

# OCEAN OUTFALL SYSTEM REHABILITATION/OUTFALL LOW FLOW PUMP STATION (PROJECT NO. J-117B)

Final Mitigated Negative Declaration  
State Clearinghouse No# 2017071012

Prepared for  
Orange County Sanitation District

September 2017





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# TABLE OF CONTENTS

## Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station (Project No. J-117B) Final Mitigated Negative Declaration

<b>Section 1: Introduction</b> .....	<b>1-1</b>
1.1 CEQA Requirements .....	1-1
1.2 CEQA Process .....	1-2
<b>Section 2: Comment Letters and Response to Comments</b> .....	<b>2-1</b>
Letter 1: State Clearinghouse, Office of Planning and Research .....	2-2
Letter 2: California Department of Fish and Wildlife .....	2-5
Letter 3: County of Orange, Public Works.....	2-9
Letter 4: Ann Krueger .....	2-13
<b>Section 3, Corrections and Additions to the Draft IS/MND</b> .....	<b>3-1</b>
<b>Section 4, Mitigation Monitoring and Reporting Program</b> .....	<b>4-1</b>
<b>Tables</b>	
2-1 List of Agency Commenters .....	2-1
4-1 Mitigation Monitoring and Reporting Program for the Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station (Project No. J-117B).....	4-2
<b>Attachments</b>	
A Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station (Project No. J-117B) Initial Study/Mitigated Negative Declaration (Revised)	



# SECTION 1

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## Introduction

This Final Mitigated Negative Declaration (Final MND) has been prepared for the Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station (Project No. J-117B; referred to herein as the “proposed project”) in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and *CEQA Guidelines* (California Administrative Code Section 15000 et seq.).

### 1.1 CEQA Requirements

To approve this Final MND, Orange County Sanitation District (OCSD) must certify that the document: a) has been completed in compliance with CEQA; b) was presented to the OCSD Board of Directors who reviewed and considered it prior to approving the project; and c) reflects OCSD’s independent judgment and analysis.

*CEQA Guidelines* Section 15132 specifies that the Final MND shall consist of the following:

- The Draft Initial Study (IS)/MND or a revision of that draft;
- Comments and recommendations received on the Draft IS/MND
- A list of persons, organizations, and public agencies commenting on the Draft IS/MND;
- The response of the Lead Agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the Lead Agency.

This Final MND presents the following sections to comply with the *CEQA Guidelines*:

- Section 1: Introduction and CEQA process;
- Section 2: A list of persons, organizations, and public agencies commenting on the Draft IS/MND, the written comments received on the Draft IS/MND, and the written responses to each comment;
- Section 3: Corrections to the Draft IS/MND in response to comments received or initiated by the Lead Agency; and
- Section 4: Mitigation and Monitoring Program (MMRP)

In addition, **Attachment A** of this Final MND contains the complete revised Draft IS/MND with corrections incorporated in ~~strikeout~~/underline format.

## 1.2 CEQA Process

### Public Participation Process

#### Notice of Intent

The Notice of Intent (NOI) to adopt an IS/MND was posted on July 6, 2017 with the County Clerk in Orange County. The Draft IS/MND was circulated for a 30-day public review until August 5, 2017. The Draft IS/MND was circulated to federal, State, and local agencies and interested parties requesting a copy of the Draft IS/MND. Copies of the Draft IS/MND were made available to the public at the following locations:

- OCSD Web Site: <https://www.ocsd.com/ceqa>
- OCSD, Administrative Office Bldg., Engineering Planning Department, 10844 Ellis Avenue, Fountain Valley, CA 92708
- Huntington Beach Central Library – 7111 Talbert Avenue, Huntington Beach, CA 92648
- Huntington Beach Banning Library – 9281 Banning Avenue, Huntington Beach, CA 92646
- Newport Beach Public Library – 1000 Avocado Avenue, Newport Beach, CA 92660

#### Evaluation and Response to Comments

In accordance with Article 6 of the *CEQA Guidelines*, OCSD, as the Lead Agency, was required to evaluate substantive environmental comments received on the Draft IS/MND. This response to comments provides written responses to each comment received on the Draft IS/MND. OCSD's responses to all comments received on the Draft IS/MND are provided in Section 2.

#### Final MND Approval

As the Lead Agency, OCSD is required to determine the adequacy of the Final MND. OCSD can approve the Final MND if they determine that the environmental documentation is adequate.

#### Notice of Determination

Pursuant to Section 15094 of the *CEQA Guidelines*, OCSD will file a Notice of Determination (NOD) with the Office of Planning and Research and Orange County Clerk within five working days of project approval.



## SECTION 2

# Comment Letters and Response to Comments

The Draft IS/MND for the proposed project was circulated for public review for 30 days (July 6, 2017 through August 5, 2017). This section contains the comment letters received on the proposed project's Draft IS/MND and the Orange County Sanitation District's (OCSD's) responses to each comment within the letters. Each letter, as well as each individual comment within the letter, has been given an assigned letter and number for cross-referencing. **Table 2-1** lists all entities who submitted comments on the Draft IS/MND during the public review period.

**TABLE 2-1  
LIST OF AGENCY COMMENTERS**

<b>Letter #</b>	<b>Commenter</b>	<b>Date of Comment</b>	<b>Comment Page Number</b>	<b>Response Page Number</b>
1	State Clearinghouse, Office of Planning and Research Scott Morgan, Director, State Clearinghouse	August 7, 2017	2-2	2-4
2	California Department of Fish and Wildlife Gail K. Sevrens, Environmental Program Manager South Coast Region	August 3, 2017	2-5	2-7
3	County of Orange, Public Works Richard Vuong, Manager, Planning Division OC Public Works Service Area/OC Development Services	August 2, 2017	2-9	2-11
4	Ann Krueger	July 27, 2017	2-12	2-13



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

August 7, 2017

Kevin Hadden  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92708-7018

Subject: Ocean Outfall System Rehabilitation; Outfall Low Flow Pump Station (Project No. J-117B)  
SCH#: 2017071012

Dear Kevin Hadden:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 4, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

1-A

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2017071012  
**Project Title** Ocean Outfall System Rehabilitation; Outfall Low Flow Pump Station (Project No. J-117B)  
**Lead Agency** Orange County Sanitation District

**Type** MND Mitigated Negative Declaration  
**Description** The proposed project includes construction of a new pump station facility consisting of an low flow pump station and a plant water pump station, rehabilitation of the existing Ocean Outfall Booster Station and Central Generation facility, and miscellaneous minor works at the Effluent Pump Station Annex and standby power facility within the Orange County Water District Water Treatment Plant No. 2 boundary.

