VALENCIA WATER RECLAMATION PLANT MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT

Final Environmental Impact Report

Prepared for
Santa Clarita Valley Sanitation District

May 2025

ESA



VALENCIA WATER RECLAMATION PLANT MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT

Final Environmental Impact Report

Prepared for
Santa Clarita Valley Sanitation District

May 2025

1955 Workman Mill Road
Whittier, CA 90601

1010 E. Union Street
Suite 203
Pasadena, CA 91106
626.204.6170
esassoc.com

Bend
Irvine
Los Angeles
Mobile
Oakland
Orlando
Palm Beach County
Pasadena
Pensacola
Petaluma
Portland
Rancho Cucamonga
Sacramento
San Diego
San Francisco
San Jose
Santa Barbara
Sarasota
Seattle
Tampa
Thousand Oaks

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

CONTENTS

Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project Final Environmental Impact Report

Page

Chapter 1 Introduction 1-1
1.1 Organization of the Final EIR 1-2
1.2 Project Summary 1-2
1.3 Public Review Process 1-3
1.4 Summary of Environmental Impacts 1-4
1.5 Final EIR Certification and Approval 1-4
1.6 Notice of Determination 1-5
1.7 Mitigation Monitoring and Reporting Program 1-5

Chapter 2 Response to Comments 2-1
2.1 Introduction 2-1
2.2 Comments Received on the Draft EIR 2-2
2.3 Master Responses 2-2
2.4 Responses to Comments 2-15
2.5 Recirculation 2-32
2.6 Comments Letters 2-33

Chapter 3 Revisions, Clarifications, and Corrections to the Draft Environmental Impact Report 3-1
3.1 Revisions, Clarification, and Corrections Made In Response to Comments 3-1
3.2 Lead Agency Initiated Changes 3-7

Chapter 4 Mitigation Monitoring and Reporting Program 4-1
4.1 Introduction 4-1

Page

Figures

Figure Hydro-1 Proposed Project Cross Sections 2-4
Figure Hydro-2 FEMA Flood Hazard Zones..... 2-7
Figure Hydro-3 LA County DPW Flood Hazard Zones..... 2-8

Tables

Table 2-1 Comments Received in Response to the Draft EIR 2-2
Table 4-1 Mitigation Monitoring and Reporting Program – VWRP Middle Section Retaining Wall Ground Improvement Project 4-2

Appendices

A. Public Meeting Presentation
B. Geosyntec Consultants, Hydraulic Study for Valencia Water Reclamation Plant (November 2024)
C. AQ Emissions and Calculations
D. Noise Data and Calculations

CHAPTER 1
Introduction

In accordance with Section 21091 of Public Resources Code and Sections 15088 and 15089 of the California Environmental Quality Act (CEQA) Guidelines, the Lead Agency must evaluate comments received on the Draft environmental impact report (EIR) and prepare written responses to them. The Lead Agency shall also consider the information contained in a Final EIR before approving a project (CEQA Guidelines Section 15090). Pursuant to CEQA Guidelines Section 15132, a Final EIR consists of the following:

(a) The Draft EIR or a revision of the Draft EIR;

(b) Comments and recommendations received on the Draft EIR either verbatim or in summary;

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR;

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

(e) Any other information added by the Lead Agency.

This Final EIR constitutes the second part of the EIR for the Valencia Water Reclamation Plant (VWRP) Middle Section Retaining Wall Ground Improvement Project (proposed project) prepared by the Santa Clarita Valley Sanitation District (SCVSD or District) and is intended to be a companion to the Draft EIR. The Draft EIR for the proposed project, which was circulated for public and agency review and comment from July 17, 2024 to September 3, 2024, constitutes the first part of the EIR and is incorporated by reference and bound separately.

Accordingly, the Final EIR for the proposed project comprises two parts as follows:

- Part 1: Draft EIR and Appendices
  - Draft Environmental Impact Report (Chapters 1 through 6)
  - Draft Environmental Impact Report (Appendices A through H)
- Part 2: Final EIR and Appendices
  - Final Environmental Impact Report (Chapters 1 through 4)
  - Final Environmental Impact Report (Appendices A through D)

1.1 Organization of the Final EIR

This Final EIR is organized into four main chapters as follows:

- **Chapter 1 – Introduction:** This section provides an introduction to the Final EIR, presents the contents of this Final EIR, summarizes the EIR public review process, and provides a summary of the proposed project and a summary of the proposed project's potential to cause environmental impacts.
- **Chapter 2 – Responses to Comments:** This section presents master responses to key topic areas among the comments received on the Draft EIR. A matrix of the parties that commented on the Draft EIR is also included. This matrix is followed by copies of the public comments received on the Draft EIR, as well as a transcript of the verbal comments received during a public meeting. Numbered responses are provided for each of the written and verbal comments made regarding the Draft EIR. A copy of the public meeting presentation is provided in Appendix A of this Final EIR.
- **Chapter 3 – Revisions, Clarifications, and Corrections to the Draft EIR:** This section provides a list of revisions, clarifications, and corrections that have been made to the Draft EIR for the proposed project based on comments received from the public and agencies.
- **Chapter 4 – Mitigation Monitoring and Reporting Program (MMRP):** This section provides the full MMRP for the proposed project by listing proposed project design features and mitigation measures by environmental topic and then identifying for each of the design features and mitigation measures the applicable enforcement agency, monitoring agency, monitoring phase, monitoring frequency, and action indicating compliance.

This Final EIR also includes the following appendices:

- **Appendix A, Public Meeting Presentation:** This appendix to the Final EIR includes the presentation from the two public meetings held on August 14, 2024 for the Draft EIR.
- **Appendix B, Geosyntec Consultants, Hydraulics Study for Valencia Water Reclamation Plant (November 2024):** This appendix to the Final EIR includes a November 2024 technical report prepared by Geosyntec Consultants Inc. to summarize the hydraulics and scour protection analyses conducted for the VWRP.
- **Appendix C, Air Quality Emissions and Calculations:** This appendix to the Final EIR includes revised air quality and greenhouse gas calculations and output used files to update the operational and construction air quality emission estimates.
- **Appendix D, Noise Data and Calculations:** This appendix to the Final EIR includes the ambient noise data and construction and vibration noise calculations used to update the construction noise calculations.

1.2 Project Summary

The proposed project would include reinforcement of the existing middle section retaining wall along the southwestern side of the VWRP, upgrades to two existing outfall structures (Discharge Outfalls 001 and 002), and the addition of riprap along the southern portion of the VWRP wall. The proposed project would construct an underground retaining wall to prevent scour of the existing middle section retaining wall. Prior

to underground retaining wall construction along or near the outfall structures, a bypass system will be connected in order to maintain VWRP operations during construction. A section of Discharge Outfall 001 that would pass through the proposed underground retaining wall structure would be temporarily removed and replaced. For the Discharge Outfall 002 upgrade, the section within the proposed underground retaining wall structure and the entire section downstream of the proposed underground retaining wall would also be demolished and replaced, including the headwall structure at the discharge point. Additional riprap is located along the southern portion of the VWRP wall to help prevent scour within this location. In order to address scour protection on the south end of the wall, where progressive scour may advance along the deeper Mechanically Stabilized Earth wall, the proposed project would extend this further to the north by adding approximately 0.05 acre of riprap and connecting it to the proposed Cement Deep Soil Mixing/secant pile area of the underground retaining wall.

1.3 Public Review Process

In accordance with CEQA, the environmental review process for the proposed project commenced with solicitation of comments from identified responsible and trustee agencies, as well as interested parties in the scope of the Draft EIR, through circulation of a Notice of Preparation (NOP). SCVSD prepared and circulated an NOP to members of local and state agencies, organizations, and interested parties to solicit comments on the proposed project between November 28, 2023, and January 5, 2024. A virtual scoping meeting was held during the scoping period on December 12, 2023, at 10:00 a.m. via Zoom and a second, in-person public meeting was held 6:00 p.m. at The Centre at 20880 Centre Pointe Parkway, Santa Clarita, CA 91351 and the Los Angeles County Sanitation Districts Joint Administration Office at 1955 Workman Mill Road, Whittier, CA 90601.

The NOP and Initial Study were available to the interested public on the SCVSD website (https://www.lacsd.org/documents/other/documents-for-public-review). Hard copies of the NOP and Initial Study were also available at the City of Santa Clarita Valencia Branch Library at 23743 West Valencia Boulevard, Santa Clarita, CA 91355 and the Los Angeles County Sanitation Districts Joint Administration Office at 1955 Workman Mill Road, Whittier, CA 90601.

Following the comment period for the NOP, a Draft EIR was prepared for the proposed project. The NOP, Initial Study, and NOP comment letters were included in Appendix A of the Draft EIR. Consistent with the requirements of Sections 15087 and 15105 of the CEQA Guidelines, the Draft EIR was submitted to the Los Angeles County Clerk and the State Clearinghouse, a division of the Governor's Office of Land Use and Climate Innovation (formerly the Governor's Office of Planning and Research), and circulated for public review and comment. The public comment period for the Draft EIR was from July 17, 2024 to September 3, 2024, exceeding CEQA's 45-day public comment period requirement. During the comment period, the Draft EIR was made available for review on the SCVSD website: https://www.lacsd.org/documents/other/documents-for-public-review.

Additionally, hard copies of the Draft EIR were made available at the following public facilities:

- City of Santa Clarita Valencia Branch Library, 23743 West Valencia Boulevard, Santa Clarita, CA 91355
- Los Angeles County Sanitation Districts Joint Administration Office, 1955 Workman Mill Road, Whittier, CA 90601

Two public meetings were held on August 14, 2024. One virtual public meeting was held at 10:00 a.m. on Zoom and a second public meeting was held at 6:00 p.m. in person at The Centre during the 49-day public comment period for the Draft EIR. Written comments were accepted via email and by mail via the following:

Email: mandyhuffman@lacsd.org

Mail to: Santa Clarita Valley Sanitation District
Attn.: Mandy Huffman
1955 Workman Mill Road
Whittier, CA 90601

This Final EIR was prepared following the Draft EIR comment period. In accordance with CEQA Guidelines Section 15088, this Final EIR includes responses to comments on environmental issues that were received during the comment period for the Draft EIR.

1.4 Summary of Environmental Impacts

The proposed project, as described in the Final EIR, does not result in significant and unavoidable environmental impacts. All identified environmental impacts of the proposed project are either less than significant or less than significant with mitigation. The proposed project includes 22 mitigation measures to reduce any potential environmental impacts to the greatest extent feasible or to a level less than significant.

1.5 Final EIR Certification and Approval

As required by Section 15088(b) of the CEQA Guidelines, SCVSD will provide the Final EIR, which includes written responses to all comments, to commenters 10 days in advance of the meeting at which the SCVSD Board of Directors will consider certification of the EIR and approval of the proposed project.

Prior to considering the proposed project for approval, SCVSD will review and consider the information presented in the Final EIR and will certify that the Final EIR has been adequately prepared in accordance with CEQA. Once the Final EIR is certified, SCVSD's Board of Directors may proceed to consider project approval (CEQA Guidelines Section 15090; Section 15092). Prior to approving the project, SCVSD must make written findings in accordance with Section 15091 of the CEQA Guidelines and adopt a statement of overriding considerations if the project will result in the occurrence of unmitigated significant environmental effects identified in the Final EIR, if needed. (Public Resources Code Section 21002; CEQA Guidelines Section 15093)

1.6 Notice of Determination

Pursuant to Section 15094 of the CEQA Guidelines, SCVSD will file a Notice of Determination with the State Clearinghouse and the Los Angeles County Clerk within 5 working days of project approval.

1.7 Mitigation Monitoring and Reporting Program

The MMRP has been prepared pursuant to Public Resources Code Section 21081.6, which requires a Lead Agency to adopt a "reporting or monitoring program for changes to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." Additionally, Section 15097(a) of the CEQA Guidelines requires that a public agency adopt a program for monitoring or reporting mitigation measures and project revisions, which it has required to mitigate or avoid significant environmental effects. This MMRP has been prepared in compliance with the requirements of Public Resources Code Section 21081.6, and Section 15097 of the State CEQA Guidelines, and is included in Chapter 4 of this Final EIR.

This page intentionally left blank

CHAPTER 2
Response to Comments

2.1 Introduction

Section 21091(d) of the Public Resources Code states the following:

> *With respect to the consideration of comments received on a draft environmental impact report, the lead agency shall evaluate comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response.*

The lead agency is not required to provide a response to comments received outside of the allotted comment period. Section 21092.5 of the Public Resources Code requires that "At least 10 days prior to certifying an environmental impact report, the lead agency shall provide a written proposed response to a public agency on comments made by that agency which conform with the requirements of this division." The Santa Clarita Valley Sanitation District (SCVSD or District) of Los Angeles County is the California Environmental Quality Act (CEQA) Lead Agency for the Valencia Water Reclamation Plant (VWRP) Middle Section Retaining Wall Ground Improvement Project (proposed project).

This section of the Final Environmental Impact Report (EIR) provides the District's responses to the written comments received during the comment period for the Draft EIR. Section 2.2, *Comments Received on the Draft EIR*, includes a table with an assigned comment number, individual and/or organization names, and date the comment was received. The table also includes the commenters who provided comments during the Draft EIR public comment meetings held on August 14, 2024. Section 2.4, *Response to Comments*, provides the District's responses to the comment letters and verbal comments received on the Draft EIR. Copies of the original comment letters are numbered and provided in Section 2.6, *Comment Letters*. The presentation from the public meetings are provided in Appendix A of this Final EIR.

As required by CEQA Guidelines Section 15088(c), the focus of the response to comments is "the disposition of significant environmental issues raised." Therefore, detailed responses are not provided to comments that do not relate to environmental issues. However, in some cases, additional information has been added for reference and clarity.

Additionally, in accordance with CEQA Guidelines Section 15132(a), Chapter 3 of the Final EIR provides revisions, clarifications, and corrections to the Draft EIR that have been made to clarify, correct, or supplement the information provided in that document. These revisions, clarifications, and corrections are the result of the responses to public and agency comments received on the Draft EIR, new information that has become available since publication of the Draft EIR for review and comment, or recognition of inadvertent errors or omissions. The revisions, clarifications, and corrections provided in this chapter do not add significant new information about the proposed project or environmental setting as defined in

CEQA Guidelines Section 15088(a) or support a conclusion that the proposed project would result in new or substantially more severe significant environmental impacts as compared to those disclosed in the Draft EIR.

2.2 Comments Received on the Draft EIR

TABLE 2-1
COMMENTS RECEIVED IN RESPONSE TO THE DRAFT EIR

No.	Name	Date Received
State/Local Agencies		
AG 1	California Department of Fish and Wildlife (CDFW)	9/9/2024
AG 2	South Coast Air Quality Management District (SCAQMD)	8/30/2024
AG 3	Los Angeles County Department of Regional Planning	9/3/2024
AG 4	Los Angeles County Department of Public Works (LA County DPW)	10/2/2024
Tribes		
TRI 1	Fernandeño Tataviam Band of Mission Indians	7/17/2024
Organization		
ORG 1	Santa Clarita Organization for Planning and the Environment (SCOPE) and Friends of the Santa Clara River, Lynne Plambeck and James M. Danza	9/3/2024
Public Meeting Comments		
PUB 1	SCOPE, Lynne Plambeck – Virtual Meeting	8/14/2024
PUB 2	SCOPE, Lynne Plambeck – In Person Meeting	8/14/2024

2.3 Master Responses

Several Master Responses have been prepared to provide comprehensive responses to address multiple, similar comments that have been raised on key topics during the Draft EIR public review period. Where appropriate, references to the Master Responses are provided within the individual responses to comments prepared in Section 2.4, *Responses to Comments*. The Master Responses focus on the following key topics that were commonly raised among the comments received on the Draft EIR:

- Need for the proposed project.
- Hydrology impacts and flood hazard zones.
- Existing California Department of Fish and Wildlife (CDFW) Conservation Easement and related Lake or Streambed Alteration Agreements.

