°F)	Wind (mph)	Cloud Cover (percent)	Precipitation (None, Light, Moderate, Heavy)	Comments
11/13/2017	0900	Malibu, California	53	4	0	None	Good visibility (10.0 miles); 26 percent humidity

Notes:

°F = degrees Fahrenheit

mph = miles per hour

The survey results are summarized in the following subsections. Photographs can be found in Attachment 2.

Site Description

The Survey Area consists primarily of ruderal/California annual grassland series. This habitat type is an anthropogenic-ruderal community containing an assemblage of plants, primarily non-native herbaceous annuals that thrive in disturbed areas. Ruderal/California annual grassland communities are dominated by non-native grasses or herbs originating from nearby cultivation, horticultural escapes or other outside sources (soil movement, animal disturbance, etc.). Dominant non-native grass species observed on the site include rip gut brome (*Bromus diandrus*), red brome (*Bromus madritensis ssp. rubens*), and wild oats (*Avena fatua*).

Land uses in the immediate vicinity of the Project include commercial, industrial, residential, and developed/disturbed areas. Along with the ruderal/California annual grassland series, the Survey Area also consists primarily of disturbed land, with relatively compacted soils and ornamental vegetation.

Special-status Plants

The Survey Area does not include habitats for special-status plants, and no special-status plants were observed. Vegetation in the Survey Area consists of scattered native and non-native plants, including but not limited to the following:

Observed Pant Species List			
Common Name	Scientific Name	Status Federal/State	Native or Non-native Species
Ice plant	<i>Avena fatua</i>	--/--	Non-native
White Oleander	<i>Anagallis arvensis</i>	--/--	Non-native
Narrow Leaf Milkweed	<i>Asclepias fascicularis</i>	--/--	Native
Bush sunflower	<i>Asclepias fascicularis</i>	--/--	Native
Australian saltbush	<i>Atriplex semibaccata</i>	--/--	Non-native
Wild oats	<i>Avena fatua</i>	--/--	Non-native
Bougainvillea	<i>Bougainvillea glabra</i>	--/--	Non-native
Cape Honeysuckle	<i>Bougainvillea spectabilis</i>	--/--	Non-native
White willow	<i>Brassica nigra</i>	--/--	Non-native
Ripgut brome	<i>Bromus diandrus</i>	--/--	Non-native
red brome	<i>Bromus madritensis ssp. rubens</i>	--/--	Non-native
Canada horseweed	<i>Erigeron Canadensis</i>	--/--	Non-native
Red-stem filaree	<i>Erodium cicutarium</i>	--/--	Non-native
Laurel Sumac	<i>Malosma laurina</i>	--/--	Non-native
Canary Island date palm	<i>Phoenix canariensis</i>	--/--	Non-native
Bristly ox-tongue	<i>Picris echioides</i>	--/--	Non-native
Ponderosa pine	<i>Pinus ponderosa</i>	--/--	Native
Castor bean	<i>Ricinus communis</i>	--/--	Non-native
Russian thistle	<i>Salsola tragus</i>	--/--	Non-native
Russian thistle	<i>Salsola tragus</i>	--/--	Non-native
Purple sage	<i>Salvia leucophylla</i>	--/--	Native
Spineless yucca	<i>Yucca elephantipes</i>	--/--	Non-native

Federal Designations:

(FE) Federally Endangered, (FT) Federally Threatened, (FPE) Federally Proposed Endangered, (FPT) Federally Proposed Threatened, (FSC) Species of Concern, (FC) Candidate

State Designations:

(SE) State Endangered, (ST) State Threatened, (SR) State Rare, (CSC) Species of Special Concern, (CFP) Fully Protected Species

California Native Plant Society (CNPS) Rare Plant Rank:

(1A) Presumed extinct in California; (1B) Rare, threatened, or endangered in California and elsewhere; (2) Rare, threatened, or endangered in California, but more common elsewhere; (3) More information is needed; (4) Limited distribution; (.1) Seriously endangered in California; (.2) Fairly endangered in California; (.3) Not very endangered in California.

Special-status Wildlife

The Survey Area is highly developed and unlikely to support special-status wildlife species. No special-status wildlife or signs of special-status wildlife were observed in the Survey Area. The Survey Area lacked burrows, burrow surrogates, and fossorial mammal dens that could be used by burrowing owls or canid species. Scat from canid species, likely coyote (*Canis latrans*), was found in the southwest corner of the Survey Area near a camper parked in the corner of the lot (Attachment 2, Photograph 1).