**Lead Agency Contact**

**Name** Kevin Hadden  
**Agency** Orange County Sanitation District  
**Phone** (714) 593-7462 **Fax**  
**email**  
**Address** 10844 Ellis Avenue  
**City** Fountain Valley **State** CA **Zip** 92708-7018

**Project Location**

**County** Orange  
**City** Huntington Beach  
**Region**  
**Lat / Long** 33° 38' 20" N / 117° 57' 21" W  
**Cross Streets** Brookhurst St and Pacific Coast Hwy (SR-1)  
**Parcel No.** Mult  
**Township** 6S **Range** 10W **Section** 20 **Base**

**Proximity to:**

**Highways** SR-1  
**Airports**  
**Railways**  
**Waterways** Santa Ana River, Pacific Ocean  
**Schools** Various  
**Land Use** GP: Public; Z: Industrial limited and residential ag with an oil overlay

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

**Reviewing Agencies** Resources Agency; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 12; Native American Heritage Commission; Regional Water Quality Control Board, Region 8; State Water Resources Control Board, Division of Water Rights; State Water Resources Control Board, Division of Financial Assistance; State Water Resources Control Board, Division of Drinking Water; Air Resources Board, Major Industrial Projects

**Date Received** 07/06/2017 **Start of Review** 07/06/2017 **End of Review** 08/04/2017

**Letter 1  
Response**

**State Clearinghouse, Office of Planning and Research  
Scott Morgan  
August 7, 2017**

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1-A

The commenter states the Draft IS/MND for the proposed project was distributed to selected state agencies for review. The commenter acknowledged OCSD complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. The State Clearinghouse attached California Department of Fish and Wildlife's (CDFW's) comment letter.

This comment is noted for the record. Comments in CDFW's letter are bracketed and responses provided starting on page 2-5 below.



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
3883 Ruffin Road  
San Diego, CA 92123  
(858) 467-4201  
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



August 3, 2017

Mr. Kevin Hadden  
Orange County Sanitation District  
10844 Ellis Avenue  
Fountain Valley, CA 92708  
CEQA@ocsd.com

**Subject: Comments on the Notice of Intent to Adopt a Mitigated Negative Declaration for Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station, Huntington Beach, CA (SCH# 2017071012)**

Dear Mr. Hadden:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the Ocean Outfall System Rehabilitation/Outfall Low Flow Pump Station Project, dated July 2017. The following statements and comments have been prepared pursuant to the Department’s authority as a Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act [CEQA] Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code (FGC) section 1600 *et seq.* The Department also administers the Natural Community Conservation Planning (NCCP) program.



2-A

The project proposes to replace existing facilities with a low flow pump station. It is located within the Orange County Sanitation District (OCSD) Plant 2, in the City of Huntington Beach, immediately west of the Santa Ana River Trail, the Santa Ana River, and Talbert Regional Park. The Santa Ana River serves as a major wildlife corridor for many wildlife species, especially birds. To the south of the project area, on the shore of the Pacific Ocean west of the mouth of the Santa Ana River, are California least tern (*Sternula antillarum browni*, least tern) and western snowy plover (*Charadrius nivosus nivosus*, snowy plover) nesting colonies. Least terns are listed as endangered under CESA and the federal Endangered Species Act (Act); they are also fully protected under FGC section 3511(b)(6). Snowy plovers are a state species of special concern and are listed as threatened under the Act.

The Department is concerned that the impacts of noise and stormwater/hazardous materials on biological resources were not analyzed in the MND. The Department offers the following comments and recommendations to assist the OCSD in avoiding or minimizing potential project impacts to biological resources.

1. While impacts of construction noise on adjacent residences and commercial areas are detailed (page 76), noise impacts relative to wildlife, specifically birds, are not. The Department is concerned with potential edge effects and indirect impacts to off-site breeding habitat, particularly noise-related impacts associated with proposed construction activities. The MND states that noise levels could range from 75-90 dBA at 50 feet (page 78). Noise levels over 60 dBA may adversely impact the ability of birds to



2-B

Mr. Kevin Hadden  
Orange County Sanitation District  
August 3, 2017  
Page 2 of 2

engage in nesting activities and/or forage. Therefore, the Department requests further analysis of noise impacts to birds and other wildlife in the final MND. This analysis should include mitigation measures that avoid or minimize noise impacts below a level of significance for biological resources.

↑  
2-B

- 2. Impacts to biological resources from stormwater impacts and/or hazardous materials were not analyzed in the MND. Due to the high volume of species that use the Santa Ana River, and the project's proximity to California least tern and snowy plover colonies, the Department requests that the final MND include a discussion of whether impacts to biological resources could result from potential stormwater impacts. Mitigation measures should also be included, if appropriate.

2-C

We appreciate the opportunity to comment on the draft MND for this project and to assist the OCSD in further minimizing and mitigating project impacts to biological resources. The Department requests an opportunity to review and comment on any response that the OCSD has to our comments and to receive notification of the forthcoming hearing date for the project (CEQA Guidelines; §15073(e)). If you have any questions or comments regarding this letter, please contact Jennifer Turner at (858-467-2717), or via email at [jennifer.turner@wildlife.ca.gov](mailto:jennifer.turner@wildlife.ca.gov).