2.3.1 Master Response 1: Need for the Proposed Project

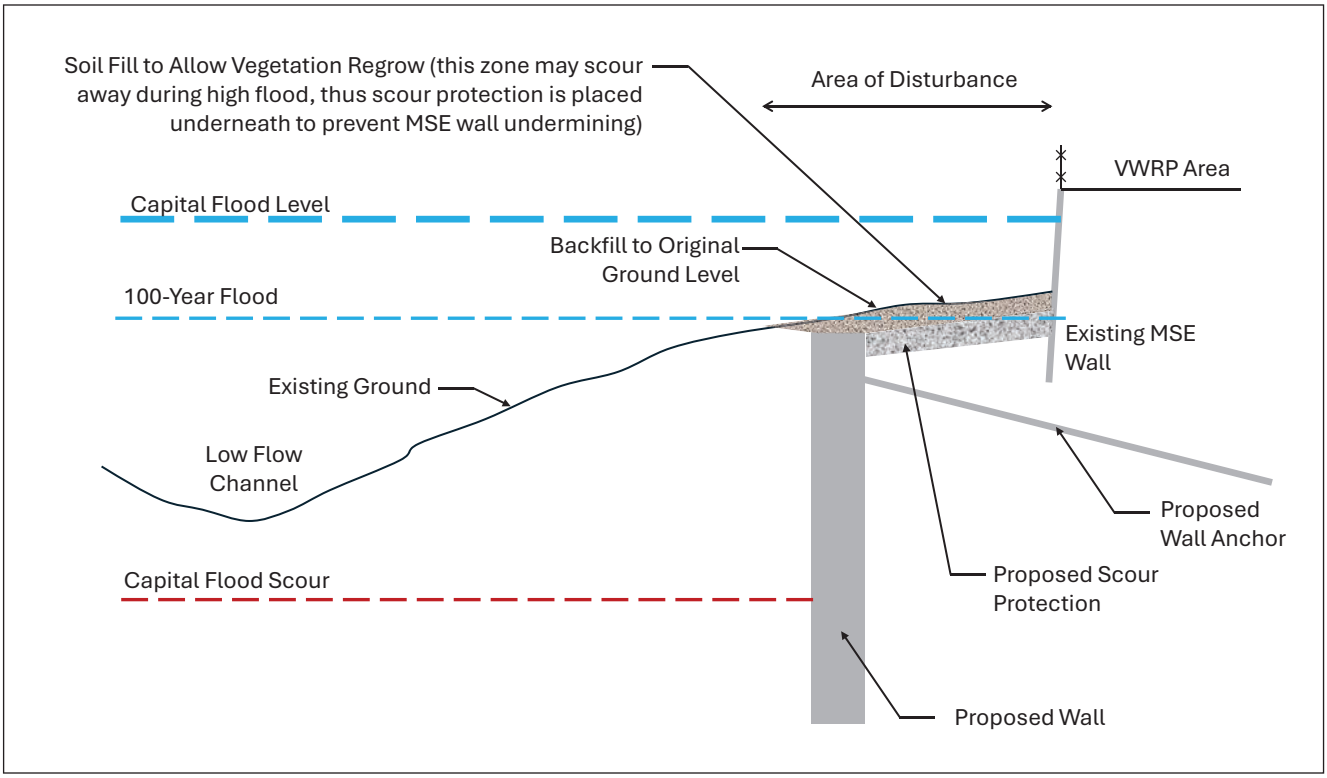
Several comments were received that questioned the need for the proposed project. This Master Response provides an overview of the information included in the Draft EIR that substantiates the proposed project need and objectives.

Hydrology

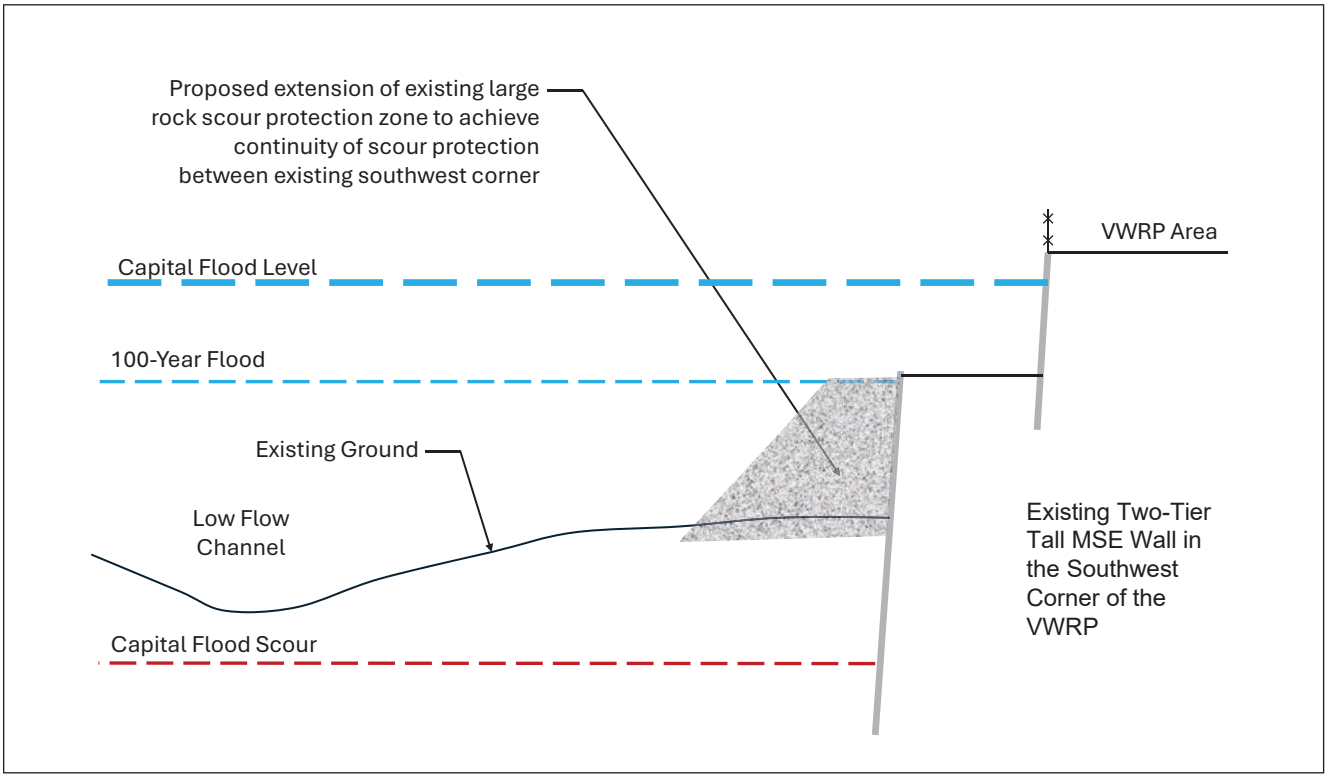
Chapter 2, page 2-1 of the Draft EIR describes that the fundamental need for the proposed project is to protect a vital public utility from potential hazards caused by unstable soils and scour caused by periodic high river flows. The VWRP provides an essential public service, protecting public health and water quality for the City of Santa Clarita, unincorporated areas within Los Angeles County, and the entire lower Santa Clara River watershed. The VWRP currently provides primary, secondary, and tertiary treatment for a design capacity of 21.6 million gallons of wastewater per day and serves a population of over 200,000 people. The loss or compromise of the facility even for a short-term outage could have catastrophic impacts on the Santa Clara River ecosystem and other downstream beneficial uses that would violate the Clean Water Act and create hazardous water quality conditions. The VWRP is located in close proximity to the Santa Clara River, which is an uncontrolled stream that experiences flashy storm flows responding to precipitation events. The stream channel is consistently shifting in response to high flow events, resulting in significant scour risks along the unprotected channel edges, including near the VWRP. To better understand the flood risks at the VWRP, the District conducted a hazard assessment study prepared by Pace Engineering in 2016 (*Valencia WRP Overall Floodplain Hydraulics and Streambed Stability Assessment # A862E Technical Memorandum*, Pace Engineering, 2016) that provided the technical basis for the identification of flood impact vulnerabilities at VWRP. The study included recommendations to upgrade the retaining wall adjacent to the VWRP to protect the facility from calculated scour, deposition, and bedform risks associated with Santa Clara River flood flows. The recommended designs follow the Los Angeles County *Hydrology and Sedimentation Manual*. A subsequent study prepared by Geosyntec in 2024 (*Hydraulics Study for Valencia Reclamation Plant*, Geosyntec, November 2024) conducted 2-D hydraulic modeling of the Santa Clara River to refine the flood protection design requirements (Appendix B of the FEIR).

The flood hazard assessment study prepared by Pace Engineering in 2016 identified that scour or abrasive action of swift-flowing water of the Santa Clara River under a Capital Flood condition may erode soils supporting the exterior walls of the VWRP and expose the VWRP to flood damage. Specifically, an approximately 1,000-foot-long middle section of the VWRP facility boundary along the Santa Clara River was identified as providing inadequate scour protection, to the point that the retaining wall may be undermined by as much as 25 to 35 feet (Geosyntec 2023; Appendix H of the Draft EIR). The schematic shown below (added to the Final EIR as **Figure Hydro-1**) identifies the depth of the calculated Capital Flood Scour (red dashed line) compared with the existing Mechanically Stabilized Earth (MSE) wall and the proposed wall. Even partial scouring of the soils supporting the middle section retaining wall could cause the wall to collapse leaving the adjacent VWRP vulnerable to seismic hazards. As shown in the schematic, the proposed project would return the site elevation to pre-project conditions. Therefore, the proposed project would not impede or redirect flood flows compared with existing conditions.

As discussed in Chapter 2 of the Draft EIR, the proposed project is being developed based on an existing, clearly identified flood hazard to avoid future damage during high river flows that could otherwise result in the need for an emergency response repair. The proposed project is not being constructed under an emergency order or exemption or in response to a current emergency. Rather, the proposed project will avoid the need for emergency permits as a responsible and reasonable action that will enable continuous operation of the VWRP. Waiting to make these safety improvements until after an emergency event would be irresponsible and reflect poor planning, exposing the public and the environment to unnecessary risk.



Typical cross section of the proposed underground retaining wall.



Typical cross section of the riprap expansion area.

D202300435.00

SOURCE: Geosyntec 2024

VWRP Middle Section Retaining Wall Ground Improvement Project

Hydro-1

Proposed Project Cross Sections

ESA

In summary, the main objective or need of the proposed project is to achieve long-term protection of the middle section of the VWRP boundary and corresponding retaining wall along the Santa Clara River to protect against damage from future Capital Flood scour events and/or design-level earthquakes. The following sections provide more detail on these two distinct hazards.

Capital Flood Event

A Capital Flood Event is defined as the runoff produced by a 50-year frequency design storm falling on an already saturated watershed. The proposed project's underground wall or ground improvement is designed to properly safeguard the VWRP during a Capital Flood Event. During such an event, the soil in front and beneath the existing wall could erode, compromising the existing wall stability, potentially resulting in collapse of the wall and exposing the VWRP infrastructure to flooding and additional scouring. The proposed project's retaining wall is designed to protect the VWRP from the scouring hazard. Once constructed, the improvements will be entirely underground so that it can safeguard the VWRP from scouring that may occur during a potential Capital Flood Event without changing the floodplain flow path or elevation.

Illustrating the high degree of hazards under the existing condition, high flow events in the winter of 2024 resulted in significant damage from river channel bank erosion to private properties downstream of VWRP. At the in-person public meeting held for the proposed project on August 14, 2024, it was observed and commented that these recent rain events in February 2024, which resulted in approximately 3 inches of rain in the proposed project vicinity, caused damage to the riverbank on a property adjacent to VWRP. Additionally, a cargo container that was located on the parcel adjacent to the VWRP was washed away during this rain event and found 5 miles downstream. Although less severe and not categorized as a Capital Flood Event, the February 2024 rain events showed the potential for catastrophic river scour impacts on the VWRP. These events substantiated concerns for the facility's long-term integrity in light of future high flow events, including the Capital Flood Event. SCVSD has a real need for the proposed project to avoid such impacts on the VWRP and disruptions to its essential public and environmental services.

Earthquake and Seismic Hazards

As discussed in the *Alternative Selection Report* prepared by Geosyntec in 2023 (Appendix H of the Draft EIR), the existing VWRP retaining wall is currently subject to seismic hazards. The proposed project area is in an active seismic zone and has experienced strong ground shaking in the past, such as the 1994 Northridge Earthquake. The 1994 Northridge Earthquake, with the estimated peak ground acceleration (PGA) of about 0.3g to 0.35g, caused visible impact damage at VWRP. The existing middle section of the retaining wall is primarily a MSE wall that was built in 1993. Longitudinal cracks were observed both in front and behind the top of the MSE wall, which was then-newly constructed around the midpoint of the VWRP site. Also following the 1994 Northridge Earthquake, a 1-inch separation was noted on a slab for an aeration tank at the site. Although the damage experienced during the 1994 Northridge Earthquake did not compromise the functioning of the facility or require substantial repairs,[1] the observed cracks and joint separation are indicative of a lateral soil movement of the VWRP site toward the river as a result of seismic shaking. The design-level earthquake PGA has been estimated at about 0.6g, which is about double the

[1] The aeration tank at the VWRP required minor repairs and was first temporarily repaired to prevent leakage. Additionally, for the aeration tank to be fixed in accordance with current seismic standards, SCVSD constructed a new aeration tank so that the original tank could be placed out of service for the repair. All the work was completed in 1997.

level of shaking experienced during the 1994 Northridge earthquake. Because of these seismic risk conditions surrounding the VWRP, the proposed project is designed to reinforce the VWRP middle section retaining wall against seismic hazards.

2.3.2 Master Response 2: Hydrology and Flood Hazard

Several comments were received on the Draft EIR that questioned whether the proposed project would be located within a designated or regulatory floodway or flood hazard area such that Federal Emergency Management Agency (FEMA) Notification is required, potentially leading to the need for a Letter of Map Revision (LOMR) or a Conditional LOMR (CLOMR). Some comments requested that a full hydrological study should be included in the EIR. This Master Response provides an overview of the flood-zone maps prepared by FEMA and Los Angeles County that cover the proposed project area. It also describes the proposed project's potential to impact the hydrologic or hydraulic characteristics of the Santa Clara River floodway, based on the hydraulic studies prepared for SCVSD that support the proposed project's need and design.

The District has assessed the vulnerability of the VWRP to flood hazards (Pace 2016) and has assessed the potential effects of the proposed improvements to the flood hazard zones (Geosyntec 2024, Appendix B of the FEIR). Therefore, there is no need to prepare a "full hydrological study" as requested in the comments since the analysis has already been conducted.