Other wildlife species observed within the Survey Area included the following:

- Common raven (*Corvus corax*)
- House sparrow (*Passer domesticus*)
- California ground squirrel (*Otospermophilus beecheyi*)
- European starling (*Sturnis vulgaris*)
- Western fence lizard (*Sceloporus occidentalis*)
- California towhee (*Melospiza crissalis*)
- Woodrat (*neotoma* sp.)
- Mourning dove (*Zenaidara macroura*)
- Black phoebe (*Sayornis nigricans*)
- Northern mockingbird (*Mimus polyglottos*)
- Orange crowned warbler (*Vermivora celata*)
- House wren (*Troglodytes aedon*)
- Song sparrow (*Melospiza melodia*)
- House finch (*Haemorhous mexicanus*)

Nesting Birds

No active bird nests (i.e., nests with birds or young) were observed in, or adjacent to, the Survey Area.

The timing of surveys is usually based on the breeding chronology of the species in the area, and should occur during the peak of breeding activities to better establish the presence or absence of nesting birds. This survey was limited in that it was conducted outside of the avian nesting season (typically ends August 31).

Summary and Recommendations

No special-status plants, special-status wildlife, or sensitive habitats were observed within the Survey Area. No riparian areas, wetlands, or conflicts with local policies or ordinances protecting biological resources were observed. No impacts to special-status species are anticipated as a result of the Project. If construction activities are to occur during the avian nesting season (typically February 1 to August 31), it is recommended that a preconstruction nesting bird survey take place prior to the start of construction to avoid impacting nesting birds. Since the field survey reported in this memorandum was conducted outside of the typical breeding season, and no active bird nests were observed, this survey may serve as clearance for nesting birds until the beginning of the 2018 (February 1 to August 31) breeding season.

References

California Department of Fish and Wildlife (CDFW). 2009. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*. Sacramento, California. <http://www.dfg.ca.gov/bdb/pdfs/guideplt.pdf>.

California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Database (CNDDDB). *RareFind5*. Electronic database. <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. Sacramento, California.

California Native Plant Society (CNPS). 2001. *Botanical Survey Guidelines of the California Native Plant Society*. December 9, 1983; revised June 2, 2001.

California Native Plant Society (CNPS). 2017. *Inventory of Rare, Threatened, and Endangered Plants of California*. <http://www.rareplants.cnps.org/>.

United States Fish and Wildlife Service (USFWS). 2017a. USFWS Critical Habitat for Threatened and Endangered Species GIS Database.

United States Fish and Wildlife Service (USFWS). 2017b. Candidate Species in California based on published population data.

http://ecos.fws.gov/tess_public/pub/stateListingIndividual.jsp?state=CA&status=candidate.

United States Fish and Wildlife Service (USFWS). 2017c. Species proposed for listing in California based on published population data.

http://ecos.fws.gov/tess_public/pub/stateListingIndividual.jsp?state=CA&status=proposed.

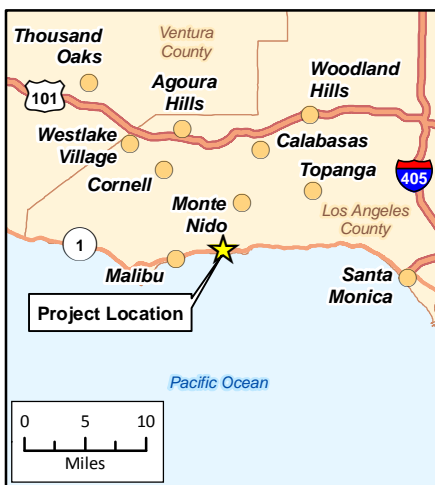
United States Fish and Wildlife Service (USFWS). 2017d. Threatened and endangered species listings and occurrences for California.

http://ecos.fws.gov/tess_public/pub/stateListingAndOccurrenceIndividual.jsp?state=CA&s8fid=112761032792&s8fid=112762573902.