2-D

Sincerely,

Gail K. Sevrens  
Environmental Program Manager  
South Coast Region

ec: Christine Medak (U.S. Fish and Wildlife Service)  
Scott Morgan (State Clearinghouse)

**Letter 2  
Response****California Department of Fish and Wildlife  
Gail K. Sevrens  
August 3, 2017**

2-A

The commenter summarizes CDFW's authorities and the primary aspects of the proposed project. The commenter notes the proposed project's location adjacent to the Santa Ana River Trail, Santa Ana River, and Talbert Regional Park, specifically stating that the Santa Ana River serves as a major wildlife corridor, particularly for avian species. The commenter further notes the presence of California least tern (*Sternula antillarum browni*) and western snowy plover (*Charadrius nivosus nivosus*) nesting colonies to the south of the project area, on the shore of the Pacific Ocean and west of the mouth of the Santa Ana River.

CDFW's authority is understood and the commenter's summary of the proposed project is consistent with Section 2 of the Draft IS/MND. Also, the presence of California least tern and western snowy plover nesting colonies is referenced in Section 4.4, *Biological Resources*, of the Draft IS/MND (see page 39).

2-B

The commenter suggests that while impacts of construction noise on adjacent residences and commercial areas are detailed, noise impacts relative to wildlife (specifically birds) are not. The commenter states that noise levels over 60 dBA may adversely impact the ability of birds to engage in nesting activities and/or forage and requests further analysis of noise impacts to birds and other wildlife and mitigation measures to avoid or minimize noise impacts below a level of significance for biological resources.

Potential construction noise impacts to nesting birds associated with the proposed project are specifically addressed under threshold a) in Section 4.4, *Biological Resources*, of the Draft IS/MND (see page 39). The Draft IS/MND states "...there is potential for nesting birds to be indirectly impacted as a result of construction noise, if construction occurs during the breeding season." Mitigation Measure BIO-1 is provided to address potential noise impacts on nesting birds. This measure requires timing construction outside of the avian breeding season (to the extent feasible) and, if the breeding season cannot be avoided, identification and avoidance of active nests (with an appropriately-sized buffer). A qualified biologist will be responsible for identifying nest sites, establishing appropriately-sized avoidance buffers, and coordinating with CDFW and USFWS to ensure proper measures are implemented to minimize impacts to active nest sites. The qualified biologist will consider potential noise impacts to local bird populations when establishing avoidance buffers.

Moreover, it should be noted that even if construction were to occur during the breeding season, OCS&D does not anticipate any noise impacts to the California least tern and western snowy plover colonies located at

the mouth of the Santa Ana River. The nesting colonies are approximately 0.5 mile south of the proposed project site and, at that distance, noise generated by the loudest construction equipment associated with the proposed project (90 dBA at 50 feet) would be below 60 dBA due to ground-effect attenuation (absorption).<sup>1</sup>

2-C

The commenter states impacts to biological resources from stormwater impacts and/or hazardous materials were not analyzed in the MND. Referencing the high volume of species that use the Santa Ana River and proximity to the California least tern and western snowy plover nesting colonies, the commenter requests that the Final MND include a discussion of potential stormwater impacts to biological resources and identification of mitigation measures, if appropriate.

The proposed project would not result in stormwater or hazardous material impacts to biological resources. The proposed project would occur within the boundaries of OCSD's Plant 2 wastewater treatment facility where all runoff is captured on-site. Also, as discussed under threshold a) in Section 4.9, *Hydrology and Water Quality*, of the Draft IS/MND (see page 68), the proposed project would be subject to a General Construction Permit under the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act. Compliance with the General Construction Permit requires implementation of a Stormwater Pollution Prevention Plan (SWPPP), which will require implementation of BMPs to reduce pollutants in stormwater. BMPs that could be used to enhance erosion control include scheduling to avoid wet weather events; hydraulic mulching; hydroseeding; using soil binders; straw mulching; using geotextiles, plastic covers, and erosion control blankets/mats; and wood mulching. BMPs would also include practices for proper handling of chemicals, such as avoidance of fueling at the construction site and overtopping during fueling, and installation of containment pans.

2-D

The commenter requests an opportunity to review and comment on any response that OCSD has to the comments provided and to receive notification of the forthcoming hearing date for the project in accordance with CEQA Guidelines Section 15073(e).

Per CEQA guidelines 15074 (a), OCSD's Board of Directors will consider the proposed MND together with comments received during the public review process. OCSD will provide notification to CDFW of the availability of the Final MND, which will include responses to CDFW's comments, and the hearing date.

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<sup>1</sup> Noise levels diminish rapidly with distance from construction sites at a rate of approximately 6 dBA per doubling of distance. A noise level of 90 dBA  $L_{eq}$  measured at 50 feet from the noise source to the receptor would reduce to 78 dBA  $L_{eq}$  at 100 feet from the source to the receptor, and reduce by another 6 dBA  $L_{eq}$  to 72 dBA  $L_{eq}$  at 200 feet from the source to the receptor. The noise level would be approximately 60 dBA  $L_{eq}$  at 800 feet.





August 2, 2017

NCL-2017-045

Kevin Hadden
Orange County Sanitation District
Engineering Planning
10844 Ellis Avenue
Fountain Valley, CA 92708

Subject: Notice of Intent to Adopt a MND for Ocean Outfall System Rehabilitation

Dear Mr. Hadden:

Thank you for the opportunity to comment on the subject project that involves the construction of a new pump station facility consisting of an Outfall Low Flow Pump Station, a Plant Water Pump Station, plus rehabilitation of the existing Ocean Outfall Booster Station. The proposed project site is in the vicinity of Santa Ana River and Santa Ana River Trail and Bikeway system. OC Infrastructure Programs/Flood Program Support would like to offer the following comment for your consideration:

3-A

Hydrology Unit

- 1. Any work related to the proposed project within OCFCD right-of-way will require an encroachment permit from the County's Public Property Permits Section. In addition, all work within OCFCD right-of-way should be performed in a manner that will not adversely impact the hydraulic flow conditions, access and/or maintenance requirements of OCFCD facilities. Information regarding permit application is available on our website - http://www.ocpublicworks.com/ds/permits/encroachment\_permits.