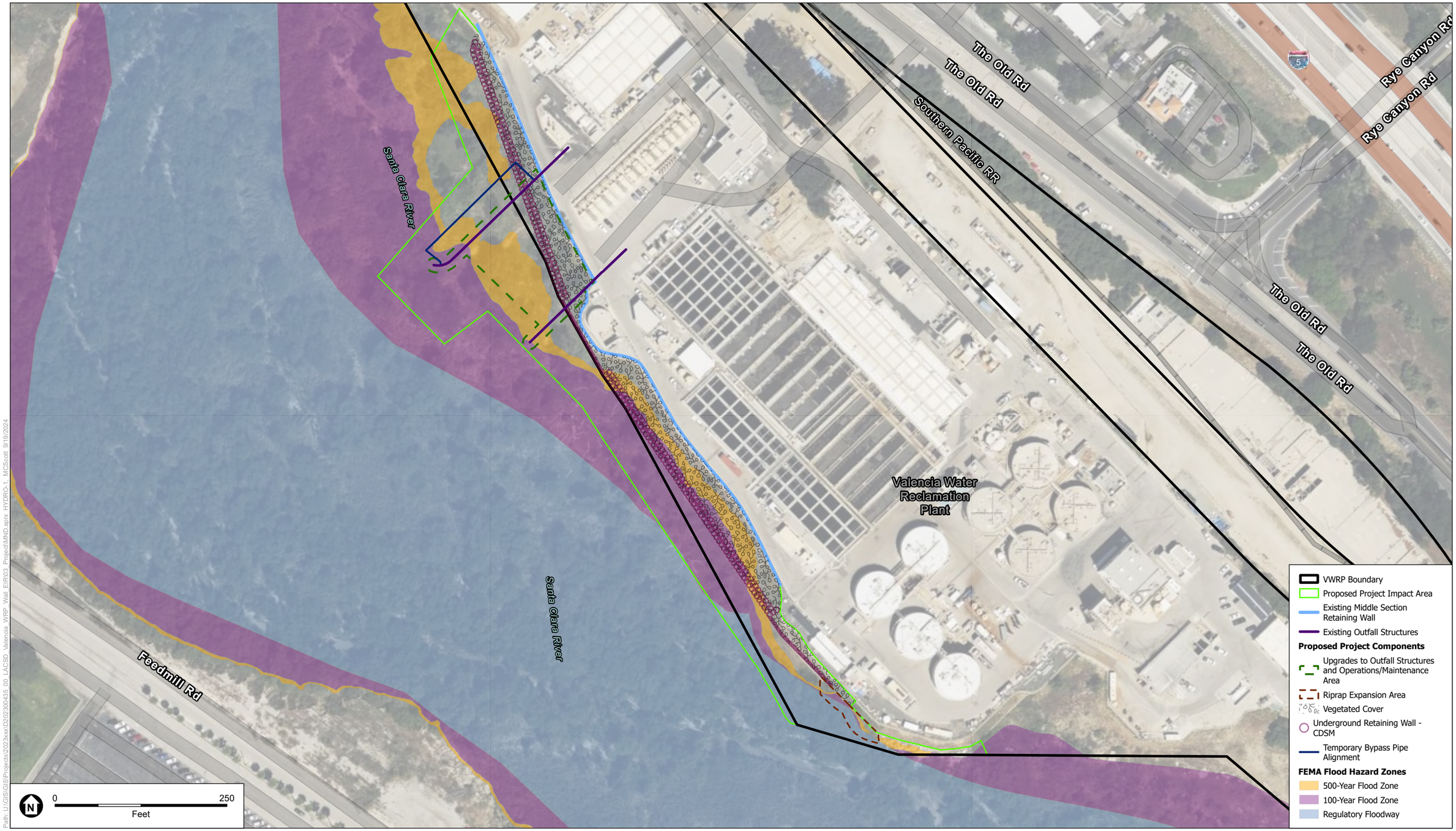
There are two entities responsible for identifying flood hazards at the proposed project location. FEMA manages the Flood Insurance Rate Map (FIRM) program that designates flood hazard areas used for insurance purposes. In addition to the FIRM program, the Los Angeles County Department of Public Works (LA County DPW) has developed flood hazard maps of the Santa Clara River that estimate the Regulatory Floodway and the 50-year Flood Zone. The two maps provided below depict the FEMA and LA County DPW flood maps at the VWRP and proposed project impact area. The following discussion addresses the proposed project's relationship firstly to the FEMA maps and then the LA County DPW maps. **Figures Hydro-2** and **Hydro-3** have been added to the Final EIR for clarification.

Thresholds of Significance

The Draft EIR establishes thresholds of significance on page 3.7-8 for impacts to drainages as follows:

- Would the Project 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 […] impede or redirect flood flows

The Draft EIR on page 3.7-11 concludes that since the proposed project would be constructed below the flood hazard zone and would not alter the elevation of the site from existing conditions, no impacts to the drainage patterns would occur that could substantially impede or redirect flood flows, resulting in a less-than-significant impact.



Path: U:\GIS\GIS\Projects\2023xxx\D2023003\435_00_LACSD_Valencia_WRP_Wall_EIR\03_Project\MND.aprx HYDRO-1 MCScott 9/19/2024

SOURCE: ESA, 2024; FEMA, 2024

VWRP Middle Section Retaining Wall Ground Improvement Project

Hydro-2
FEMA Flood Hazard Zones

ESA



Path: U:\GIS\GIS\Projects\2023xxx\D202300435_00_LACSD_Valencia_WRP_Wall_EIR\03_Project\MND.aprx HYDRO-2 MCScott 9/19/2024

SOURCE: ESA, 2024; LACDPW, 2024

VWRP Middle Section Retaining Wall Ground Improvement Project

Hydro-3
LA County DPW Flood Hazard Zones

ESA

FEMA Flood Hazard Zones

As shown in the map below (included as Figure Hydro-2 in the Final EIR), the FEMA flood hazard zones are located outside of the existing VWRP, which is separated from the flood hazard zone by the existing retaining wall. This map also identifies the footprint of the proposed project improvements that would be installed underground, partially within the 100-year and 500-year flood plain. The Draft EIR concludes that since the improvements would be underground as shown in Figure Hydro-1, and that the site would be returned to pre-project elevation, there would be no significant modification to the flood zones.

To evaluate the potential for the underground improvements to impact the regulated floodway, Geosyntec prepared a hydraulic study in 2024 for SCVSD that included a 2-D hydraulic model of the Santa Clara River floodway (Geosyntec 2024) (Appendix B of the FEIR). The results of this study found that the proposed underground improvements to the retaining wall could "cause some changes in the hydraulic characteristics of the flow" (Appendix B of the FEIR ; page 33). Overall, changes up to 1 foot in water surface elevation and 4 feet per second in flow velocity were observed between existing and proposed conditions scenarios during Capital Flood simulations near the proposed project site. The modeled changes were largely the result of site grading and vegetation clearing that modified the flow patterns compared to existing conditions. The 2024 hydraulic study also recommended the placement of a small amount of riprap (approximately 2,000 square feet, or 0.05 acre) at the base of the existing VWRP flood wall within the FEMA-designated floodway flood hazard area to enhance scour protection at the VWRP facility. This small area is shown on the FEMA Flood Hazard Zones map below. The hydraulic study included this additional riprap in the flood model described previously. Although the placement of the new riprap would not substantially impede or redirect flood flows, the placement would be subject to regulatory approvals from the LA County DPW. The proposed project, if certified, could be used by LA County DWP, as a responsible agency, in permitting the proposed project.

The Draft EIR concludes on page 3.7-11 that the minor effects to water surface elevation and velocity and small amount of riprap placed at the edge of the VWRP would not substantially impede or redirect flood flows. Nonetheless, as noted in Table 2-3 of the Final EIR, SCVSD would coordinate with the LA County DPW to ensure the proposed project complies with regulatory requirements. Compliance with the flood control regulations would help ensure that impacts to flood hazards zones would be less than significant.

Los Angeles County 50-Year Flood Zone

In addition to the FEMA FIRMs, LA County DPW has adopted County Floodway Maps to identify additional potential severe flood hazard areas associated with the County's Capital Flood. Capital Flood means the runoff produced by a 50-year frequency design storm falling on an already saturated watershed (soil moisture at field capacity). The County Floodway Maps are not used to determine federal flood insurance mandates. The maps are used to regulate development (including, but not limited to, activities requiring building and grading permits) within the Capital Flood floodplain. As shown in Figure Hydro-3, the LA County DPW Flood Zone Determination Map adopted in 2022 identifies the 50-year flood zone as extending into the existing VWRP site. The VWRP occupies 27 acres west of the Golden State (I-5) Freeway. The treatment plant was placed in operation in 1967, and initially had a capacity of 1.5 million gallons per day of secondary treatment. The construction of a 4.4-million-gallon flow equalization tank was completed in February 1995, followed by the completion of a solids handling expansion in August 2002.

The Draft EIR incorrectly stated on page 3.7-2 that the "southwestern site boundary" is not located within an area mapped as flood hazard on the LA County DPW Floodway Map. To correct this error, the Final EIR has modified page 3.7-2 of the Draft EIR to clarify that the current 50-year flood zone encroaches onto the existing VWRP at the southwestern site boundary and proposed project area as shown in Figure Hydro-3. Additionally, the proposed work effort would be conducted beneath the County-designated 50-year flood zone but would not modify the flood zone or surface elevation. The Draft EIR concluded that once installed, the flood zone would be unchanged from its current location and would not result in substantial changes that could impede or redirect flood flows.

The potential to affect the localized flood elevation and velocity would require coordination with the LA County DPW to ensure that the proposed project complies with regulatory requirements. Compliance with the flood control regulations would ensure that impacts to flood hazard zones would be less than significant. Based on the minor placement of fill in the flood zone and the minimal impact to localized flood hydraulics identified in the 2024 study, the need for a CLOMR or LOMR is not anticipated, but would be determined by the County based on existing regulatory requirements.

2.3.3 Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement

Several comments were received that focused on the potential impacts to areas with existing conservation easement overlays. They suggested that a project alternative that would avoid the CDFW and U.S. Army Corps of Engineers (USACE) areas should be chosen over the proposed project. This Master Response provides an overview of the proposed project's effects on habitat and existing conservation easements.

As described in Section 3.2, *Biological Resources,* of the Draft EIR, SCVSD recognizes the ecological values and conservation status of the property to be affected by the proposed project. The Project Objectives (see Section 2.3) identified on page 2-6 of the Draft EIR stress the need to minimize impacts where feasible:

- *"Minimize permanent impacts to the vegetated area on the riverside of the existing retaining wall;*
- *Minimize temporary construction impacts to the existing vegetated area riverside of the existing retaining wall;*
- *Minimize the disturbance of the recently revegetated area alongside the Advanced Water Treatment Facility retaining wall[.]"*

As described in Section 5, *Alternatives*, no alternative project design could meet the project objectives and adequately protect the VWRP from scour hazards. As a result, impacts to lands currently within a conservation easement are unavoidable. SCVSD has held several meetings with CDFW staff during the design of the proposed project to explain the need for the proposed project and to develop measures to minimize and compensate for impacts. CDFW has provided comments on the Draft EIR (included later in this Final EIR with responses) that outline necessary impact avoidance and minimization measures. SCVSD will continue to coordinate as required by Mitigation Measures BIO-6 and BIO-11 to ensure that conservation values are restored or compensated, resulting in a less-than-significant impact of the proposed project.

As described on page 3.2-9 of the Draft EIR, a conservation easement was recorded in 1993 along the site boundary of the VWRP in accordance with conditions set forth in a CDFW Stream or Lake Alteration Agreement Notification No. 5-644-91, dated August 6, 1992. The CDFW conservation easement recorded on August 2, 1993 was intended to mitigate the VWRP Stage Four Expansion Retaining Wall Project's impacts to CDFW jurisdictional riparian areas in perpetuity. Since that time, SCVSD has also restored impacted areas with planting and monitoring of trees along the edge of the VWRP property.

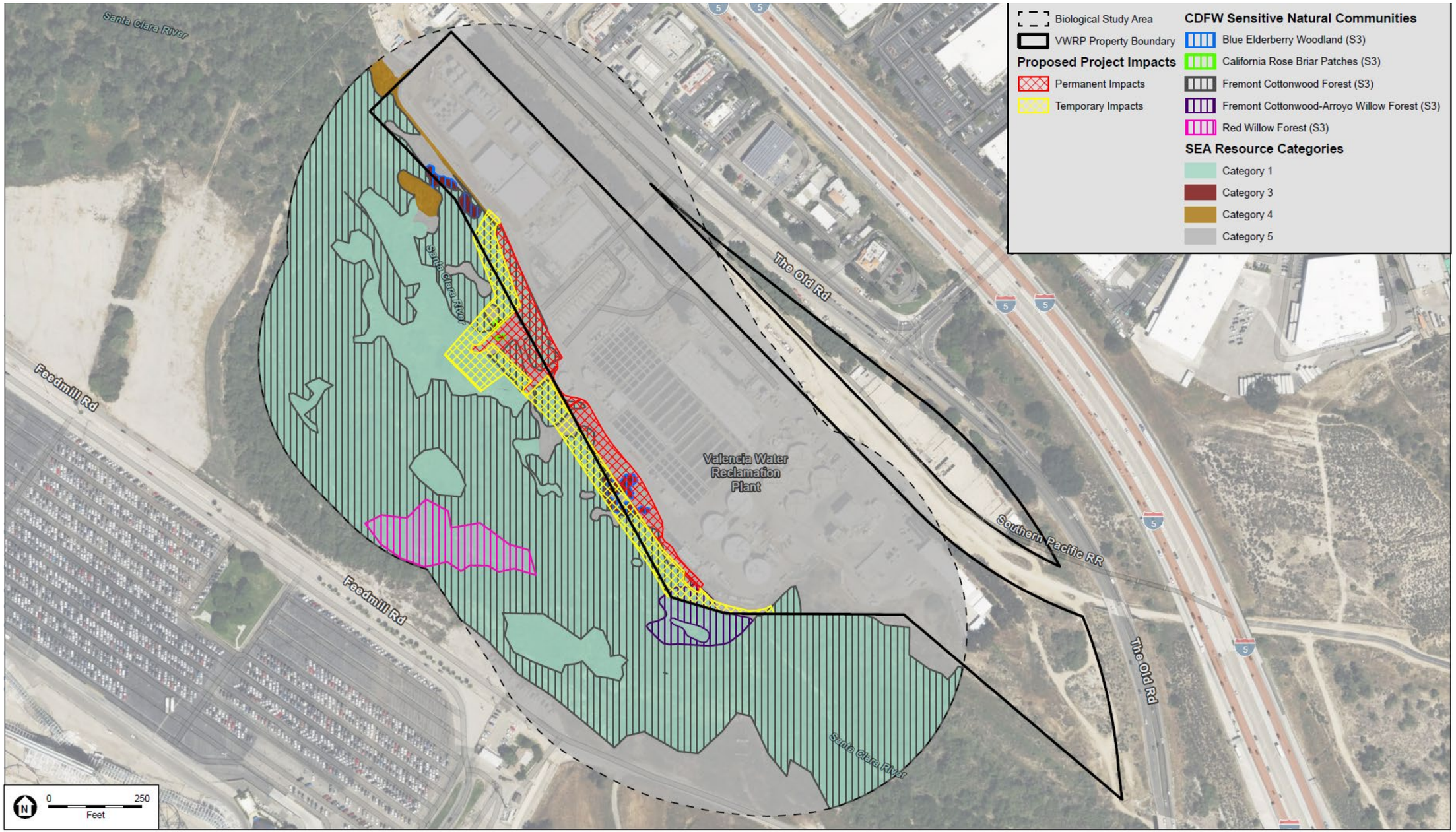
The Draft EIR clearly shows in Figure 3.2-3 (shown below) how the proposed project's temporary and permanent impacts will impact the existing CDFW conservation easement area. Figure 3.2-4 (shown below) illustrates the proposed impacts to the sensitive natural communities located within and near the impact areas. The Draft EIR evaluates impacts of the proposed project on Special-Status Species (Impact 3.2-1), Sensitive Natural Communities (Impact 3.2-2), Wetlands (Impact 3.2-3), Wildlife Movement (Impact 3.2-4), Local Policies and Ordinances (Impact 3.2-5), Habitat Conservation Plans (Impact 3.2-6), and Cumulative Effects (Impact 3.2-7). The Draft EIR identifies 12 mitigation measures (BIO-1 through BIO-12) that would be implemented to avoid significant impacts to these resources. Each of these mitigation measures are needed to minimize impacts to ecological resources within the conservation easement area and surrounding habitats.

Mitigation Measure BIO-6 (Draft EIR pages 3.2-33 to 3.2-34) expressly identifies habitat replacement requirements for impacts to habitat within the existing CDFW conservation easement to ensure the original mitigation objectives are maintained and to compensate for additional acreage impacts caused by the proposed project. Table 3.2-3 (Draft EIR page 3.2-37) includes acreage impacts to sensitive natural communities, and Table 3.2-4 (Draft EIR page 3.2-37) summarizes acreage impacts to aquatic resources. Mitigation Measure BIO-6 establishes a habitat replacement strategy centered on minimum replacement ratios for temporary and permanent impacts to aquatic resources, critical habitat, habitat occupied by federally listed species, CDFW sensitive natural communities, the CDFW conservation easement area, and significant ecological areas. Additionally, Mitigation Measure BIO-11 requires additional coordination with CDFW for impacts to restoration areas within the existing conservation easement.