Figures



Aerial Imagery Source: ESRI World Imagery



LEGEND

- Malibu Mesa Water Reclamation Plant

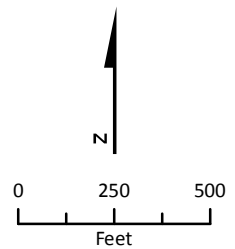


Figure 1
Project Location
 County of Los Angeles Public Works
 Malibu Mesa Water Reclamation Plant





Aerial Imagery Source: ESRI World Imagery

LEGEND

- | | |
|--|---|
| Malibu Mesa Water Reclamation Plant | San Diego desert woodrat |
| 3-mile Buffer | Santa Monica dudleya |
| CNDDDB Plant and Wildlife Occurrences | |
| American peregrine falcon | Southern California Coastal Lagoon |
| Blochman's dudleya | Southern California Steelhead Stream |
| Braunton's milk-vetch | Southern Coastal Salt Marsh |
| Coulter's goldfields | arroyo chub |
| Coulter's saltbush | decumbent goldenbush |
| Davidson's saltscale | golden eagle |
| Lyon's pentachaeta | monarch - California overwintering population |
| Parry's spineflower | steelhead - southern California DPS |
| San Bernardino ringneck snake | tidewater goby |
| | white-veined monardella |

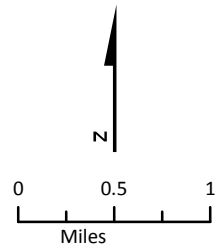


Figure 2
CNDDDB Plant and Wildlife Occurrences
 County of Los Angeles Public Works
 Malibu Mesa Water Reclamation Plant



Attachments

Attachment 1
Special-Status Species with Potential
to Occur

Attachment 1-1. Special-Status Species with Potential to Occur within the Regional Vicinity of the Project Survey Area for the Malibu Mesa Water Reclamation Plant

Species	Status* (Federal / State / Other)	Habitat Requirements	Potential for Occurrence
Plants			
Lyon's pentachaeta <i>Pentachaeta lyonii</i>	FE / SE, S1 / CNPS 1B.1	Annual herb. Occurs in rocky, clay soils of chaparral, coastal scrub, and valley and foothill grassland. Blooms March through August.	Not expected. One CNDDDB record (16664, presumed extant) was identified in Malibu Hills of the Santa Monica Mountains as recent as 1926. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Braunton's milk-vetch <i>Astragalus brauntonii</i>	--- / S2 / CNPS 1B.1	Perennial herb. Occurs in recent burns or disturbed areas, usually sandstone with carbonate layers, chaparral, coastal scrub, and valley and foothill grassland. Blooms January through August.	Not expected. One CNDDDB record (19388, possibly extirpated) was identified in Malibu Lagoon as recent as 1984. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Coulter's goldfields <i>Lasthenia glabrata ssp. coulteri</i>	--- / S2 / CNPS 1B.1	Annual herb. Occurs in marshes and swamps, playas, and vernal pools. Blooms February to June.	Not expected. One CNDDDB record (81897, presumed extant) was identified near Malibu in 1933. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Decumbent goldenbush <i>Isocoma menziesii var. decumbens</i>	--- / S2 / CNPS 1B.2	Perennial shrub. Occurs chaparral and coastal scrub (often in sandy, disturbed areas). Blooms April through November.	Not expected. One CNDDDB record (88375, presumed extant) was identified in Malibu Colony in 1975. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted inside of the appropriate blooming period.
White-veined monardella <i>Monardella hypoleuca ssp. Hypoleuca</i>	--- / S3 / CNPS 1B.3	Perennial herb. Occurs in chaparral and cismontane woodland. Blooms May through August.	Not expected. One CNDDDB record (88857, presumed extant) was identified in Malibu Canyon, in the Santa Monica Mountains in 1898. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.

Attachment 1-1. Special-Status Species with Potential to Occur within the Regional Vicinity of the Project Survey Area for the Malibu Mesa Water Reclamation Plant

Species	Status* (Federal / State / Other)	Habitat Requirements	Potential for Occurrence
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	--- / S2 / CNPS 1B.1	Annual herb. Found in sandy or rocky openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Blooms April through June.	Not expected. One CNDDDB record (10140, possibly extirpated) was identified in the west side of the mouth of Latigo Canyon in 2008. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	--- / S2 / CNPS 1B.1	Perennial herb. Rocky, often clay or serpentinite soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. Blooms April through June.	Not expected. One CNDDDB record (10034, presumed extant) was identified in the mouth of Winter Canyon, near Malibu Beach in 1948. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Coulter's saltbush <i>Atriplex coulteri</i>	--- / S1, S2 / CNPS 1B.2	Perennial herb. Found in alkaline or clay, coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland. Blooms March through October.	Not expected. One CNDDDB record (85824, presumed extant) was identified in Malibu Buffs as recent as 2009. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Santa Monica dudleya <i>Chorizanthe parryi</i> var. <i>parryi</i>	--- / S1 / CNPS 1B.1	Annual herb. Found in sandy or rocky openings, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Blooms April through June.	Not expected. One CNDDDB record (33081, presumed extant) was identified in Malibu Canyon as recent as 2011. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.
Davidson's saltscale <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	--- / S1 / CNPS 1B.2	Perennial herb. Found volcanic or sedimentary, rocky, habitat and chaparral or coastal scrub. Blooms March through June.	Not expected. One CNDDDB record (88926, presumed extant) was identified in Malibu Canyon in 1974. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys. Surveys were conducted outside of the appropriate blooming period.