3-B

Santa Ana River Project Unit

- 1. In the event the proposed work alters, modifies, or occupies the Santa Ana River levee system, a section 408 permit will need to be obtained from the US Army Corps of Engineers (USACE).
2. The appropriate regulatory agencies should review the potential impacts to the sensitive habitat within the area, especially the least tern that is located within the salt marsh area, across from the proposed project site.

3-C
3-D

If you have any questions regarding these comments, please contact Robert McLean at (714) 647-3951 or Anna Brzezicki in Flood Programs at (714) 647-3989 or Linda Smith in Development Services at (714) 667-8848.

3-E

Sincerely,



Richard Vuong, Manager, Planning Division  
OC Public Works Service Area/OC Development Services  
300 North Flower Street  
Santa Ana, California 92702-4048  
Richard.Vuong@ocpw.ocgov.com

cc: Robert McLean, OC Infrastructure Programs/Flood Program Support  
Anna Brzezicki, OC Infrastructure Programs/Flood Program Support  
Ariel Corpuz, Flood Programs/Santa Ana River

**Letter 3  
Response****County of Orange, Public Works  
Richard Vuong  
August 2, 2017**

- 
- 3-A The commenter thanks OCSD for the opportunity to comment on the proposed project and notes its location near the Santa Ana River and Santa Ana River Trail and Bikeway system.
- The commenter's description of the proposed project's location near the Santa Ana River and Santa Ana River Trail and Bikeway system is consistent with the description of the project setting in the Draft IS/MND. The Draft IS/MND states "[t]he Santa Ana River and Santa Ana River Trail are located immediately east of the facility." (see page 2 of the Draft IS/MND)
- 3-B The commenter states any work related to the proposed project within the Orange County Flood Control District right-of-way will require an encroachment permit.
- As currently designed, the proposed project will occur entirely within the boundaries of OCSD's Plant 2 wastewater treatment facility and work within an Orange County Flood Control District right-of-way is not anticipated. OCSD will coordinate with the Orange County Flood Control District to confirm the need or lack thereof of an encroachment permit for the proposed project.
- 3-C The commenter states that in the event the proposed project alters, modifies, or occupies the Santa Ana River levee system, a Section 408 permit will need to be obtained from the U.S. Army Corps of Engineers.
- The proposed project will occur entirely within the boundaries of OCSD's Plant 2 wastewater treatment facility and will not alter, modify, or occupy the Santa Ana River levee system. Therefore, a Section 408 permit will not be required for the proposed project.
- 3-D The commenter states the appropriate regulatory agencies should review potential impacts to sensitive habitat, especially the least tern that is located within the salt marsh area across from the proposed project site.
- Both USFWS and CDFW have been notified of the proposed project. CDFW provided comment on the Draft IS/MND and referenced the California least tern and snowy plover nesting colonies located at the mouth of the Santa Ana River. It should be clarified the salt marsh habitat in the immediate vicinity of the project area is not suitable nesting habitat for these species. Rather the California least tern and western snowy plover nesting habitat is located on open beach habitat at the mouth of the Santa Ana River, approximately 0.5 mile south of the proposed project site.

3-E

The commenter provides contact information in the event OCSD has any questions regarding the provided comments. This comment is noted for the record.

**From:** ann krueger [<mailto:skipperkrueger@gmail.com>]  
**Sent:** Monday, July 24, 2017 11:48 AM  
**To:** CEQA <[ceqa@ocsd.com](mailto:ceqa@ocsd.com)>  
**Subject:** upgrades

This is in response to your proposed upgrades.

I live in Newport Shores and look directly across the river at the sanitation plant.

My neighbors and I suffer the most impact because of noise and our "view".

The upgrades are necessary and that requires noise.

More tall trees would help to shield the view of the plant. I realize that tall trees might attract big birds to prey on little birds but, in fact the big birds can roam over a very large area.

You may have some more creative solutions.

Please give us something positive, especially since we have to deal with all the negatives.

Improve the view.

Thank you for your consideration.

Ann Krueger  
439 Canal ST.  
Newport Beach  
949 642 2646



4-A

**Letter 4  
Response**

**Ann Krueger  
July 24, 2017**

---

4-A

The commenter expresses concerns regarding noise and visual impacts associated with the proposed project. The commenter requests improving the view using tall trees or other creative solutions.

Visual and noise impacts associated with the proposed project are disclosed in Draft IS/MND Sections 4.1 and 4.12, respectively. Visual impacts to surrounding residents would be less than significant as “the proposed facilities would not contrast with existing facilities at Plant 2, and the new pump station facility and ancillary facilities would not obstruct public views of the neighboring Santa Ana River or marshlands.” (see page 15 of the Draft IS/MND) Noise impacts to surrounding residents would also be less than significant as “[t]he proposed project would not expose persons to or generate noise levels in excess of established standards.” (see page 78 of the Draft IS/MND) Improving the view for local residents is beyond the scope of this project.

## SECTION 3

### Corrections to the Draft IS/MND

---

The following changes are made in the Final MND to address inclusion of an emergency standby generator as part of the proposed project, which addition of text is signified with underline text and text deletions are shown in ~~strikeout~~. This component of the proposed project was not described in the Draft IS/MND circulated for public review. Inclusion of the emergency standby generator does not change conclusions of the MND or result in the need for new mitigation.

In addition to this Section 3, **Attachment A** of this Final MND contains the complete revised Draft IS/MND with corrections incorporated in ~~strikeout~~/underline format.

#### Section 2.2.3 Rehabilitation at Effluent Pump Station Annex, page 8

Rehabilitation at EPSA and SPF would include the following:

- Addition of a 2 megawatt 12 kilovolt Tier 2 Diesel Standby Generator on existing equipment pad within existing sound attenuated enclosed building shared by four other existing generator units.
- Provide emergency egress lighting and exit signage throughout the generator, electrical, and pump buildings.
- Provide a security camera system on the exterior east side of EPSA to monitor the plant east exterior fence line.