In addition to these mitigation requirements, SCVSD is required to obtain permits from CDFW prior to construction. Together, these mitigation measures and required regulatory permits minimize the magnitude of the impacts, rectify the impact by restoring or repairing the environment, and compensate for the impact through establishment of replacement habitat to be conserved in perpetuity. As a result, the Draft EIR concludes that impacts to ecological resources are mitigated to a level of less than significant.

Finally, the Draft EIR provides an analysis of an alternative in Section 5, *Alternatives,* that would avoid impacting the ecological resources. The alternative, which was developed in a report prepared by Geosyntec in 2023 (*Alternative Selection Report*, Geosyntec, 2023), would construct the scour protection infrastructure within the VWRP footprint, behind the existing retaining wall. As concluded on page 5-7 of the Draft EIR, this alternative would not meet the proposed project's objective of allowing uninterrupted VWRP operation. Additionally, it would provide the least efficient scour protection, which would reduce the efficiency of the main objective of the proposed project. As a result, the Draft EIR concludes that there is no factual foundation supporting an alternative that would avoid construction activities within the conservation easement or USACE jurisdiction.

This page intentionally left blank



SOURCE: ESA, 2024

VWRP Middle Section Retaining Wall Ground Improvement Project

Draft EIR Figure 3.2-3
CDFW Conservation Easement and VWRP Retaining Wall Extension Project Restoration Area



SOURCE: ESA, 2024

VWRP Middle Section Retaining Wall Ground Improvement Project

Draft EIR Figure 3.2-4
CDFW Sensitive Natural Communities and SEA Resource Categories

2.4 Responses to Comments

2.4.1 State Agencies

Letter AG 1 CDFW

Response AG 1a

The comment summarizes the proposed project and provides a brief overview of the biological setting and CDFW's jurisdictional role, but it does not identify or state an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Response AG 1b

The comment expresses concern that the proposed mitigation (BIO-10; Draft EIR page 3.2-35 to 3.2-36) may not be sufficient to reduce impacts to Crotch's bumble bee to a less-than-significant level. CDFW recommends that if Crotch's bumble bee nests or overwintering sites are discovered or can be documented, SCVSD will coordinate with CDFW to develop appropriate avoidance and minimization measures and determine if take authorization is required. SCVSD shall also contact CDFW at wildlifemgt@wildlife.ca.gov, as well as the CDFW staff listed on the comment letter. In response to this comment, the following changes have been made to Mitigation Measure BIO-10:

> **BIO-10: Crotch's Bumble Bee**. A qualified entomologist, approved by CDFW, shall conduct a focused survey in suitable habitat (e.g., Fremont cottonwood forest, blue elderberry woodland, California rose briars, and non-native grasses and forbs), in accordance with the ~~California Bumble Bee Atlas Point Surveys~~[6] *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* protocol to determine presence/absence of the species. Surveys shall be conducted within one year prior to vegetation removal activities and a minimum of three surveys shall be conducted during peak flying season (April-August), when the species is most likely to be detected above ground. If surveys verify absence, no further action is required.
>
> If surveys determine that Crotch's bumble bees are currently utilizing the study area or~~,~~ within 500 feet of the project site, project oversight and construction staff shall coordinate with CDFW staff to develop appropriate avoidance and minimization measures and determine if take authorization will be required. Appropriate take authorization shall be obtained prior to project initiation ~~a qualified entomologist shall identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone shall be established around any identified nest(s) to reduce the risk of disturbance or incidental take. A qualified entomologist shall expand the buffer zone as necessary to prevent disturbance or take. If impacts to a nest from proposed construction is unavoidable, consultation with the CDFW shall occur to determine if take authorization may be necessary. If take authorization is granted, the qualified entomologist will relocate the nest to a suitable location, through coordination with the CDFW. Various considerations shall be made to further reduce impacts during the relocation, such as 1) delaying relocation until the queen has the opportunity to emerge and 2) relocating within the home range of the nest.~~

If Crotch's bumble bee is determined present, portions of the project site impacted by project activities shall be revegetated, in coordination with CDFW, to mitigate impacts to nectaring/foraging sources for the species. The revegetation effort shall include local native nectar resources that can be expected to bloom at any given time during the Colony Active Season (February 1 - October 31). A diverse assemblage of herbs, forbs, vines, and sub-shrubs, as well as annual and perennial plant species, shall be used. Nectar- and pollen-producing plants that may be used by the Crotch's bumble bee include, but are not limited to, the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Phacelia*, and *Salvia* in the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae, and Boraginaceae. Nectar resources shall be weed and pest free (e.g., Argentine ants), pathogen-free, and have not been treated with pesticides.

Response AG 1c

The comment states the proposed project has the potential to impact CESA-listed birds—least Bell's vireo (vireo), southwestern willow flycatcher (flycatcher), and yellow-billed cuckoo (cuckoo)—and that vegetation removal activities and proposed project construction occur outside of the nesting season. Vireo is known to occur within 500 feet of the proposed project activities, and the potential for the species to occur on-site is high. However, while suitable habitat for the flycatcher and cuckoo occurs within the study area, these species are not well-documented within this portion of the Santa Clara River. CDFW recommends that SCVSD conduct focused surveys for all three species to determine the presence or absence of the species prior to construction, as outlined in Mitigation Measure BIO-5. As stated on page 3.2-32 of the Draft EIR, activities will be timed to avoid the nesting bird season when nests may be active. In the case that vegetation removal or construction occurs within the nesting bird season, and if vireo is detected within 500 feet of the proposed project site during focused surveys, SCVSD will comply with Mitigation Measures BIO-2 through BIO-5, which would require focused surveys, help reduce potential construction impacts through the implementation of minimization and avoidance buffers, and nighttime lighting restrictions.

If listed bird species are determined to be present during focused surveys, SCVSD will coordinate with CDFW to ensure the birds are not affected through the implementation of impact minimization measures, such as those identified in Mitigation Measure BIO-5. If impact avoidance is infeasible, SCVSD will obtain CESA take authorization prior to proposed project initiation. SCVSD understands that appropriate take authorization may include an Incidental Take Permit or a Consistency Determination, among other options.

Additionally, ambient noise level monitoring was conducted at three locations within the study area and results ranged between 54.0 and 74.5 A-weighted decibels (dBA), as shown on Table 3.8-1, page 3.8-9 of the Draft EIR, suggesting that levels may regularly exceed 60 dBA under ambient conditions. Limiting construction efforts to a 60 dBA maximum is not feasible since existing noise levels are higher. Additionally, it is reasonable to assume that nesting birds would tolerate an average hourly increase of 10 dBA above these ambient levels during construction since those are baseline conditions.

In response to this comment, Mitigation Measure BIO-5 has been revised as follows:

> **BIO-5: Special-Status Bird Surveys**. Prior to the start of construction, focused surveys for the three listed bird species with potential to occur within the project area (least Bell's vireo, southwestern willow flycatcher and/or yellow-billed cuckoo) shall be conducted to determine

presence/absence of the species within the study area. These shall be conducted in accordance with the Least Bell's Vireo Survey Guidelines,[2] A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher[3] and A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo.[4] If surveys verify absence of all species, no further action is required.

If surveys determine that these species are present within 500 feet of the project site, and avoidance of the nesting bird season (Mitigation Measure BIO-3) is not feasible, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no more than 10 decibels (dBA) above pre-construction ambient noise levels) at an active nest or occupied habitat. If construction must take place within 500 feet of an active nest of either the least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo, a qualified biologist will monitor noise levels to ensure that they do not exceed 10 dBA above pre-construction ambient noise levels. If this is not feasible, installation of temporary construction noise barriers may be installed to reduce noise levels to an acceptable level. If the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded~~.~~, or as determined appropriate in coordination with CDFW. Avoidance measures requiring installation (sound barriers) shall be in place prior to March 15 and shall remain until September 15 of each year of project construction.

Response AG 1d

The comment questions the justification or methodology for determining mitigation ratios for the proposed project's temporary and permanent impacts to aquatic resources, critical habitat, habitat occupied by an ESA-listed species, CDFW sensitive natural communities, or conservation easement areas as stated in Mitigation Measure BIO-6. The comment acknowledges that the mitigation ratio values were determined based on the 2018 VWRP Retaining Wall Extension Project impacts occurring in areas adjacent to the proposed project impact area. The District has held several meetings with CDFW staff during the design of this proposed project to explain the need for the proposed project and to develop measures to minimize and compensate for impacts. CDFW has provided comments on the Draft EIR that outline necessary impact avoidance and minimization measures. The District will continue to coordinate as required by Mitigation Measures BIO-6 and BIO-11 to ensure that conservation values are restored or compensated, resulting in a less-than-significant impact of the proposed project.

Response AG 1e

The commenter is concerned with proposed project impacts to special-status fish during proposed project construction activities, particularly during high-flow events that may encroach the proposed project construction area during the dry season when construction work is expected to occur. As stated on page 2-12 of the Draft EIR, proposed project construction would occur during the dry-season. Therefore, to further clarify that project construction would occur in the dry season and that if river flows increase and inundate the proposed project site, construction work would stop and only recommence once river flows recede away

[2] U.S. Fish and Wildlife Service (USFWS). 2001. *Least Bell's Vireo Survey Guidelines*. January 19, 2001.

[3] United States Geological Survey (USGS). 2010. *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher.*

[4] USGS. 2016. *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo.* May 2016.

from the project site, the discussion for special-status fish species has been revised accordingly. With this change, the proposed project would not have a significant impact on any fish species in the Santa Clara River, including the newly listed Southern California steelhead.

Specifically, the following changes have been made to pages 3.2-30 to 3.2-31 of the Draft EIR:

> **Fish**
>
> Flowing water within the Santa Clara River (when present) provides suitable habitat for the Arroyo chub, Santa Ana sucker, and unarmored threespine stickleback. All three species have been documented within the Santa Clara River as recently as 2007 for the Santa Ana sucker and unarmored threespine stickleback, and 2011 for the Arroyo chub (CDFW 2024a). In addition, on February 13, 2025, the California Fish and Game Commission adopted findings adding the Southern California steelhead to the list of endangered species under the California Endangered Species Act (CESA; Fish and Game Code, Section 2050 et seq. The proposed project would include upgrades to Discharge Outfalls 001 and 002, resulting in disturbance to the immediate vicinity, as depicted in Figure 3.2-7. However, the proposed project would install a bypass structure during upgrades to Outfall 001 in order to ensure that flow is not disrupted during construction activities. Outflow from the VWRP would be re-routed immediately downstream (~50 feet) of Outfall 001, and flow along Drainage 1-Outfall 001 to the Santa Clara River would remain the same. Additionally, conditions immediately downstream of Outfall 001 are not consistent with natural conditions found along the Santa Clara River and do not provide suitable habitat for special-status fish (i.e., increased flow velocity). The proposed addition of riprap along the southern portion of the proposed project area would take place during the dry season (May-September) and would not encroach into ~~the~~ flowing or ponded areas associated with ~~channel of~~ the Santa Clara River; and therefore, ~~and thus~~ would not remove suitable fish habitat. ~~;~~ If flows within the Santa Clara River increase and inundate the project site during construction, activities will cease until water levels recede, and construction activities may recommence. ~~however, all three~~ Fish species have the potential to occur within the river ~~in this area~~, within close proximity to the project site~~. T~~ and the installation of riprap could result in indirect water quality impacts to special-status fish. Application of standard water quality best management practices, such as the installation of erosion control measures (e.g., silt fencing and straw wattles) and secondary containment, and parking/fueling of equipment at least 100 feet away from flowing water would avoid and minimize these potential water quality impacts to a less-than-significant level.

Response AG 1f

The comment is concerned that the proposed mitigation (BIO-1: Rare Plants) may not be sufficient to reduce impacts to special-status plants to a less-than-significant level. The proposed project would comply with Mitigation Measure BIO-1 (as revised in this Final EIR) requiring focused, CDFW authorized surveys. Prior to construction, if CESA-listed or NPPA-listed plants are found to be present within or near the proposed project area, SCVSD will coordinate with CDFW to determine whether take authorization is required. Such authorization may include an Incidental Take Permit, among other options. The implementation of the revised Mitigation Measure BIO-1 and implementation of avoidance and minimization measures in BIO-2 would continue to ensure that proposed project impacts to rare plants are reduced to a less-than-significant level.

In response to this comment, the following changes have been made to Mitigation Measure BIO-1:

> **BIO-1: Rare Plants.** Preconstruction focused special-status plant surveys shall be conducted within areas containing suitable habitat throughout the project site during the appropriate blooming periods for Catalina mariposa lily, chaparral ragwort, Hubby's phacelia, Nuttall's scrub oak, Palmer's grappling hook, Peirson's morning glory, Plummer's mariposa lily, slender mariposa lily and southern California black walnut. ~~Throughout the project site.~~ Plant surveys shall be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW March 20, 2018). If special-status plants are found to be present within or near the project impact area, a suitable area around the plants (as determined by a qualified biologist) shall be avoided and demarcated with orange-mesh construction fencing to alert construction workers and to avoid impacts to special-status plant species.
>
> If avoidance is not feasible, SCVSD shall coordinate with CDFW to determine a replacement ratio (i.e., 1:1 or greater if required by CDFW) and to determine whether take authorization is required prior to construction. SCVSD shall prepare and implement a restoration/relocation plan. ~~If restoration, translocation and/or seed collection is used to mitigate impacts to special-status plants, a~~A restoration/translocation plan shall be developed for CDFW approval prior to any disturbance to special-status plants and shall include, but shall not be limited to, the following information: identification of documented populations of the specie(s) within the project site, estimated impacts to the population on-site, proposed restoration methods (e.g., translocation, seed collection, etc.), expected timeline, success criteria, performance standards, funding source(s) and responsible parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program.

Response AG 1g

The comment notes that environmental data should be properly submitted. The comment is noted and does not warrant a substantive response other than to say that SCVSD acknowledges that the environmental information developed in this EIR process and documentation of special-status species and/or other resources will be incorporated into a database for potential future use. Additionally, SCVSD acknowledges that such environmental information has been submitted to CDFW.

Response AG 1h

The comment notes that payment of the environmental document filing fee is required. The comment about CDFW filing fees is noted. Filing fees will be paid when submitting the Notice of Determination to the Los Angeles County Clerk as required by CEQA.

Response AG 1i

Comment noted. The comment does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Letter AG 2 South Coast Air Quality Management District

Response AG 2a

Comment noted. The comment provides an overview of the proposed project and does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Response AG 2b

The comment states that air permits (permits to construct and/or permits to operate) will be required from South Coast Air Quality Management District (SCAQMD) if implementation of the proposed project requires the use of new stationary sources and that the CEQA role of SCAQMD would change from a Commenting Agency to a Responsible Agency if air permitting is found to be necessary.

The on-site cement batch plant is proposed for use during the Underground Retaining Wall/Outfall Structures construction phase. Table 3.1-7 (Draft EIR page 3.1-27) and Table 3.1-8 (Draft EIR page 3.1-28) report the construction and operational emissions from the cement batch plant within the Underground Retaining Wall/Outfall Structures construction phase. Detailed calculations and analyses for the on-site cement batch plant can be found in Appendix B of the Draft EIR and included in Section 3.1, *Revisions, Clarifications, and Corrections Made In Response to Comments*, of the Final EIR. No new operational stationary sources are proposed and, therefore, are not included in the Draft EIR analysis. Given this fact, SCVSD will coordinate or cooperate with SCAQMD, in its role as a CEQA Responsible Agency, for the appropriate permits as needed.

Response AG 2c

The comment notes that SCVSD shall evaluate comments on the DEIR and prepare a written response at least 10 days prior to certifying the FEIR. SCVSD will comply with Public Resources Code Section 21092.5(a) and the CEQA Guidelines Section 15088(a) and (b). SCVSD will provide written responses to SCAQMD at least 10 days prior to certification of the Final EIR.