Attachment 1-1. Special-Status Species with Potential to Occur within the Regional Vicinity of the Project Survey Area for the Malibu Mesa Water Reclamation Plant

Species	Status* (Federal / State / Other)	Habitat Requirements	Potential for Occurrence
Birds			
American peregrine falcon <i>Falco peregrinus anatum</i>	--- / S3S4 / CDFW: Fully Protected CDF: Sensitive USFWS: Birds of Conservation Concern	A medium-sized falcon. Found in large, open habitats including tundra, marshes, seacoasts, savannahs, grasslands, meadows, open woodlands, and agricultural areas; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Low. One CNDDDB record (90320, presumed extant) was identified. The project area is developed and disturbed and did not contain suitable habitat for this species (besides human-made structures). The project area contained migration habitat (out of nesting range). This species was not observed during the reconnaissance surveys.
Golden eagle <i>Aquila chrysaetos</i>	--- / S3 / CDFW: Fully Protected	A large raptor. Golden eagles generally inhabit open and semi-open country such as prairies, sagebrush, arctic and alpine tundra, savannah or sparse woodland, and barren areas, especially in hilly or mountainous regions, in areas with sufficient mammalian prey base and near suitable nesting sites.	Not expected. One CNDDDB record (47919, presumed extant) was identified in Malibu Canyon in the Santa Monica Mountains as recent as 1989. The project area is developed and disturbed and does not contain suitable habitat. This species was not observed during the reconnaissance surveys.
Fish			
Arroyo chub <i>Gila orcuttii</i>	--- / S2 / CDFW: Species of Special Concern	A fish (chub) that reaches a maximum length of 40 cm. Habitat includes headwaters, creeks, and small to medium rivers, often intermittent streams.	Not expected. One CNDDDB record (47978, presumed extant) was identified in Malibu Creek, north of Malibu Beach. No bodies of water were identified in the project area, therefore, habitat for this species was not present. This species was not observed during the reconnaissance surveys.
Steelhead <i>Oncorhynchus mykiss irideus</i>	FE / S1 / CDFW: Species of Special Concern	A trout of variable appearance. Coastal rainbow trout occur in the ocean, in rivers and creeks, and in large inland lakes.	Not expected. One CNDDDB record (29797, presumed extant) was identified in Malibu Creek and Lagoon. No bodies of water were identified in the project area, therefore, habitat for this species was not present. This species was not observed during the reconnaissance surveys.
Tidewater goby <i>Eucyclogobius newberryi</i>	FE / S3 / ---	A two-inch long benthic fish with large fins, a ventral sucker, and a large mouth. This benthic fish occurs in small coastal lagoons, lower reaches of streams, and uppermost portions of large bays. It is most abundant in the upper ends of lagoons created by small coastal streams.	Not expected. One CNDDDB record (28502, presumed extant) was identified in Malibu Creek and Lagoon in 1995. No bodies of water were identified in the project area, therefore, habitat for this species was not present. This species was not observed during the reconnaissance surveys.

Attachment 1-1. Special-Status Species with Potential to Occur within the Regional Vicinity of the Project Survey Area for the Malibu Mesa Water Reclamation Plant