#### Section 4.3 Air Quality, page 27

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the proposed project would include the following:

**Rule 401 – Visible Emissions.** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

**Rule 402 – Nuisance.** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

**Rule 403 – Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.

**Rule 1113 – Architectural Coatings.** No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule.

**Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule applies to stationary compression ignition engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

## Section 4.3 Air Quality, pages 31-32

### *Operations*

Implementation of the proposed project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. Since the new pump system may operate alongside the older system for an undetermined amount of time, the annual operational criteria pollutant emissions associated with the existing uses at the Plant 2 site are not subtracted from the proposed project's operational emissions calculations. The proposed project's operational emissions fall well below the thresholds for the associated criteria pollutants so operating the new system and older one in tandem will not cause a significant increase in operational emissions. Furthermore, the new LOFLO PS/PWPS system is expected to be more efficient than the system it is replacing and will effectively lower the plant's operational emissions once the older system is phased out completely. Regional operational emissions were modeled using CalEEMod Version 2016.3.1 and are summarized in **Table 6**.

Stationary source emissions are estimated for the proposed 2 megawatt emergency standby generator. These emissions were estimated separately outside of the CalEEMod software. The emergency generator emissions are calculated based on compliance with the Tier 2 emissions standards and compliance with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines) mandated emission limits and operating hour constraints. OCSD will obtain requisite permits from SCAQMD to construct and operate the standby generator.



**TABLE 6  
PROPOSED REGIONAL OPERATIONAL EMISSIONS**

Operational Activities	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10	PM2.5
Area (Consumer Products, Landscaping)	<1	<1	<1	<1	<0.1	<0.1
Energy (Natural Gas)	<1	<1	<1	<1	<0.1	<0.1
Motor Vehicles	<1	<1	1	<1	0.2	<0.1
Stationary (Emergency Generator)	<u>3</u>	<u>39</u>	<u>23</u>	<u>&lt;0.1</u>	<u>0.2</u>	<u>0.2</u>
<b>Total Project On-Site and Off-Site Emissions</b>	<1	<1	1	<1	<0.1	<0.1
<b>Maximum Net Regional (On-Site and Off-Site) Emissions</b>	<del>&lt;13</del>	<del>&lt;139</del>	<del>123</del>	<1	<b>0.2</b>	<del>&lt;0.10.2</del>
<b>SCAQMD Numeric Indicators</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Refer Appendix A

## Section 4.3 Air Quality, pages 34-35

### *Operational LST*

During project operations, the daily amount of localized pollutant emissions generated on-site by the proposed project would not be substantial. As stated above, the new LOFLO PS/PWPS may operate simultaneously with the older system while the old facility is intermittently decommissioned. This temporary overlap would not result in any significant increase in emissions. This is corroborated by the fact that the project's localized operational emissions are all less than 1 pound per day for all criteria pollutants. The proposed project on-site operational emissions are shown in **Table 8**. Operational emissions were modeled using CalEEMod Version 2016.3.1, and the on-site emissions were used to compare SCAQMD LST thresholds. Assumptions and modeling output are included in Appendix A. As shown, the proposed project's total operational-related emissions generated on-site would not exceed SCAQMD's applicable operational LSTs. Thus, localized air quality impacts during operations would be less than significant.

**TABLE 8  
PROPOSED PROJECT UNMITIGATED LOCALIZED DAILY OPERATIONAL EMISSIONS**

Operational Activities	Estimated Maximum Daily On-Site Emissions (lbs/day)			
	NO <sub>x</sub>	CO	PM10 <sup>a</sup>	PM2.5 <sup>a</sup>
Area (Consumer Products, Landscaping)	<1	<1	<0.1	<0.1
Energy (Natural Gas)	<1	<1	<0.1	<0.1
<u>Stationary (Emergency Generator)</u>	<u>39</u>	<u>23</u>	<u>0.2</u>	<u>0.2</u>
<b>Total Project On-Site Emissions</b>	<b>&lt;139</b>	<b>&lt;123</b>	<b>&lt;0.10.2</b>	<b>&lt;0.10.2</b>
<b>SCAQMD Numeric Indicators</b>	<b>131</b>	<b>962</b>	<b>2</b>	<b>2</b>
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Refer to Appendix A

<sup>a</sup> Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.  
<sup>b</sup> LSTs for a 2-acre site in SRA 18 at a receptor distance of 25 meters.

## Section 4.7 Greenhouse Gas Emissions, pages 61-62

**Less than Significant Impact.** According to SCAQMD methodology, because GHG emissions are a cumulative impact, project significance is determined by the combined amortized construction and operational emissions.

Construction-related GHG emissions for the proposed project were estimated using CalEEMod Version 2016.3.1 with the same assumptions as the air quality analysis. The proposed project's total estimated GHG emissions during construction would be approximately 1,128 MTCO<sub>2</sub>e. This would equal approximately 37.6 MTCO<sub>2</sub>e per year after amortization over 30 years per SCAQMD methodology.

Area and indirect sources associated with the proposed project would primarily result from electricity consumption, water transport (the energy used to pump water to and from the project area), and solid waste generation.

Stationary sources would include one on-site emergency standby generator rated at 2 megawatts. The emergency standby generator would result in emissions during maintenance and testing operations and emissions were estimated separately outside of the CalEEMod software. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470. Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470. OCS&D will obtain requisite permits from SCAQMD to construct and operate the standby generator.

Similar to the air quality analysis, the annual operational GHG emissions associated with the project are presented as an addition to preexisting emissions due to the potential overlap in operation while the old facility is intermittently decommissioned.

Currently, while SCAQMD has issued proposed standards and guidelines, there is no adopted state or local standard for determining the cumulative significance of the proposed project's GHG emissions on global climate change. However, the SCAQMD has proposed a screening level of 10,000 MTCO<sub>2</sub>e per year for industrial projects (SCAQMD, 2008). It is estimated that this screening threshold would capture 90 percent of the GHG emissions from new industrial projects. Since the City also has not adopted any significance criteria or guidelines for GHG analysis, the annual threshold of 10,000 MTCO<sub>2</sub>e proposed by the SCAQMD was used as a screening level for determining the significance of the proposed project's GHG emissions.