Letter AG 3 Los Angeles County Department of Regional Planning

Response AG 3a

The comment requests that the Los Angeles County Department of Regional Planning be listed as one of the public agencies that may issue a permit. In response to this comment, the following modifications to Section 2.7, *Proposed Project Approvals*, of the Draft EIR have been made:

TABLE 2-3
REGULATORY PERMITS AND AUTHORIZATIONS

Agency	Type of Approval	Needed for
California Regional Water Quality Control Board, Los Angeles Region	Construction General Permit	Construction-related stormwater discharges
	401 Water Quality Certification	Discharge of dredge or fill material into waters of the State if any
California Department of Fish and Wildlife	Lake or Streambed Alteration Agreement (Section 1602 of Fish and Game Code)	Activity that may substantially modify a river, stream, or lake if any
US Army Corps of Engineers	404 Permit	Discharge of dredge or fill material into waters of the US, if any
Los Angeles County Department of Regional Planning	Significant Ecological Area (SEA) Ordinance permit	Development within SEA

Letter AG 4 Los Angeles County Department of Public Works

Response AG 4a

Comment noted. The comment provides a summary of the proposed project. The comment does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Response AG 4b

The comment states that the proposed project is located within FEMA Zone AE (i.e., a 1 percent annual chance flood area with defined Base Flood Elevations) and that the proposed project encroaches within the regulatory floodway. The comment further states that Code of Federal Regulations Title 44, Section 60.3(d)(3) prohibits encroachments into FEMA's regulatory floodway that result in any increase in the Base Flood Elevation unless the proposed project proponent obtains a CLOMR and a final LOMR showing the As-Built conditions.

Otherwise, please refer to Master Response 2: Hydrology and Flood Hazard.

Response AG 4c

The comment states that the EIR should discuss the proposed project's impacts to the FEMA flood hazard, the County Floodplain, and Floodway boundaries. Please refer to Master Response 2: Hydrology and Flood Hazard for a discussion on how the EIR addresses the proposed project's affect FEMA flood hazard, the County Floodplain, and Floodway boundaries.

Response AG 4d

The comment requests a map that shows that the proposed project is not encroaching in a FEMA flood hazard not in a County floodway/floodplain. Please refer to Master Response 2: Hydrology and Flood Hazard, and particularly Figures Hydro-1 through Hydro-3 for an explanation on how the proposed project does not have a significant hydrologic impact to FEMA flood zones.

Response AG 4e

The comment lists coordination requirements for work subject to a Los Angeles County Flood Control permit. If the proposed project is determined to be subject to a Los Angeles County Flood Control District permit, SCVSD will follow the requirements outlined in Comment 4e, or as outlined by the permit. Please know that SCVSD is already committed to coordinate its proposed project activities with the LA County DPW.

In response to this comment, the following modifications to Section 2.7, *Proposed Project Approvals*, of the Draft EIR have been made:

TABLE 2-3
REGULATORY PERMITS AND AUTHORIZATIONS

Agency	Type of Approval	Needed for
California Regional Water Quality Control Board, Los Angeles Region	Construction General Permit	Construction-related stormwater discharges
	401 Water Quality Certification	Discharge of dredge or fill material into waters of the State if any
California Department of Fish and Wildlife	Lake or Streambed Alteration Agreement (Section 1602 of Fish and Game Code)	Activity that may substantially modify a river, stream, or lake if any
US Army Corps of Engineers	404 Permit	Discharge of dredge or fill material into waters of the US, if any
Los Angeles County Department of Public Works	Los Angeles County Flood Control District permit	Work subject to Los Angeles County Flood Control District permit

2.4.2 Tribes

Letter TRI 1 Fernandeño Tataviam Band of Mission Indians

Response TRI 1-1

The commenter states that the Cultural Resources Management Division of the Fernandeño Tataviam Band of Mission Indians agrees with Mitigation Measures TCR-1 and TCR-2 as presented in the Section 3.10, *Tribal Cultural Resources*, of the Draft EIR. The commenter also states that the communication in the provided letter concludes the Cultural Resources Management Division of the Fernandeño Tataviam Band of Mission Indians input on the proposed project, unless there is an unanticipated discovery of cultural resources during proposed project implementation. SCVSD appreciates the Tribe's participation in the Assembly Bill 52 process (see Public Resources Code Sections 21080.3.1, 21080.3.2, 21082.3; and CEQA Guidelines Section 15064.5) and acknowledges the Tribe's agreement with the mitigation measures.

2.4.3 Organizations

Letter ORG 1 SCOPE and Friends of the Santa Clara River

Response ORG 1a

The comment requests that additional elaboration be provided for the following issues:

(1) Need or emergency approval for the proposed project;

(2) Impacts to the CDFW conservation easement;

(3) Potential project impacts to Endangered Species and corresponding Draft EIR Mitigation Measures; and

(4) Project alternatives.

For item 1, please refer to Master Response 1: Need for the Proposed Project. For item 2, please refer to Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement. For item 3, please refer to Mitigation Measures BIO-1 through BIO-10, which outline mitigation requirements for nesting birds and special-status species as well as Response AG 1b and AG 1c. Lastly for item 4, please see the Project Alternatives analysis included in Chapter 5.0, *Alternatives,* of the Draft EIR and an *Alternatives Analysis Report* prepared by Geosyntec in 2023, which was attached as Appendix H to the Draft EIR and incorporated therein.

Response ORG 1b

The commenter states that the current proposed project "was conceived nine years ago and is still in the study stages can hardly be considered an emergency" due to river erosion or earthquakes. In response to this comment, please refer to Master Response 1: Need for the Proposed Project.

Response ORG 1c

The comment notes that the existing middle section retaining wall has survived high rainfall, precipitation, and extreme rain events since the 1990s. In response to this comment, please refer to Master Response 1: Need for the Proposed Project.

Response ORG 1d

The comment notes that the Draft EIR does not explain why the proposed project is needed to prevent earthquake damage if it has already withstood the 1994 Northridge earthquake. However, as discussed in the *Alternative Selection Report* prepared by Geosyntec in 2023 (Appendix H of the Draft EIR), the proposed project area is in an active seismic zone and has experienced strong ground shaking in the past, such as the 1994 Northridge Earthquake. The 1994 Northridge Earthquake, with the estimated PGA of about 0.3g to 0.35g, caused visible impact at VWRP. The existing middle section of the retaining wall is primarily a MSE wall that was built in 1993. Longitudinal cracks were observed both in front and behind the top of the MSE wall, which was then-newly constructed around the midpoint of the site. Also, a one-inch separation was noted on a slab for an aeration tank at the site. Although the damage experienced during

the 1994 Northridge Earthquake did not compromise the functioning of the facility or require substantial repairs, the observed cracks and joint separation are indicative of a lateral soil movement of the VWRP site toward the river as the result of seismic shaking. The design-level earthquake PGA has been estimated at about 0.6g, which is about double the level of shaking experienced during the 1994 Northridge earthquake. The proposed project will reinforce the wall against seismic hazards as well as scour hazards.

Please refer to Master Response 1: Need for the Project and Master Response 2: Hydrology and Flood Hazard.

Response ORG 1e

The comment discusses the Draft EIR's analysis of and response to flood hazards. Please refer to Master Response 1: Need for the Proposed Project and Master Response 2: Hydrology and Flood Hazard.

Response ORG 1f

This comment expresses concerns regarding the CDFW Conservation Easement and Santa Clara River Significant Ecological Area (SEA). SCVSD understands the importance of the conservation easement. SCVSD has participated in multiple pre-consultation meetings with the CDFW staff to discuss how best to construct this proposed project without having a significant impact on the conservation easement/biological resources. SCVSD has committed to comply with County requirements for impacts occurring within an SEA. Figure 3.2-3 of the Draft EIR shows the proposed project's temporary and permanent impacts in relation to the existing CDFW easement and other current restoration projects within the impact area, and Impact 3.2-3 includes an analysis of the impacts related to the CDFW conservation easement. Additionally, Figure 3.2-4 shows the proposed project's temporary and permanent impacts in relation to the SEA's resource area categories and Impact 3.2-5 includes an analysis of the impacts related to the SEA. Mitigation Measure BIO-6 includes a habitat replacement strategy for temporary and permanent impacts. Additionally, Mitigation Measure BIO-11 requires additional coordination with CDFW for impacts to restoration areas within the existing conservation easement. Also, Mitigation Measure BIO-12 requires coordination with LA County Planning Department and preparing an application for a Protected Tree Permit and/or SEA Conditional Use Permit, as needed.

SCVSD would also be required to obtain permits from the CDFW, RWQCB, and/or USACE, and implement Mitigation Measure BIO-6, which outlines a replacement strategy for temporary and permanently impacted aquatic resources as shown on pages 3.2-33 to 3.2-34 of the Draft EIR. As outlined in the proposed project's objectives discussed on page 2-6 of the Draft EIR, SCVSD will attempt to minimize permanent impacts to the vegetated area on the riverside of the existing retaining wall, minimize temporary construction impacts to the existing vegetated area riverside of the existing retaining wall, and minimize the disturbance of the recently revegetated area alongside the Advanced Water Treatment Facility retaining wall.

The comment discusses other alternatives suggested in a 2016 PACE Engineering study, attached as Exhibit 5 to the comment letter. The alternatives mentioned in this study were developed for Addendum No. 1 to the 2015 Santa Clarita Valley Joint Sewerage System Facilities Plan and Final EIR (SCH 1996041084), also referred to as the VWRP Retaining Wall Extension Project. As part of this previously approved project, the then-existing retaining wall (now known as the middle section) was extended to the north end of the VWRP in 2018. Therefore, these project alternatives do not apply to the proposed project at all. The project

alternatives assessed for this proposed project can be found in the Alternative Selection Report included as Appendix H to the Draft EIR and discussed in Section 5.0, *Alternatives*.

Finally, please refer to Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement.

Response ORG 1g

This comment expresses concerns regarding significant endangered species within the proposed project area, including the least Bell's vireo, southwestern willow flycatcher, arroyo toad, and unarmored threespine stickleback and for what it deems to be insufficient mitigation measures to address proposed project impacts to these species. However, these species are analyzed in relation to the proposed project and discussed in Section 3.2, *Biological Resources*, of the Draft EIR. As noted in Section 3.2 of the Draft EIR, the proposed project would not have a significant and unavoidable impact to these biological resources or species. Impacts to biological resources, habitats, or wildlife species would be less than significant with the implementation of Mitigation Measures BIO-1 through BIO-12. These mitigation measures require that focused surveys for the least Bell's vireo and southwestern willow flycatcher are conducted prior to commencement of proposed project activities. Additionally, the proposed project has been designed to ensure that impacts to the unarmored threespine stickleback will be prevented by avoiding impacts to flowing portions of the Santa Clara River, where the fish could reside. Suitable habitat for the arroyo toad does not occur within the vicinity of the proposed project site; therefore, focused surveys were not recommended to determine presence/absence of the species. Further Appendix C of the Draft EIR includes a Biological Constraints Analysis, CDFW California Natural Diversity Database results table, USFWS Information for Planning and Consultation (IPaC) resource list, special-status wildlife species potential to occur table, and an Aquatic Resources Delineation Report, all specifically prepared for the proposed project and used in the analysis contained in Section 3.2, *Biological Resources,* of the Draft EIR, which again comes to the conclusion that the proposed project will not have a significant impact on these biological resources. Also, please refer to Response AG 1e.

Response ORG 1h

The comment expresses concern regarding special-status migratory birds, including the least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo. As discussed on pages 3.2-29 to 3.2-30 of the Draft EIR, the disruption of nesting activities and/or the removal of occupied habitat may result in a significant impact to one or both of these species. However, the implementation of Mitigation Measures BIO-2 through BIO-5 would help reduce impacts to a less-than-significant level by conducting presence/absence surveys, establishing nest avoidance buffers, and restricting lighting during nighttime construction to be shielded and directed away from the river corridor. If the proposed construction would result in an impact to occupied habitat, the implementation of Mitigation Measure BIO-6 would ensure that the habitat is replaced at the appropriate mitigation ratio. Also, please refer to Responses ORG 1g and AG 1c, for further discussion on special-status species and noise impacts on wildlife. When taken together, these responses and Draft EIR analyses lead to the conclusion that the proposed project will not have a significant impact on these migratory birds.

Response ORG 1i

The comment requests information on the effects of dewatering and potential sediment impacts on fish species, such as unarmored threespine stickleback. An analysis on the unarmored threespine stickleback and potential impacts related to direct and indirect impacts (such as water quality) is included on pages 3.2-30 to 3.2-31 of the Draft EIR. A discussion of water quality and best management practices (BMPs) designed to control and reduce soil erosion that includes dewatering can be found in Chapter 3.7, *Hydrology and Water Quality,* of the Draft EIR. As discussed on page 3.7-9 of the Draft EIR, a site-specific Stormwater Pollution Prevention Plan (SWPPP) would be developed and implemented as part of the proposed project in accordance with the Construction General Permit to minimize water impacts during construction. The SWPPP would include BMPs designed to control and reduce soil erosion. The BMPs may include the use of silt fences and straw wattles, dewatering procedures, watering for dust control, and other BMPs, as needed. The proposed temporary dewatering would lower groundwater levels locally, but would not be expected to significantly influence groundwater upwelling, which occurs in the segment of river over 1,000 feet upstream. The dewatering would not reduce surface water flows in the river downstream since flows are largely from the VWRP discharge.

Also, please refer to Response AG 1g, for analysis of special-status species.

Response ORG 1j

The comment expresses concern regarding the existence of oak trees impacted by the proposed project or in the proposed project area. As discussed on page 3.2-19 of the Draft EIR and in the Biological Constraints Analysis (Appendix C of the Draft EIR), oak trees were not observed within the project site during biological surveys; therefore, an oak tree survey was not required or conducted.

Response ORG 1k

The comment expresses concern regarding the sufficiency of the Draft EIR's cumulative biological impacts. The comment specifically refers to the nearby road widening and bridge replacement project along the Old Road. The proposed project may also result in the removal of biological resources. The proposed project would contribute to the cumulative impacts to biological resources. However, with the implementation of project-specific avoidance, minimization, or mitigation measures, impacts would be less than significant. The proposed implementation of Mitigation Measures BIO-1 through BIO-12 for the proposed project, as well as mitigation proposed as part of nearby projects, including the Old Road Bridge project, would ensure that cumulative impacts to biological resources within the region would be reduced to a less-than-significant level. Cumulative biological impacts are discussed on pages 3.2-40 to 3.2-41 of the Draft EIR. As noted in Draft EIR Section 3.2, the proposed project would not have significant and unavoidable cumulative impacts to these biological resources.

Response ORG 1l

The comment expresses concern regarding whether the proposed project will affect jurisdictional waters of the United States and if the Draft EIR is deficient in this regard. This comment is addressed in two ways:

(a) As presented in Table 3.2-4 on page 3.2-37 of the Draft EIR, impacts to aquatic resources (i.e., jurisdictional waters) would occur from the proposed project; however, through compliance with existing regulations, obtaining permits from the CDFW, RWQCB, and USACE, and the implementation of Mitigation Measures BIO-6 and BIO-11, the Draft EIR sufficiently details how

impacts to aquatic resources and previously restored areas, respectively, are mitigated and reduced to a less-than-significant level.

(b) As discussed in the Draft EIR on page 3.2-20, a formal aquatic resources delineation was performed within the aquatic resources study area on December 19, 2023. The results of the aquatic resources delineation survey are presented in Appendix C of the Draft EIR, Aquatic Resources Delineation. Two features were documented within the aquatic resources study area, Drainage 1 – Outfall and Drainage 2 – Santa Clara River; both of these features include waters of the United States and State or CDFW jurisdictional areas.

Moreover, SCVSD will coordinate with all regulatory agencies prior to proposed project implementation to ensure compliance with local, state, and federal laws.