Species	Status* (Federal / State / Other)	Habitat Requirements	Potential for Occurrence
Mammals			
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	--- / S3, S4, SSC / ---	A small light brown rodent. Found in shrubland, chaparral, and sagebrush scrub.	Not expected. One CNDDDB record (30062, presumed extant) was identified near the west edge of Pepperdine University Campus in Malibu in 1995. The project area is developed and disturbed and did not contain suitable habitat for this species. This species was not observed during the reconnaissance surveys.
Reptiles			
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	--- / S2 / ---	A mildly-venemous small, thin snake with smooth scales. Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, woodlands.	Not expected. One CNDDDB record (12040, possibly extirpated) was identified on Malibu Canyon Road, about 2 miles north of Malibu Beach as recent as 1999. The project area is developed and disturbed and contained some suitable habitat for this species (moist habitats). This species was not observed during the reconnaissance surveys.
Invertebrates			
Monarch <i>Danaus plexippus pop. 1</i>	--- / S2, S3 / ---	A large migratory orange and black butterfly. Range extent is based on the winter range which runs along about 1,000 kilometers along the California coast, from northern Mendocino County south to Baja California, Mexico.	Not expected. Three CNDDDB records (12893, 12202, 12040, presumed extant) were identified near Malibu Creek and Escondido Canyon as recent as 1999. Roost trees (such as nonnative Eucalyptus and native conifers) observed in the vicinity of the project. This species was not observed during the reconnaissance surveys.

Attachment 1-1. Special-Status Species with Potential to Occur within the Regional Vicinity of the Project Survey Area for the Malibu Mesa Water Reclamation Plant

Species	Status* (Federal / State / Other)	Habitat Requirements	Potential for Occurrence
---------	--------------------------------------	----------------------	--------------------------

* Key to Status Designations:

Federal Designations:

- (FE) Federally Endangered
- (FT) Federally Threatened
- (FPE) Federally Proposed Endangered
- (FPT) Federally Proposed Threatened
- (FSC) Species of Concern
- (FC) Candidate

State Designations:

- (SE) State Endangered
- (ST) State Threatened
- (SR) State Rare
- (SSC) Species of Special Concern
- (CFP) Fully Protected Species

NatureServe State ranking (S-rank):

- (S1) Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres
- (S2) 6 to 20 EOs OR 1,000 to 3,000 individuals OR 2,000 to 10,000 acres
- (S3) 21-80 EOs or 3,000 to 10,000 individuals OR 10,000 to 50,000 acres
- (S4) Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT RANK
- (S5) Demonstrably secure to ineradicable in California. NO THREAT RANK.

California Native Plant Society (CNPS) Designations:

- | | |
|--|---|
| (1A) Presumed extinct in California | (.1) Seriously endangered in California |
| (1B) Rare, threatened, or endangered in California and elsewhere | (.2) Fairly endangered in California |
| (2) Rare, threatened, or endangered in California, but more common elsewhere | (.3) Not very endangered in California |
| (3) More information is needed | |
| (4) Limited distribution | |

BLM = U.S. Bureau of Land Management

IUCN = International Union for Conservation of Nature

WBWG = Western Bat Working Group

USFS = U.S. Forestry Service

Sources:

California Department of Fish and Wildlife (CDFW). 2017. California Natural Diversity Database (CNDDB). Search within 3 miles. October.