As shown in **Table 11**, the proposed project's total annual GHG emissions, as calculated using CalEEMod Version 2016.3.1, would be approximately ~~128~~**181** MTCO<sub>2</sub>e per year (detailed calculations are included in **Appendix C**), which would not exceed SCAQMD's proposed screening level of 10,000 MTCO<sub>2</sub>e per year for industrial projects. Therefore, the change in GHG emissions resulting from project implementation is considered to be less than significant.

**TABLE 11**  
**ESTIMATED CONSTRUCTION- AND OPERATIONS-RELATED GHG EMISSIONS**

Emission Source	Estimated Emissions CO <sub>2</sub> e (MT/year)
<b>Construction</b>	
Annual Mitigated Construction (Amortized over 30 years)	34
<b>Operations</b>	
Area Sources	<0.1
Energy Consumption	43
<u>Emergency Generator</u>	<u>53</u>
Mobile Sources	30
Solid Waste	7
Water Consumption	14
<b>Total (Construction and Operational Emissions)</b>	<b><u>128</u><del>181</del></b>
<b>Greater than 10,000 MTCO<sub>2</sub>e?</b>	<b>No</b>

**NOTES:**

<sup>a</sup> GHG emissions for intermittent construction phases (e.g. demolition, drainage) calculated proportionally to number of work days, not total days

SOURCE: Refer to Appendix C

## Section 4.12 Noise, pages 80-81

### *Operations*

Chapter 8.40 of the Huntington Beach Municipal Code serves as the City's Noise Ordinance, which establishes noise standards to control unnecessary, excessive, and annoying noise levels in the City. **Table 14**, Huntington Beach Exterior Noise Standards, presents the applicable exterior noise standards for the designated noise zones established in the City's Noise Ordinance.

**TABLE 14**  
**HUNTINGTON BEACH EXTERIOR NOISE STANDARDS**

Noise Zone	Exterior Noise Standards	Time Period
1 – All residential properties.	55 dB(A) 50 dB(A)	7:00 a.m. – 10:00 p.m. 10:00 p.m. – 7:00 a.m.
2 – All professional office & public institution properties.	55 dB(A)	Anytime
3 – All commercial properties with the exception of professional office properties.	60 dB(A)	Anytime
4 – All industrial properties.	70 dB(A)	Anytime

SOURCE: City of Huntington Beach Municipal Code Section 8.40.050

Once the proposed pump stations are operational, noise levels generated at the project area would mainly occur from the pump stations.

The analysis of the pump station-related noise is based upon reference noise measurement conducted on July 15, 2016, at a pump station located in the OCWD facility at 18700 Ward Street, Fountain Valley, CA. Pump station-related noise levels were measured inside of the pump station and outside of the pump station at 5 feet from a louver.<sup>1</sup> The pump station-related noise level was then calculated, in terms of hourly  $L_{eq}$ , for sensitive receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance. Noise level of 80 dBA was measured inside of the pump station and noise level of 66 dBA was measured at 5 feet from the louver outside of the pump station. The pump station house with louvers would provide approximately 14 dBA noise reduction.

The nearest single-family residential uses west of the project area would be located approximately 1,300 feet from the proposed pump stations. Based on a noise level source strength of 66 dBA at a reference distance of 5 feet, and accounting for distance attenuation (minimum 39 dBA insertion loss) and barrier insertion loss by the existing structures and block walls along Brookhurst Street (minimum 10 dBA insertion loss), pump station related noise would be reduced to 10 dBA at the nearest noise sensitive uses.

The proposed project would include installation of an on-site emergency standby generator, which may be used in the event of a power outage to provide electricity for emergency safety lighting and other emergency electricity needs. Maintenance and testing of the emergency generator would not occur daily, but rather periodically, up to 50 hours per year per SCAQMD Rule 1470. The emergency generator would be located within an existing sound attenuated building that currently houses four other existing generators.

<sup>1</sup> A louver is a window blind or shutter with horizontal slats that are angled to admit light and air, but to keep out rain and direct sunshine.

The building within which the generator would be located within is approximately 1,300 feet from the nearest single-family residential uses west of the project area. Based on a noise survey that was conducted for an equivalent generator, the generator would generate noise levels of approximately 96 dBA  $L_{eq}$  at 25 feet.<sup>2</sup> Based on a noise level source strength of 96 dBA at a reference distance of 25 feet, and accounting for barrier-insertion loss by the building and mufflers (minimum 20 dBA insertion loss)<sup>3</sup> and distance attenuation (minimum 34 dBA loss per doubling of distance), generator related activity noise would be approximately 42 dBA at the nearest single-family residential use. As such, noise generator by the emergency standby generator would not exceed the daytime exterior noise limit of 55 dBA  $L_{eq}$  and impacts would be less than significant.

All of the proposed facilities would be designed to insulate noise of the machinery such that elevated noise levels would be contained on-site. Operation of the project would not expose persons to, or generate noise levels in excess of standards established in the noise ordinance, or applicable standards of other agencies, Therefore, impacts would be less than significant.

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<sup>2</sup> The generator noise measurements were conducted at a Verizon facility using the Larson-Davis 820 Precision Integrated Sound Level Meter (“SLM”) in November 2000. The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute S1.4. All instruments were calibrated and operated according to the applicable manufacturer specification. The microphone was placed at a height of approximately 5 feet above the local grade.

<sup>3</sup> Federal Highway Administration, Noise Barrier Design Handbook, Acoustical Considerations, Updated July 6, 2011, [https://www.fhwa.dot.gov/environment/noise/noise\\_barriers/design\\_construction/design/design03.cfm](https://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/design/design03.cfm). Accessed on May 11, 2017.

## SECTION 4

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# Mitigation Monitoring and Reporting Program

### CEQA Requirements

Section 15091(d) and Section 15097 of the CEQA Guidelines require a public agency to adopt a program for monitoring or reporting on the changes it has required in the project or conditions of approval to substantially lessen significant environmental effects. This Mitigation, Monitoring and Reporting Program (MMRP) summarizes the mitigation commitments identified in the proposed project's Draft IS/MND (State Clearinghouse No. 2017071012). Mitigation measures are presented in the same order as they occur in the Draft IS/MND.