Response ORG 1m

The comment requests information on mitigation requirements (Mitigation Measure BIO-11) and a previous streambed alteration agreement for a separate project and how they help mitigate impacts from the proposed project. Impacts related to the VWRP Retaining Wall Extension Project's restoration areas are shown on Figure 3.2-3, *CDFW Conservation Easement and VWRP Retaining Wall Extension Project Restoration Area,* and discussed in Section 3.2*, Biological Resources,* of the Draft EIR. An analysis of impacts is discussed on page 3.2-37 of the Draft EIR under Impact 3.2-3. SCVSD has consulted and worked with CDFW staff regarding the potential impacts and will comply with Mitigation Measure BIO-11 requiring further coordination under the existing Streambed Alteration Agreement.

Please also refer to Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement and Response ORG 1f.

Response ORG 1n

The comment expresses concern about Mitigation Measure BIO-12 and how it might constitute impermissible deferred mitigation. This concern is addressed in the terms and conditions of Mitigation Measure BIO-12 itself,[5] which requires that SCVSD comply with existing regulations and requirements for projects occurring within an existing SEA. Additionally, an environmental assessment is required if SCVSD needs to obtain a conditional use permit for the proposed project, and there will be continuing coordination with the County – and it is clear that there is no deferred mitigation planned or suggested by BIO-12. Please also refer to Master Response 2: Hydrology and Flood Hazard and Response ORG 1f.

Response ORG 1o

The comment expresses concern that the proposed project triggers FEMA notification requirements and notices to downstream property owners. In response to this comment, please refer to Master Response 2: Hydrology and Flood Hazard.

[5] Draft EIR Mitigation Measure BIO-12 states proposed project "[i]mpacts to SEA categories and protected trees shall be provided through coordination with the Los Angeles County Planning Department via SEA Counseling and Ministerial Review, and through application for a Protected Tree Permit and/or SEA Conditional Use Permit." The fact that the Los Angeles County Department of Regional Planning's comment letter (AG 3) did not find any deficiency in the terms of BIO-12 but confirms that it is a potential CEQA responsible agency when it may be called upon to consider and approve a conditional use permit application for the proposed project means that there is no deferred mitigation here at all.

Response ORG 1p

The comment expresses concern regarding the proposed project alternatives analysis in the Draft EIR. This comment is addressed by the text set forth in Response ORG 1f and PUB 1c and 1d. Chapter 5 of the Draft EIR contains a reasonable range of feasible proposed project alternatives and the assessment of these proposed project alternatives (Proposed Project, No Project, and VWRP-Side Improvements) with the proposed project goals and objectives and environmental impacts in mind (see Table 5-3 on DEIR page 5-11). The assessment meets the standards set forth in CEQA Guidelines Section 15126.6 for the consideration and discussion of alternatives to the proposed project. Furthermore, it results in a finding, supported by substantial evidence in the proposed project record, that the proposed project is the environmentally superior alternative in accordance with CEQA Guidelines Section 15126.6(e)(2) (see Draft EIR pages 5-11 to 5-12).

2.4.4 Public Meeting Comments

Letter PUB 1 Lynne Plambeck, SCOPE

Response PUB 1a

Comment noted. The comment provides an introductory statement. The comment does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Response PUB 1b

This comment expresses concerns regarding the proposed project's impact on the CDFW Conservation Easement and Santa Clara River SEA.

In response to this comment, please refer to Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement and Response ORG 1f.

Moreover, as stated on page 3.2-38 of the Draft EIR, proposed project impacts to the CDFW Conservation Easement would be considered less than significant with implementation of Mitigation Measures BIO-6 and BIO-11. To address any impacts to the conservation easement area, SCVSD would be required to obtain permits from the CDFW, RWQCB, and/or USACE and implement Mitigation Measure BIO-6. The measure outlines a replacement strategy for temporary and permanent impacts to areas covered by a conservation easement and would ensure that impacts to the conservation easement would be reduced to a less-than-significant level. Additionally, Mitigation Measure BIO-11 would be required to ensure that replacement values associated with additional impacts to an active restoration project are mitigated to a less-than-significant level.

A detailed analysis of the proposed project's impacts to an SEA can be found on page 3.2-39 of the Draft EIR. Implementation of Mitigation Measures BIO-6 and BIO-12 would ensure that proper coordination with the Los Angeles County Department of Regional Planning occurs and that impacts to SEA resources are mitigated through habitat replacement.

Response PUB 1c

This comment expresses concern for endangered species, including the unarmored threespine stickleback. Special-status species are covered in Section 3.2, *Biological Resources,* of the Draft EIR. Also, please refer to Response AG 1c and AG 1e.

Response PUB 1d

The comment expresses concern regarding hydrology impacts and changes to flood maps from the Los Angeles County Department of Public Works (LA County DPW).

In response to this short comment, please refer to Master Response 2: Hydrology and Flood Hazard and Response ORG 1d.

Additionally, the proposed project components would not alter the existing hydrology within the proposed project area since the proposed retaining wall would be constructed underground, the proposed addition of riprap would be placed along the wall adjacent to existing riprap, and the outfall structures are being rehabilitated in place. To fully address this comment, the following modifications to Section 3.7, *Hydrology and Water Quality*, of the Draft EIR have been made:

Page 3.7-2 **Flooding**

Flooding is inundation of normally dry land as a result of a rise in surface water levels or rapid accumulation of stormwater runoff during storm events. The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping (FIRM) program, designates areas where urban flooding could occur during 100-year and 500-year flood events. A 100-year flood event has a one-percent probability of occurring in a single year. 100-year floods can occur in consecutive years or periodically throughout a decade. A 500-year flood event has a 0.2 percent probability of occurring in a single year. A Capital Flood, or 50-year flood event, has a two-percent (2%) probability of occurring in a single year. Although the Santa Clara River is located adjacent to the project site, the ~~southwestern site boundary~~VWRP is not located within an area mapped as a 100- and 500-year flood hazard area on FEMA's Flood Insurance Rate Map ~~or the LA County DPW Floodway Map~~ (FEMA 2021~~3~~). However, the Los Angeles County 50-year Flood Zone as mapped in 2022 does encroach onto the VWRP facility at the southwestern site boundary and the proposed project area as shown on **Figure Hydro-3**. As a result, the ~~project site~~VWRP would not be at risk from 100-year and 500-year flood hazards, but would be within the County's 50-year flood zone.

Page 3.7-11 ***Drainage Patterns***

Impact 3.7-3: The proposed project could 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.

Underground Retaining Wall Improvement and Outfall Structures
Construction and Operation

The retaining wall improvements are designed to be and would occur entirely underground, and the upgraded outfall structures would occupy approximately the same footprint they do now. Therefore, there would be no change to drainage patterns in the project area. The LA County DPW floodway map identifies potential severe flood hazard areas associated with the County's Capital Flood (LA County DPW 2024). On June 28, 2022, the LA County Board of Supervisors adopted an ordinance for new floodway maps, including for the main stem of the Santa Clara River (LA County DPW 2024). The LA County DPW Floodway Maps reflect updated hydrologic and topographic data, modern hydraulic engineering modeling, and physical changes that have already taken place in this reach of the Santa Clara River over the years, and thus the 2024 DPW Floodway Map more accurately assesses the areas of potential flood hazard associated with the Capital Flood along the Santa Clara River (LA County DPW 2024). As shown in Figure Hydro-3, the LA County DPW 50-year flood zone encroaches onto the existing VWRP at the southwestern site boundary and the proposed project area. The proposed project would be designed to reinforce the exterior VWRP retaining wall to prevent damage during a County Capital Flood event, without modifying the floodplain extent. Since the retaining wall improvements would not substantially alter the floodplain from its existing condition, the proposed project would not substantially alter the existing drainage pattern or floodway course in the surrounding area of the project or impede or redirect flood flows. In addition, SCVSD has and will continue to comply with local, state, and federal flood control regulations and to coordinate with LA County DPW and FEMA, as needed, to ensure compliance with existing regulatory requirements. Therefore, relative to changes to drainage patterns on the site or area or the alteration of the course of a stream or river through the addition of impervious surfaces, project impacts ~~there~~ would be less than significant ~~no impact~~.

Mitigation Measures

None Required

Significance Determination

~~No~~Less than Significant Impact

Response PUB 1e

This comment expresses concern for the impacts of noise on nesting and endangered birds. Section 3.2, *Biological Resources,* of the Draft EIR includes an analysis of impacts to birds related to noise. As discussed on page 3.2-29 of the Draft EIR, implementation of Mitigation Measures BIO-3 and BIO-5 would require pre-construction surveys for non-listed and listed bird species and the delineation of nest avoidance buffers. Also, please refer to Response AG 1c.

Response PUB 1f

The comment expresses a preference for an alternative that doesn't impact the conservation easement. An alternatives analysis was included in Chapter 5.0, *Alternatives,* of the Draft EIR. Alternative 2 discussed in Chapter 5.0 proposed construction of a retaining wall within the VWRP. However, although Alternative 2

would reduce biological impacts, it would not meet the proposed project objective of allowing uninterrupted VWRP operations during construction activities, would provide less efficient scour protection, and would not contribute to the main objective of the proposed project to achieve long-term protection of the middle section of the VWRP boundary in case of future Capital Flood scour events. An *Alternatives Analysis Report* prepared by Geosyntec in 2023 was included as Appendix H to the Draft EIR and included additional details on alternatives to the proposed project. Please also refer to Response ORG 1p.

Response PUB 1g

The comment expresses concern about the need for the proposed project if there was already a VWRP retaining wall project constructed in 2016 just north of the existing middle section of the retaining wall. This comment likely refers to the Santa Clarita Valley Joint Sewerage System Facilities Plan (Final EIR SCH No. 1996041084), also referred to as the VWRP Retaining Wall Extension Project, completed in 2018. This 2018 project is discussed on page 3.2-10 of the Draft EIR. The proposed project that is the subject of this EIR is independent of the 2018 project and includes updates to the existing VWRP middle section retaining wall.

Please also refer to Response ORG 1d and Master Response 1: Need for the Proposed Project.

Response PUB 1h

Comment is noted and there is a lack of specificity when it refers to the inclusion of a "court order." The comment does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Letter PUB 2 Lynne Plambeck, SCOPE

Response PUB 2a

Comment noted. The comment provides an introductory statement. The comment does not identify an issue relating to the adequacy of the information or analysis provided in the Draft EIR. No additional response is required.

Response PUB 2b

This comment expresses concern regarding the proposed project's hydrology impacts. In response to this comment, please refer to Master Response 2: Hydrology and Flood Hazard.

Response PUB 2c

This comment reiterates concerns regarding endangered species and biological resources. As discussed in Section 3.2, *Biological Resources*, of the Draft EIR, impacts to biological resources would be considered less than significant with the implementation of Mitigation Measures BIO-1 through BIO-12.

Please also refer to Responses AG 1c, ORG 1g, and Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement.

Response PUB 2d

This comment reiterates concern about the need for the proposed project and its impact to the conservation easement. The comment states support for both proposed project alternatives in the Draft EIR. In response to this comment, please refer to Master Response 3: Existing Conservation Easement and Related Streambed Alteration Agreement and Responses ORG 1a, PUB 1b, and PUB 1f.

Response PUB 2e

The comment suggests that because of the location of the proposed project in the Santa Clara River, the Draft EIR should also be an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The EIS requirement applies whenever a federal agency proposes to implement a "major action," (as defined in Code of Federal Regulations Title 40, Section 1508), which may include a federal project, use of federal land, funding by a federal agency, or approval of federal permits. The proposed project would not trigger any of these requirements and therefore is not subject to NEPA environmental impact review. Also, please refer to Response ORG 1l.

2.5 Recirculation

CEQA Guidelines Section 15088.5(a) provides direction for when a Draft EIR must be recirculated when new significant information is added to the EIR after public notice of the availability of the Draft EIR but prior to certification. Under CEQA Guidelines Sections 15088.5(a)(1) to (4), "Significant new information" for this purpose is a disclosure that shows the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed in the Draft EIR would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

These points in relation to the information added to the EIR are addressed below.

With respect to Section 15088.5(a)(1), as described in the Responses to Comments, no information has been produced or provided to the lead agency by any of the commenters that reveals a new significant environmental impact would result from the proposed project. Moreover, the lead agency in responding to the commenters has not added information to the Draft EIR that would show a new significant environmental impact that might be caused by the proposed project. In the same way, no commenter or lead agency has produced or added new information to the Draft EIR showing that a new mitigation measure proposed to be implemented, by itself, might cause a significant environmental impact. See also CEQA Guidelines Section 15126.4(a)(1)(D) and *Stevens v. City of Glendale* (1981) 125 CA3d 986.

With respect to Section 15088.5(a)(2), no commenter has identified new significant information about the proposed project that shows a substantial increase in the severity of an identified environmental impact for any of the environmental topics required by CEQA. In other words, no one has produced information that negates the Draft EIR findings about any potential environmental impact from the proposed project by showing the any potential impact is substantially greater than what has been found and stated in the Draft EIR. As such, no new mitigation measures are required nor is there a need for recirculation on this point.

With respect to Section 15088.5(a)(3), a review of comments does not reveal, propose, or recommend a feasible project alternative or mitigation measure that is "considerably different from others previously analyzed in the Draft EIR" on the subjects or environmental topics they were most concerned about. Because the comments made no such recommendation for a project alternative or mitigation measure, the second prong of this basis for recirculation (i.e., that the Lead Agency has declined to adopt it) cannot be shown. In the absence of a recommendation for a different project alternative or mitigation measure, recirculation of the Draft EIR is not warranted.

With respect to Section 15088.5(a)(4), the Draft EIR is not so fundamentally or basically inadequate in nature that it precludes meaningful public review and comment. The fact that there are multiple comment letters—all of which are substantive, arise from sufficient time for public review and comment, and refer to Draft EIR sections and attached technical reports that contain sufficient explanation and analysis pursuant to CEQA and the CEQA Guidelines—is fact alone that this basis for recirculation does not apply here. The Draft EIR includes numerous technical studies and site-specific analysis to support the environmental significance determinations in Draft EIR Chapter 3, *Environmental Setting, Impact Analysis, and Mitigation Measures*, which have enabled the commenters to provide meaningful public review and comment. The document is clearly not fundamentally inadequate to preclude meaningful public review and comment.

In summary, when reviewing the Draft EIR and comments received, in light of the standards set in CEQA Guidelines Section 15088.5 for what constitutes grounds for recirculation and the substantial record of evidence supporting the Draft EIR analysis, recirculation of the Draft EIR is not warranted.

2.6 Comments Letters

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

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

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

September 9, 2024

Mandy Huffman
Santa Clarita Valley Sanitation District
1955 Workman Mill Road
Whittier, California 90601
mandyhuffman@lacsd.org

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE VALENCIA WATER RECLAMATION PLANT MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT, SCH NO. 2023110644, LOS ANGELES COUNTY, CA

Dear Mandy Huffman:

The California Department of Fish and Wildlife (CDFW) reviewed the Environmental Impact Report (EIR) from the Santa Clarita Valley Sanitation District (SCVSD) for the Valencia Water Reclamation Plant (VWRP) Middle Section Retaining Wall Ground Improvement Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

1a

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law[2] of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: SCVSD

Objective: The primary objective of the Project is to achieve long-term protection of the middle section of the VWRP boundary along the Santa Clara River. The Project proposes to construct a structure that can withstand capital flood scour levels and earthquakes with limited impact to the VWRP area; allow uninterrupted VWRP operation with controlled impact from construction activities; and to maintain permanent improvements within the property limits of the VWRP. 1a Cont.

The Project would include construction of an underground retaining wall to prevent scour of the existing VWRP middle section wall, upgrades to two outfall structures, and the addition of riprap along the southern portion of the VWRP wall. The wall would be an anchored cement deep soil mixing (CDSM) structure or, where constraints prevent the use of CDSM, a secant wall with anchors. The wall would extend to a depth of approximately 70 feet below ground. A three-foot thick layer of riprap would be placed between the new CDSM/secant piles and the existing wall. Once constructed, a layer of approximately 18 inches of soil would be placed above the CDSM and riprap, and the impact area would be revegetated. The proposed CDSM/secant pile underground retaining wall would cover a surface area of approximately 0.87 acre.