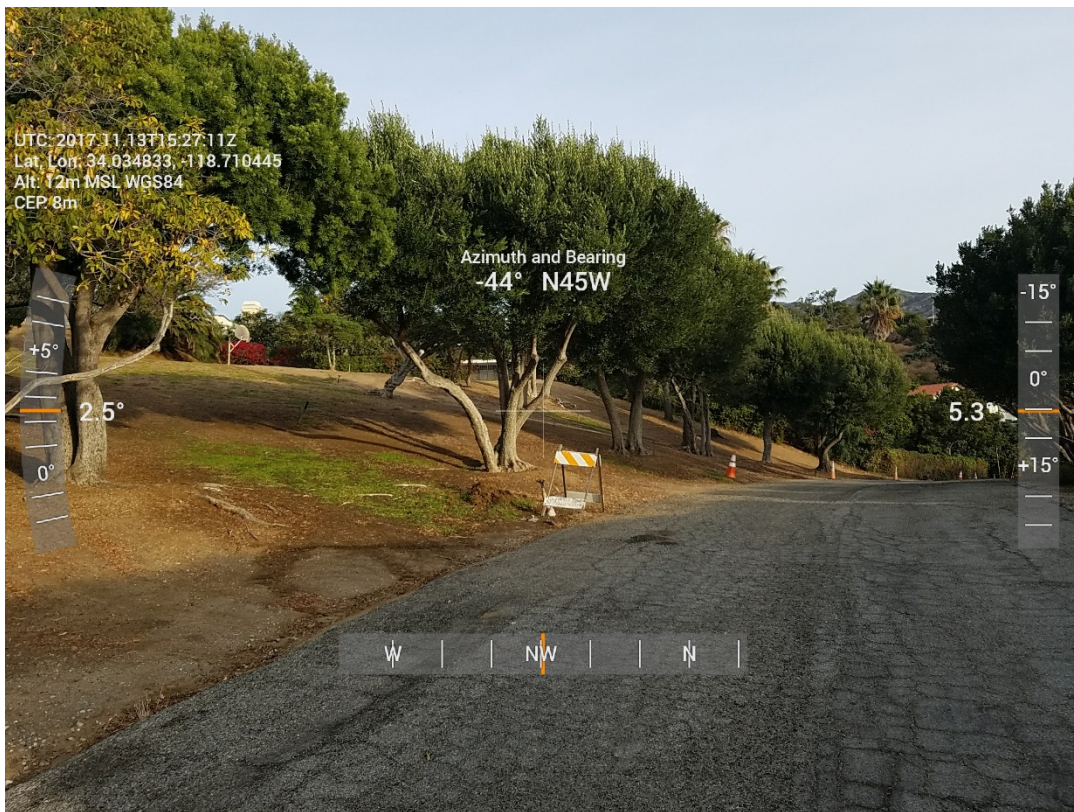
Attachment 2 Site Photographs



Photograph 1. Southern alleyway



Photograph 2. Northern alleyway



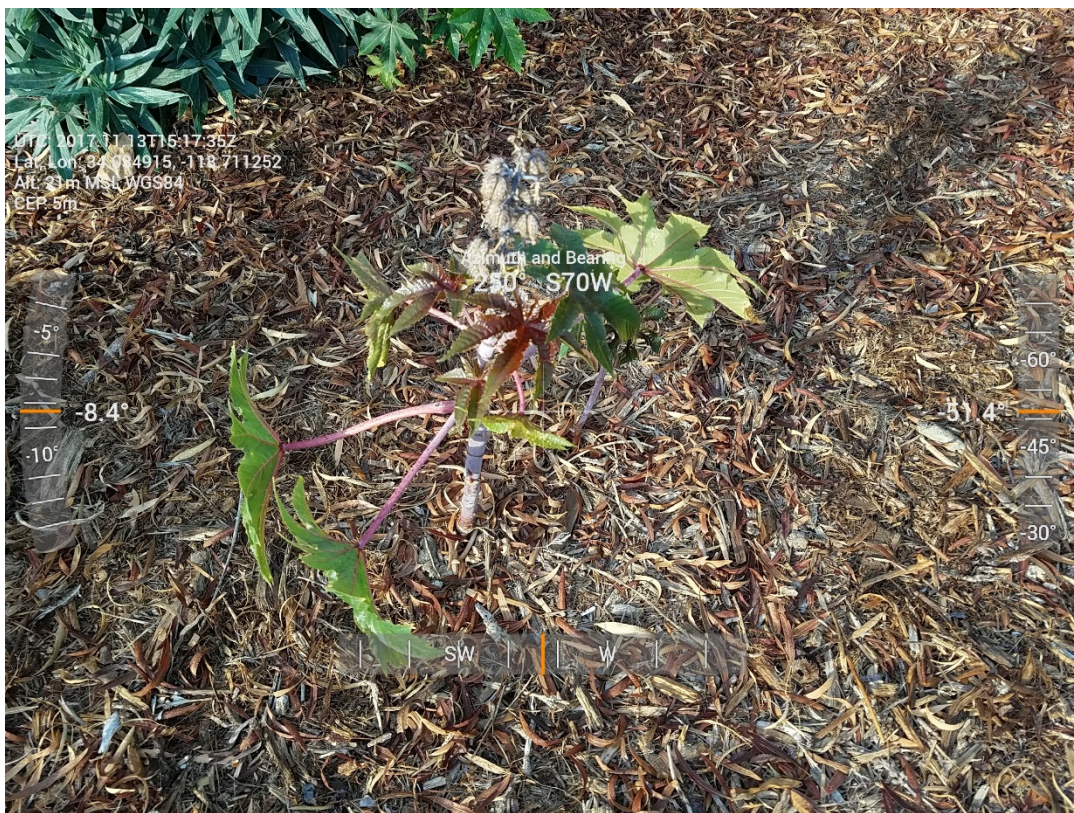
Photograph 3. Entrance road with ornamental trees



Photograph 4. Landscaping at east end of survey area (Cape honeysuckle, *Bougainvillea spectabilis*)



Photograph 5. Ruderal/California annual grassland series



Photograph 6. Castor bean, *Ricinus communis* (invasive)



Photograph 7. Australian saltbush, *Atriplex semibaccata*



Photograph 8. Spineless yucca, *Yucca elephantipes*