The columns in the MMRP table provide the following information:

- **Mitigation Measure(s):** The action(s) that will be taken to reduce the impact to a less-than-significant level.
- **Implementation, Monitoring, and Reporting Action:** The appropriate steps to implement and document compliance with the mitigation measures.
- **Responsibility:** The agency or private entity responsible for ensuring implementation of the mitigation measure. However, until the mitigation measures are completed, OCSD, as the CEQA Lead Agency, remains responsible for ensuring that implementation of the mitigation measures occur in accordance with the MMRP (CEQA Guidelines, Section 15097(a)).
- **Monitoring Schedule:** The general schedule for conducting each task, either prior to construction, during construction and/or after construction.

**TABLE 4-1  
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE  
OCEAN OUTFALL SYSTEM REHABILITATION/OUTFALL LOW FLOW PUMP STATION PROJECT (PROJECT NO. J-117B)**

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
<b>Biological Resources</b>			
<p><b>BIO-1:</b> To the extent feasible, grading and excavation activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds. If avoidance of the nesting season is not feasible during grading and excavation activities, suitable nesting habitat within 500 feet of construction activities shall be surveyed for the presence of nesting birds by a qualified biologist. If any active nests are detected, a buffer of 300 feet for songbirds (or 500 feet for raptors) around the nest adjacent to construction will be delineated, flagged, and avoided until the nesting cycle is complete. The buffer may be modified and/or other recommendations proposed as determined appropriate by the qualified biologist to minimize impacts. Nest buffer distance will be based on species, specific location of the nest, the intensity of construction activities, existing disturbances unrelated to the proposed project present in the project area, and other factors. The qualified biologist will be responsible for coordinating with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) to ensure proper measures are implemented to minimize impacts to any active nest sites that would be subject to disturbance.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Prepare reports to document any changes to buffers or species relocation activities, and retain such reports in the project file.</li> <li>• Coordinate with USFWS and CDFW, as needed.</li> <li>• Perform site inspections to ensure compliance with biological resources requirements.</li> <li>• Retain copies of compliance in the project file.</li> </ul>	<p>Orange County Sanitation District (OCSD); Construction Contractor; Qualified Biologist</p>	<p>Before and During Construction</p>
<b>Cultural Resources</b>			
<p><b>CUL-1:</b> Prior to earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (36 CFR Part 61) shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of cultural resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. OCSD shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Retain copies of presentations and/or notes of cultural resources sensitivity training in the project file.</li> <li>• Retain documentation demonstrating attendance.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Archeologist</p>	<p>Before Construction</p>
<p><b>CUL-2:</b> Prior to the start of any ground-disturbing activities, OCSD shall retain an archaeological monitor to observe all ground-disturbing activities. Archaeological monitoring shall be conducted by a monitor familiar with the types of archaeological resources that could be encountered and shall work under the direct supervision of the qualified archaeologist. Monitoring may be reduced or discontinued by the qualified archaeologist, in coordination with OCSD, based on observations of subsurface soil stratigraphy and/or the presence of older C-horizon deposits. The monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to OCSD, South Central Coastal Information Center (SCCIC), and any Native American groups who request a copy.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Retain copies of all archeological monitoring reports in the project file.</li> <li>• Submit monitoring report to SCCIC and any Native American groups requesting copies.</li> <li>• Perform site inspections to ensure compliance with archeological sensitivity requirements.</li> <li>• Retain all reports in the project file.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Archeologist</p>	<p>Before and During Construction</p>

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
<p><b>CUL-3:</b> Prior to issuance of a grading permit and prior to start of any ground-disturbing activities, OCSD shall retain a Native American monitor to observe all ground-disturbing activities. The monitor shall be obtained from a Tribe that is traditionally and culturally affiliated with the area, according to the Native American Heritage Commission (NAHC) list. The monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. Monitoring may be reduced or discontinued, in coordination with OCSD and the qualified archaeologist, based on observations of subsurface soil stratigraphy and/or the presence of older C-horizon deposits.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Native American to monitor and observe all ground-disturbing activities.</li> <li>• Retain all notes or reports in the project file.</li> </ul>	<p>OCSD; Construction Contractor; Native American Monitor</p>	<p>Before and During Construction</p>
<p><b>CUL-4:</b> In the event of the discovery of archaeological materials, OCSD or its contractor shall immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction shall not resume until the qualified archaeologist has conferred with OCSD on the significance of the resource.</p> <p>If it is determined that the discovered archaeological resource constitutes a historical resource or unique archaeological resource under the California Environmental Quality Act (CEQA), avoidance and preservation in place shall be the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource shall be prepared and implemented by the qualified archaeologist in consultation with OCSD. The appropriate Native American representatives shall be consulted in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• In the event that archeological resources are discovered, documentation of the assessment of the significance of the find will be prepared and retained in the project file.</li> <li>• Archeological monitoring reports and logs will be retained in project file.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Archeologist; Native American Representative</p>	<p>During Construction</p>



Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
<p><b>CUL-5:</b> Prior to the start of any ground-disturbing activities, OCSD shall retain a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP, 2010<sup>1</sup>). The qualified paleontologist shall contribute to any construction worker cultural resources sensitivity training either in person or via a training module provided to the qualified archaeologist. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project area and the procedures to be followed if they are found. The qualified paleontologist shall also conduct periodic spot checks in order to ascertain when older deposits are encountered and where monitoring shall be required.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Retain copies of presentations and/or notes of cultural resources sensitivity training in the project file.</li> <li>• Retain documentation demonstrating attendance.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Paleontologist</p>	<p>Before Construction</p>
<p><b>CUL-6:</b> Prior to the start of any ground-disturbing activities, OCSD shall retain a paleontological monitor to observe all ground-disturbing activities within older Quaternary deposits. Paleontological resources monitoring shall be performed by a qualified paleontological monitor, or cross-trained archaeological/paleontological monitor, under the direction of the qualified paleontologist. The monitor shall have the authority to temporarily halt or divert work away from exposed fossils in order to recover the fossil specimens. Monitoring may be reduced or discontinued by the qualified paleontologist, in coordination with OCSD, based on observations of subsurface soil stratigraphy and/or other factors and if the qualified paleontologist determines that the possibility of encountering fossiliferous deposits is low. The monitor shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. The qualified paleontologist shall prepare a final monitoring report to be submitted to OCSD and filed with the local repository. Any recovered significant fossils shall be curated at an accredited facility with retrievable storage.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• In the event that paleontological resources are discovered, documentation of the assessment will be prepared and retained in the project file.</li> <li>• Paleontological monitoring reports and logs will be retained in project file.</li> <li>• The qualified paleontologist shall prepare a final monitoring report to be submitted to OCSD and filed with the local repository.</li> <li>• Paleontological monitoring reports and logs will be retained in project file.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Paleontologist</p>	<p>Before and During Construction</p>
<p><b>CUL-7:</b> If construction or other project personnel discover any potential fossils during construction, regardless of the depth or presence of a monitor, work in the vicinity (within 100 feet) of the find shall cease until the qualified paleontologist has assessed the discovery and made recommendations as to the appropriate treatment.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• In the event that fossils are discovered, documentation will be prepared and retained in the project file.</li> <li>• Paleontological reports and logs will be retained in project file.</li> <li>• Retain copies of compliance in the project file.</li> </ul>	<p>OCSD; Construction Contractor; Qualified Paleontologist</p>	<p>During Construction</p>

<sup>1</sup> Society of Vertebrate Paleontology (SVP), 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available at: [http://vertpaleo.org/Membership/Member-Ethics/SVP\\_Impact\\_Mitigation\\_Guidelines.aspx](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx).

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
<p><b>CUL-8:</b> If human remains are encountered, OCSD or its contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Orange County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the NAHC will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98. The NAHC will designate a Most Likely Descendent (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, OCSD shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• In the event that human remains are discovered, the Orange County Coroner will be contacted and documentation will be prepared and retained in the project file.</li> <li>• Retain copies of compliance with NAHC in the project file.</li> </ul>	<p>OCSD; Construction Contractor; Orange County Coroner</p>	<p>During Construction</p>
<b>Geology, Soils, and Seismicity</b>			
<p><b>GEO-1:</b> OCSD shall conduct site-specific, design-level geotechnical investigations to evaluate the geological and seismic hazards of: slope instability; liquefaction; total and differential settlement, and surface displacement due to faulting or seismically induced lateral spreading or flow. Following geotechnical investigations, a geotechnical report shall be prepared by a structural and geotechnical engineer. The geotechnical report shall include recommendations for foundation design or other measures to mitigate these hazards. Final design of the new joint low flow pump station/plant water pump station (LOFLO PS/PWPS) facility shall be consistent with the most recent version of the California Building Code (CBC), Seismic Hazards Mapping Act, and Zone 4 requirements to mitigate potential risks from fault rupture, expansive soils, liquefaction hazards, and ground accelerations, and shall incorporate recommendations contained in the geotechnical report. The final design shall be stamped by a professional engineer.</p>	<ul style="list-style-type: none"> <li>• Retain copies of the geotechnical investigation in the project file.</li> <li>• OCSD shall verify that recommendations have been incorporated into the project design prior to initiation of the project.</li> <li>• Include the geotechnical report as part of the construction documents.</li> <li>• Perform site inspections to ensure contractor compliance with geotechnical report recommendations.</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>Before Construction</p>
<b>Noise</b>			
<p><b>N-1:</b> Stationary construction equipment that generate noise or vibration (e.g., compressors, generators, cement mixing, general truck idling) shall be placed on the construction site as far as possible from the nearest residential land uses.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Appoint a construction monitor to verify contractor compliance with noise measures.</li> <li>• Retain copies of monitoring records in the project file.</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>During Construction</p>
<p><b>N-2:</b> Sound dampening devices shall be placed around or adjacent to pile driving activities to minimize noise impacts to the surrounding community.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Appoint a construction monitor to verify contractor compliance with noise measures.</li> <li>• Retain copies of monitoring records in the project file.</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>During Construction</p>

Mitigation Measures	Implementation, Monitoring, and Reporting Action	Responsibility	Monitoring Schedule
<p><b>N-3:</b> Construction activities shall be limited to between the hours of 7:00 a.m. and 8:00 p.m. and as necessary to comply with local ordinances. Any nighttime or weekend construction activities would be subject to local permitting.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in project design specifications.</li> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Perform construction site inspections to ensure compliance with noise ordinances.</li> <li>• Retain copies of site inspection logs or reports in project files.</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>During Construction</p>
<p><b>N-4:</b> All equipment used during construction shall be muffled and maintained in good operating condition. All internal combustion engine driven equipment shall be fitted with intake and exhaust mufflers that are in good condition.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Appoint a construction monitor to verify contractor compliance with noise measures.</li> <li>• Retain copies of monitoring records in the project file.</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>During Construction</p>
<p><b>N-5:</b> Nearby sensitive receptors affected by construction shall be notified concerning the timing and construction schedule for the proposed project, and shall be provided with a phone number to call with questions or complaints.</p>	<ul style="list-style-type: none"> <li>• Include mitigation measure in construction contractor specifications.</li> <li>• Appoint a construction monitor to verify contractor compliance with noise measures.</li> <li>• Retain copies of monitoring records in the project file.</li> <li>• Appoint a Noise Concern Coordinator to respond to construction noise complaints.</li> <li>• Maintain log of concerns filed with the Coordinator and the resolution of each complaint.</li> <li>• Retain copies of the notification and concern log in the project file</li> <li>• Retain copies of notifications to all landowners and occupants of properties</li> </ul>	<p>OCSD; Construction Contractor</p>	<p>Before Construction</p>