Discharge Outfall 001, the northern outfall structure that is used to discharge tertiary treated water into the Santa Clara River, is currently infiltrated by vegetation and roots, which has caused a pipe joint separation. Portions of Discharge Outfall 001 would be temporarily removed and replaced, and the outfall would be rehabilitated by slip lining. Discharge Outfall 002, the southern outfall structure that discharges stormwater, exhibits a similar presence of infiltrating vegetation and roots as well as soil and debris, all of which has caused pipe backflow conditions. Discharge Outfall 002 would be demolished and replaced. An area surrounding both outfall structures would be permanently cleared to allow access to the outfall structures and to reduce impacts to the new structures from infiltrating vegetation and roots. The new maintenance area

[2] "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

surrounding the outfalls would encompass approximately 0.57 acre. Existing riprap along the southern portion of the VWRP wall would be expanded to the north, with the addition of approximately 0.05 acre of additional riprap. In total, the Project would impact approximately 3.26 acres.

Location: The Project site is located along the western boundary of the VWRP, which is located at 28185 The Old Road in Valencia, in unincorporated Los Angeles County, California. The VWRP is bound by The Old Road to the northeast and by the Santa Clara River to the south and west. A conservation easement area is located on SCVSD's property between the existing VWRP retaining wall and the western property line.

Timeframe: Construction of the Project is anticipated to begin in February 2026 and conclude by October 2027, with demolition taking approximately 1 month, grading and excavation lasting approximately 4 months, and construction of the retaining wall and outfall lasting approximately 15 months. Work would be confined to the dry season.

Biological Setting: The Project site is immediately adjacent to the Santa Clara River. The Project site is within the County of Los Angeles designated Significant Ecological Area (SEA) 20: Santa Clara River. A general biological survey and focused rare plant survey was conducted on March 4, 2022, and findings from the surveys and literature review were compiled in a Biological Technical Report (Bio Report). The Bio Report indicates the natural communities and land cover types within and adjacent to the Project footprint include big sagebrush (*Artemisia tridentata* shrubland), blue elderberry woodland (*Sambucus nigra* ssp. *caerulea* woodland), California rose briar patches (*Rosa californica* shrubland), California sagebrush scrub (*Artemisia californica* shrubland), Fremont cottonwood-arroyo willow forest (*Populus fremontii-Salix lasiolepis* forest), giant reed marsh (*Arundo donax* marsh), non-native annual grasses and forbs, tamarisk thickets (*Tamarix ramossisima* thickets), sandbar willow thickets (*Salix exigua* thickets), and disturbed/developed land. Of these habitats, blue elderberry woodland, California rose briar patches, Fremont cottonwood forest, and Fremont cottonwood-arroyo willow forest meet the criteria as CDFW sensitive communities. 1a Cont.

The Project would result in impacts to 0.16 acre of blue elderberry woodland, 0.02 acre of California rose briar patches, 0.01 acre of restored California sagebrush scrub, 0.11 acre of Fremont cottonwood-arroyo willow forest, 1.65 acre of Fremont cottonwood forest, 0.36 acre of giant reed marshes, 0.58 acre of non-native annual grasses and forbs, 0.04 acre of tamarisk thickets, 0.17 acre of disturbed vegetation, and 0.17 acre of developed land, for a total of 3.26 acres.

The Bio Report determined 22 special-status wildlife species have a moderate to high potential to occur in the Project area. Species potentially affected by the Project include Santa Ana sucker (*Catostomus santaanae*; Endangered Species Act (ESA)-listed threatened, California Species of Special Concern (SSC)), arroyo chub (*Gila orcuttii*; SSC), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*; ESA-

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

listed endangered, CESA-listed endangered, State fully protected), San Diegan legless lizard (*Anniella stebbinisi*; SSC), coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC), coast horned lizard (*Phrynosoma blainvillii*; SSC), two-striped garter snake (*Thamnophis hammondii*; SSC), southwestern pond turtle (*Actinemys pallida*; SSC, ESA-proposed threatened), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*; CESA-listed endangered, ESA-listed threatened), southwestern willow flycatcher (*Empidonax traillii extimus*; CESA-listed endangered, ESA-listed endangered), least Bell's vireo (*Vireo bellii pusillus*; CESA-listed endangered, ESA-listed endangered), American badger (*Taxidea taxus*; SSC), and Crotch's bumble bee (*Bombus crotchii*; CESA candidate).

During the rare plant survey, no rare plants were detected, but the Bio Report indicates suitable habitat exists at the Project site for 14 special-status plant species, including Nevin's barberry (*Berberis nevinii*; ESA-listed endangered, CESA-listed endangered), San Fernando Valley spineflower (*Chorizanthe parryi* var. *Fernandina*; CESA-listed endangered), and California orcutt grass (*Orcuttia californica*; ESA-listed endangered, CESA-listed endangered). Additionally, the Project site overlaps U.S. Fish and Wildlife Service (USFWS)-designated critical habitat for arroyo toad, least Bell's vireo, and southwestern willow flycatcher. 1a Cont.

Measures are incorporated in the EIR to mitigate for Project impacts towards rare plants, nesting and special-status birds, special-status mammals including bats, special-status herpetofauna including southwestern pond turtle, Crotch's bumble bee, habitat including previously restored habitat, and SEA resources.

Project History: The VWRP was constructed in the 1960's. In the 1990's, the VWRP Stage Four Expansion Retaining Wall Project was constructed. In accordance with CDFW Stream or Lake Alteration Agreement Notification No. 5-644-91, a Conservation Easement was recorded in 1993 over the portion of SCVSD's property between the VWRP and the Santa Clara River. The Conservation Easement was intended to partially mitigate impacts resulting from that project and protect existing fish and wildlife resources in perpetuity. The Project overlaps portions of the Conservation Easement.

In 2018, SCVSD completed construction of the VWRP Retaining Wall Extension Project, situated northwest of the proposed Project. In accordance with CDFW Streambed Alteration Agreement No. 1600-2016-0004-R5, permanent impacts associated with the VWRP Retaining Wall Extension Project were mitigated through the purchase of mitigation credits from a CDFW-approved mitigation bank, and temporary impacts were mitigated through revegetation. The northern portion of the Project footprint overlaps habitat installed as part of mitigation, which includes California sagebrush scrub and planted Fremont cottonwood trees.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist SCVSD in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

COMMENT # 1: Crotch's Bumble Bee

Issue: The Project has the potential to impact habitat for and result in take of Crotch's bumble bee. The measures in the EIR regarding Crotch's bumble bee can be improved to provide more effective and efficient protection.

Specific impact: Project activities involving ground and vegetation disturbance could result in potential significant impacts, including loss of foraging resources, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young, and/or queens, and direct mortality. Construction delays caused by work stoppages due to Crotch's bumble bee presence can extend the Project into additional breeding seasons, leading to increased disturbance to Crotch's bumble bee.

Why impact would occur: Crotch's bumble bee inhabits open grassland and scrub habitats. They are generalist foragers and can be found throughout most of southwestern California in areas that have suitable nesting habitat and floral resources. Bumble bees live in colonies composed of a queen, workers, and, near the end of the season, reproductive members of the colony. Colonies are annual, with new nests initiated by solitary queens in the spring. Crotch's bumble bees primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). New queens produced at the end of the annual colony cycle mate before entering diapause, which is a form of hibernation. Overwintering sites utilized by these solitary mated queens include soft, disturbed soil (Goulson, 2010), or under leaf litter or other debris (Williams et al. 2014). The highest detection probability is during the Colony Active Period of April through August, but Crotch's bumble bee could be on the Project site at any time of year. 1b

Mitigation Measure *BIO-10: Crotch's Bumble Bee*, as it is currently written, requires focused surveys for Crotch's bumble bee. If Crotch's bumble bee is detected within 500 feet of the Project site during the surveys, the measure requires a qualified entomologist to identify the locations of all nests within and adjacent to the Project site and establish a minimum 15-meter no disturbance buffer around each nest. The measure only requires consultation with CDFW in the event impacts to a nest are unavoidable, to determine if take authorization is required. Finally, the measure requires the relocation of Crotch's bumble bee nests once a take authorization is acquired. If Crotch's bumble bee is present within or near the Project site, Project activities could result in take. Crotch's bumble bee nests are difficult to locate, as are individual bees hibernating

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

underground, so avoidance of take may not be possible if Crotch's bumble bee is within the Project impact area. SCVSD should not obligate itself to relocating Crotch's bumble bee nests given how difficult and unsuccessful relocation activities are.

Evidence impact would be significant: Recently, the California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9).

CDFW considers impacts to species that are candidates for CESA listing to be significant under CEQA. Accordingly, the Project may 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 CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: Mitigation Measure BIO-10 - SCVSD shall revise Mitigation Measure BIO-10: Crotch's Bumble Bee to incorporate the underlined language and omit language in strikethrough: 1b Cont.

A qualified entomologist, approved by CDFW, shall conduct a focused survey in suitable habitat (e.g., Fremont cottonwood forest, blue elderberry woodland, California rose briars, and non-native grasses and forbs), in accordance with the ~~California Bumble Bee Atlas Point Surveys~~[6] *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*[3] protocol to determine presence/absence of the species. Surveys shall be conducted within one year prior to vegetation removal activities and a minimum of three surveys shall be conducted during peak flying season (April-August), when the species is most likely to be detected above ground. If surveys verify absence, no further action is required.

If surveys determine that Crotch's bumble bees are currently utilizing the study area, within 500 feet of the project site, *coordination with CDFW shall occur to develop appropriate avoidance and minimization measures and determine if take authorization may be required. Appropriate take authorization may include an Incidental Take Permit, among other options. Appropriate take authorization shall be obtained prior to Project initiation.* ~~a qualified entomologist shall identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone shall be established around any identified nest(s) to reduce the risk of disturbance or incidental take. A qualified entomologist shall expand the buffer zone as necessary to prevent disturbance or take. If impacts to a nest from proposed construction is unavoidable, consultation~~

[3] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

~~with the CDFW shall occur to determine if take authorization may be necessary. If take authorization is granted, the qualified entomologist will relocate the nest to a suitable location, through coordination with the CDFW. Various considerations shall be made to further reduce impacts during the relocation, such as 1) delaying relocation until the queen has the opportunity to emerge and 2) relocating within the home range of the nest.~~

Mitigation Measure #2: Revegetation - The revegetation planting shall include locally native nectar resources that can be expected to be blooming at any given time during the Colony Active Season (February 1 - October 31). A diverse assemblage of herbs, forbs, vines, and sub-shrubs, as well as annual and perennial plant species, shall be planted in the revegetated areas. Nectar- and pollen-producing plants that may be used by the Crotch's bumble bee include, but are not limited to, the genera Asclepias, Chaenactis, Lupinus, Phacelia, and Salvia in the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae, and Boraginaceae. Nectar resources shall be weed and pest free (e.g., Argentine ants), pathogen-free, and have not been treated with pesticides. 1b Cont.

Recommendation #1: Nest Sites Notification - If Crotch's bumble bee nest or overwintering sites are discovered or can be documented, CDFW recommends SCVSD contact CDFW at wildlifemgt@wildlife.ca.gov, as well as the CDFW staff contact listed at the end of this letter.

COMMENT # 2: CESA-Listed Birds

Issue: The Project has the potential to impact CESA-listed birds. The measures in the EIR regarding least Bell's vireo (vireo), southwestern willow flycatcher (flycatcher), and yellow-billed cuckoo (cuckoo) can be revised to provide enhanced protection.

Specific impact: Project activities such as vegetation removal, ground disturbance, or installation of sound walls occurring during the breeding season of vireo, flycatcher and cuckoo could result in injury or mortality to adult birds, chicks, or eggs, and adversely affect breeding behavior. Elevated noise and ground disturbance could result in birds abandoning their nesting territory. 1c

Why impact would occur: The Santa Clara River adjacent to the Project site contains characteristic vireo, flycatcher, and cuckoo habitat. Presence of these species may occur during their designated breeding season; vireo (March 15 through September 15), flycatcher (late April through mid-August), and cuckoo (early June through late August). Previous presence/absence vireo surveys conducted in the stretch of river adjacent to the Project site confirmed presence of vireo (Bloom Biological, Inc. 2015, Environmental Science Associates 2016, Compliance Biology Inc. 2022).

Mitigation Measure *BIO-5: Special-Status Bird Surveys* requires protocol-level presence/absence surveys for vireo, flycatcher, and cuckoo prior to the start of

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

construction. If surveys confirm presence of any of the three species, and it is not feasible to avoid the nesting season, the measure indicates steps will be taken to reduce construction noise at an active nest or occupied habitat. Noise levels will be monitored to ensure that they do not exceed 10 decibels above pre-construction ambient noise levels. The measure goes on to state that if sound attenuation is not possible, the breeding season will be avoided. Considering the requirement to work only during the dry season, avoidance of the breeding season may not be feasible for some portions of the Project. To avoid adverse impacts to CESA-listed birds, SCVSD should assume presence of these species and aim to work outside of the nesting season. Removing all vegetation outside of the nesting season would lessen the potential for direct take of vireo, flycatcher, cuckoo, or their nests, and the birds will be unlikely to nest within the disturbance footprint once they do arrive for the season.

Evidence impact would be significant: Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). In addition, take under the ESA is more broadly defined than take under CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

CDFW considers impacts to CESA-listed species to be significant under CEQA. Accordingly, the Project may 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 CDFW or USFWS. 1c Cont.

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #3: Mitigation Measure BIO-5 - SCVSD shall revise Mitigation Measure BIO-5 Special-Status Bird Surveys to incorporate language <u>underlined</u> and omit language in strikethrough:

Prior to the start of construction, focused surveys for the three listed bird species with potential to occur within the project area (least Bell's vireo, southwestern willow flycatcher and/or yellow-billed cuckoo) shall be conducted to determine presence/absence of the species within the study area. These shall be conducted in accordance with the Least Bell's Vireo Survey Guidelines, A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher and A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. If surveys verify absence of all species, no further action is required.

If surveys determine that these species are present within 500 feet of the project site, *<u>SCVSD shall coordinate with CDFW and USFWS prior to Project initiation to develop an Avoidance Plan that includes conservation measures required to ensure vireo,</u>*

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

flycatcher, and cuckoo are not adversely affected by Project activities. Such measures may include, but not be limited to, pre-construction nest surveys, screening materials to separate the Project site from adjacent habitat, and noise reduction/attenuation techniques to reduce Project-related noise to a maximum hourly average of 60 A-weighted decibels (dBA) or existing ambient levels, whichever is greater, at the edge of adjacent habitat. ~~and avoidance of the nesting bird season (Mitigation Measure BIO-3) is not feasible, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no more than 10 decibels (dBA) above pre-construction ambient noise levels) at an active nest or occupied habitat.~~ If construction must take place within 500 feet of an active nest of either the least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo, a qualified biologist will monitor noise levels to ensure that they do not exceed ~~10 dBA above~~ pre-construction ambient noise levels. If this is not feasible, ~~installation of~~ temporary construction noise barriers may be installed to reduce noise levels to an acceptable level. If the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded. *Avoidance measures requiring installation (sound walls, for example) shall be in place prior to March 15 and shall remain operational until September 15, of each year.*

1c Cont.

SCVSD shall coordinate with CDFW to obtain CESA take authorization for vireo, flycatcher, and cuckoo. Appropriate take authorization may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options. Coordination with CDFW shall begin as soon as possible to discuss the appropriate take authorization for the Project. SCVSD shall obtain take authorization prior to Project initiation.

COMMENT # 3: Habitat Loss and Degradation

Issue: Despite Mitigation Measure *BIO-6: Habitat Replacement*, the Project may result in a substantial adverse effect on riparian habitats or other sensitive natural communities identified by CDFW. Furthermore, the Project could result in a substantial adverse effect on the habitat conservation value of lands set aside as mitigation for impacts from previous projects.

Specific impact: Project activities would result in direct impact to 3.26 acres, including removal of riparian habitats and other sensitive natural habitats. Additionally, disturbance from Project activities could make the adjacent habitats less suitable for wildlife during construction.

1d

Why impact would occur: The EIR acknowledges that the Project would result in permanent and temporary impacts to CDFW sensitive natural communities, including blue elderberry woodland, California rose briar patches, Fremont cottonwood-arroyo willow forest, Fremont cottonwood forest, and red willow forest. The EIR also indicates that a portion of those impacts would occur within the Conservation Easement. The EIR

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

states that implementation of Mitigation Measure *BIO-6: Habitat Replacement* would reduce such impacts to a less than significant level.

For temporary impacts to aquatic resources, critical habitat, habitat occupied by an ESA-listed species, CDFW sensitive natural communities, or areas covered by a conservation easement, BIO-6 requires habitat replacement at a 1:1 ratio. For permanent impacts, BIO-6 requires mitigation at a 4:1 replacement-to-impact ratio for aquatic resources, critical habitat, habitat occupied by an ESA-listed species, or CDFW sensitive natural communities. For permanent impacts within the Conservation Easement, the mitigation ratio is 2:1 for impacts to disturbed habitat, giant reed marshes, non-native annual grasses and forbs, and tamarisk, and 4:1 for all other natural communities and land cover types (excluding developed land cover). BIO-6 also includes requirements for 4:1 mitigation for permanent impacts to SEA Category 1 and 2:1 for SEA Category 3.

The EIR does not include the methodology use by SCVSD to arrive at these mitigation ratios. It is not disclosed in the EIR all factors that were considered to determine that mitigation at the prescribed ratios would adequately offset the loss of habitat value resulting from the Project, and therefore reduce impacts to a less than significant level.

The mitigation ratio for temporary impacts does not appear to take into consideration temporal loss. Habitat will be absent on the Project site for a minimum of 2 years, after which it will take many years of growth for impacted habitats to approach their pre-Project condition and carrying capacity. Ratios for temporary impacts should take into consideration the delay between Project impacts and full replacement of functions. 1d Cont.

In determining appropriate mitigation ratios for permanent impacts, factors that should be considered in addition to temporal loss include a comparison of the functional loss at the impact site versus the expected functional gain at the mitigation site, the location of the mitigation site relative to the Project site, whether the proposed mitigation is out-of-kind compared to the impacted habitat, whether the proposed mitigation would impact high value existing habitat to convert it to the desired mitigation habitat, and the risk and uncertainty inherent in habitat mitigation.

For impacts within the Conservation Easement, mitigation for the impacts to existing habitat should be calculated separately from mitigation for the reduction in conservation value of the easement itself. That is, the appropriate mitigation ratio for impacts to each type of habitat should be determined, and then a multiplier should be applied to that resulting number. The EIR does not include requirements for mitigation lands to be preserved or managed in perpetuity. Without adequate replacement of biological functions and values through impact revegetation and compensatory mitigation, and protection of those lands in perpetuity, the Project would continue to have a significant impact on special-status fish and wildlife, and sensitive habitats.

Temperate freshwater wetlands are threatened globally by urbanization, agriculture, hydrologic modification, and other land use practices and continued reductions in

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

wetland area and function is likely to continue over the coming decades (Brinson and Malvarez 2002). An estimated 93 to 98 percent of California's riparian habitat has been converted to other land uses. California continues to lose wetland acreage and value, despite both state and national regulations and "no net loss" wetland policies (National Research Council 2001).

Wetland creation and the restoration and enhancement of existing wetlands are a common means of mitigating wetland loss. However, on average, the quality of created, restored, and enhanced wetlands achieved through mitigation is lower than that of intact reference wetlands (Ambrose, Callaway and Lee 2006). This suggests that projects conducted in wetlands, as currently permitted, are contributing to a net loss of wetland functions and values. Along with the risk of mitigation underperformance or failure, the temporal loss of wetland function from the time of impact to the time a mitigation site is fully functional is also a factor in potentially diminishing the value of compensatory restored wetlands (Zedler 2004). When compensatory mitigation sites themselves are impacted by subsequent projects, that effect is compounded.

Evidence impact would be significant: CDFW considers adverse impacts to a conservation easement area to be significant. Without adequate compensatory mitigation, the Project would continue to have a substantial adverse effect on riparian habitats and other sensitive natural communities identified by CDFW. Impacts to sensitive plant communities should be considered significant under CEQA unless they are clearly mitigated below a level of significance. 1d Cont.

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #2: Mitigation Ratios - CDFW recommends SCVSD reevaluate the habitat impacts and proposed mitigation and provide justification in the EIR for the replacement-to-impact ratios.

Mitigation Measure #4: Mitigation Lands – Prior to approval of the restoration plan required in Mitigation Measure BIO-6, the Project proponent shall provide CDFW with documentation demonstrating the suitability of the proposed property as mitigation land. Requested documentation may include, but is not limited to, a biological report, preliminary title report, mineral risk assessment report, and Phase I Environmental Site Assessment report. A wildlife conservation easement shall be recorded on compensatory mitigation lands to protect existing fish and wildlife resources in perpetuity. The grantee named on the conservation easement instrument shall be an entity that meets the requirements identified in Section 815 of the California Civil Code. Mitigation lands shall be perpetually managed, maintained, and monitored by a designated land manager. Funding for the perpetual management, maintenance, and monitoring of the site shall be provided through the establishment of an endowment.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

COMMENT # 4: Fish and Other Aquatic Species

Issue: The Project could result in adverse effects to special-status fish and other aquatic species.

Specific impact: Construction activities such as grading, excavation, use of heavy machinery, and riprap installation, if conducted in flowing or standing water, may result in impaired water quality, and injury or mortality towards special-status fish and other aquatic species.

Why impact would occur: The impact analysis regarding special-status fish acknowledges the potential for arroyo chub, Santa Ana sucker, and unarmored threespine stickleback to occur in the Santa Ana River. The document explains that construction will not result in decreased flows or reduced water quality downstream, that velocities in the Outfall 001 channel are not suitable for the three fish species, and that the riprap installation would not remove suitable fish habitat because it would not encroach on the flowing channel of the Santa Clara River.

While the riprap installation area may be outside the low flow channel, in higher flow events the Santa Clara River can overlap portions of the Project site. If work were to occur in that situation, fish could be injured or killed. The Project description mentions that work would occur during the dry season, but it does not say that work would not occur if flows were occupying the Project site. If Project activities occur during a flow event, the Project may result in injury or mortality to fish from crushing and reduction in habitat quality due to increased turbidity caused by the use of heavy equipment or installation of riprap. Without adequate avoidance measures, the Project would continue to have a significant impact on special status fish. 1e

Evidence impact would be significant: Take of any endangered, threatened, or candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9).

CDFW considers impacts to CESA-listed species to be significant under CEQA. Accordingly, the Project may 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 CDFW or USFWS.

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #3 Aquatic Resources Revision - CDFW recommends the EIR is revised to discuss the possibility of flowing or ponded water overlapping the Project site.

Mitigation Measure #5: Dry Season Work - Project activities shall occur only in the dry season only, and only in areas that do not contain ponded or flowing water.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

COMMENT # 5: Rare Plants

Issue: The Project has the potential to impact rare plants.

Specific impact: Ground and vegetation disturbance associated with the Project could result in direct loss of rare plants and their stored seedbank.

Why impact would occur: The EIR identifies potential significant impacts to rare plants and concludes that application of the proposed mitigation measures will reduce the impacts to a less than significant level.

Mitigation Measure *BIO-1: Rare Plants* calls for preconstruction surveys for rare plant species, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. If rare plants are found, the measure requires a suitable area around the plants (as determined by a qualified biologist) be avoided and demarcated with orange-mesh construction fencing. CDFW is concerned that, depending on the location of rare plants, avoidance may not be feasible (for example, if a rare plant is located within the retaining wall alignment).

To avoid missed detection of rare plants, SCVSD should conduct focused rare plant surveys during the upcoming 2025 growing season. If surveys are not conducted well in advance of Project activities, the Project may be delayed due to the presence of any special-status species (i.e., CESA-listed) that may require permits. 1f

Evidence impact would be significant: Nevin's barberry, San Fernando Valley spineflower, and California orcutt grass are CESA-listed endangered plants with potential to occur on the Project site. Additionally, plants with California Native Plant Society California Rare Plant Rank (CRPR) of 1B.1, 1B.2, and 4.2 have potential to occur on the Project site. Plants with a CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A. 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing. Impacts to these species or their habitats should be considered significant under CEQA, as they meet the definition of rare or endangered (CEQA Guidelines § 15380). Inadequate avoidance, minimization, and mitigation measures for impacts to special status plant species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation # 4: Feasibility Evaluation - CDFW recommends SCVSD reevaluate the feasibility of avoidance and no-work buffers in areas of the Project where the footprint cannot be adjusted.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure #6: Mitigation Measure BIO-1 – SCVSD shall revise Mitigation Measure BIO-1 Rare Plants to incorporate underlined language and omit language in strikethrough:

~~Preconstruction~~ Focused special-status plant surveys *shall be conducted* within areas containing suitable habitat throughout the project site during the appropriate blooming periods for Catalina mariposa lily, chaparral ragwort, Hubby's phacelia, Nuttall's scrub oak, Palmer's grappling hook, Peirson's morning glory, Plummer's mariposa lily, slender mariposa lily and southern California black walnut. ~~Throughout the project site.~~ Plant surveys shall be conducted in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW March 20, 2018). If special-status plants are found to be present within or near the project impact area, a suitable area around the plants (as determined by a qualified biologist) shall be avoided and demarcated with orange-mesh construction fencing to impacts to special-status plant species. *If special-status plants are found to be present within or near an area of the Project where direct impacts cannot be avoided (for example, within the alignment of the retaining wall), SCVSD shall coordinate with CDFW to determine appropriate mitigation for Project impacts.* 1f Cont.

If restoration, translocation and/or seed collection is used to mitigate impacts to special-status plants, a restoration/translocation plan shall be developed for CDFW approval prior to any disturbance to special-status plants and shall include, but shall not be limited to, the following information: identification of documented populations of the specie(s) within the project site, estimated impacts to the population on-site, proposed restoration methods (e.g., translocation, seed collection, etc.), expected timeline, success criteria, performance standards, funding source(s) and responsible parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program.

If CESA-listed or NPPA-listed plants are found to be present within or near the Project impact area, SCVSD shall coordinate with CDFW to determine whether take authorization is required. Such authorization may include an Incidental Take Permit, among other options. Take authorization shall be obtained prior to Project initiation.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB website[4] provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms. 1g

[4] https://wildlife.ca.gov/Data/CNDDB

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[5]. 1g Cont.

SCVSD should ensure data collected for the preparation of the EIR is properly submitted.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.) 1h

CONCLUSION

CDFW appreciates the opportunity to comment on the EIR to assist SCVSD in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that SCVSD has to our comments and to receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines, § 15073(e)).

Questions regarding this letter or further coordination should be directed to Kelly Fisher[6], Environmental Scientist. 1i

Sincerely,

DocuSigned by:
5991E19EF8094C3...
Victoria Tang
Environmental Program Manager
South Coast Region

ATTACHMENTS

Attachment A: Draft Mitigation Monitoring and Reporting Program (MMRP)

[5] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit
[6] Phone: 858-354-5083; Email: kelly.fisher@wildlife.ca.gov

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

EC: California Department of Fish and Wildlife
Kelly Fisher, Environmental Scientist
Steve Gibson, Senior Environmental Scientist (Supervisory)
Frederic (Fritz) Rieman, Senior Environmental Scientist (Supervisory)
Victoria Tang, Environmental Program Manager
Jennifer Turner, Senior Environmental Scientist (Supervisory)

Office of Planning and Research
State.Clearinghouse@opr.ca.gov

REFERENCES

Ambrose, Richard F., John C. Callaway, and Steven F. Lee. 2006. "An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Quality Control Board, 1991-2002."

Bloom Biological, Inc. 2015. "Santa Clara River Riparian Bird Surveys 2015 Final Report."

Brinson, M. M., and A. I. Malvarez. 2002. "Temperate freshwater wetlands: types, status, and threats." *Environmental Conservation* 29:115-133.

California Department of Fish and Wildlife. 2021. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.* https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

California Department of Fish and Wildlife. 2023. "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species." https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

Compliance Biology Inc. 2022. "Summary of Riparian Bird Surveys Santa Clara River: Natural River Management Plan (NRMP) Reach."

Environmental Science Associates. 2016. "Valencia Water Reclamation Plant Retaining Wall Least Bell's Vireo Protocol Survey Report."

Goulson, D. 2010. *Bumblebees: Behaviour, Ecology, and Conservation.* New York, NY: Oxford University Press.

Hatfield, R, S Jepsen, E Mader, S H Black, and M Shepherd. 2012. *Conserving Bumble Bees Guidelines for Creating and Managing Habitat for America's Declining Pollinators.* Portland, OR: The Xerces Society for Invertebrate Conservation.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

National Research Council. 2001. *Compensating for wetland losses under the Clean Water Act.* Washington D.C.: National Academies Press.

Williams, P H, R W Thorp, L L Richardson, and S R Colla. 2014. *Bumble Bees of North America: An Identification Guide.* Princeton University Press.

Zedler, Joy B. 2004. "Compensating for Wetland Losses in the United States." *Ibis* 146;92-100.

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measure	**Timing**	**Responsible Party**
Mitigation Measure #1: Mitigation Measure BIO-10 - SCVSD shall revise Mitigation Measure BIO-10: Crotch's Bumble Bee to incorporate the underlined language and omit language in strikethrough: A qualified entomologist, approved by CDFW, shall conduct a focused survey in suitable habitat (e.g., Fremont cottonwood forest, blue elderberry woodland, California rose briars, and non-native grasses and forbs), in accordance with the ~~California Bumble Bee Atlas Point Surveys~~[6] *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*[7] protocol to determine presence/absence of the species. Surveys shall be conducted within one year prior to vegetation removal activities and a minimum of three surveys shall be conducted during peak flying season (April-August), when the species is most likely to be detected above ground. If surveys verify absence, no further action is required. If surveys determine that Crotch's bumble bees are currently utilizing the study area, within 500 feet of the project site, *coordination with CDFW shall occur to develop appropriate avoidance and minimization measures and determine if take authorization may be required. Appropriate take authorization may include an Incidental Take Permit, among other options. Appropriate take authorization shall be obtained prior to Project initiation.* ~~a qualified entomologist shall identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone shall be established around any identified nest(s) to reduce the risk of disturbance or incidental~~	Prior to Project Initiation	SCVSD

[7] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	Timing	Responsible Party
~~take. A qualified entomologist shall expand the buffer zone as necessary to prevent disturbance or take. If impacts to a nest from proposed construction is unavoidable, consultation with the CDFW shall occur to determine if take authorization may be necessary. If take authorization is granted, the qualified entomologist will relocate the nest to a suitable location, through coordination with the CDFW. Various considerations shall be made to further reduce impacts during the relocation, such as 1) delaying relocation until the queen has the opportunity to emerge and 2) relocating within the home range of the nest.~~		
Mitigation Measure #2: Revegetation -The revegetation planting shall include locally native nectar resources that can be expected to be blooming at any given time during the Colony Active Season (February 1 - October 31). A diverse assemblage of herbs, forbs, vines, and sub-shrubs, as well as annual and perennial plant species, shall be planted in the revegetated areas. Nectar- and pollen-producing plants that may be used by the Crotch's bumble bee include, but are not limited to, the genera Asclepias, Chaenactis, Lupinus, Phacelia, and Salvia in the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae, and Boraginaceae. Nectar resources shall be weed and pest free (e.g., Argentine ants), pathogen-free, and have not been treated with pesticides.	At Completion of Project Activities	SCVSD
Mitigation Measure #3: Mitigation Measure BIO-5 - SCVSD shall revise Mitigation Measure BIO-5 Special-Status Bird Surveys to incorporate language <u>underlined</u> and omit language in strikethrough: Prior to the start of construction, focused surveys for the three listed bird species with potential to occur within the project area (least Bell's vireo, southwestern willow	Prior to Project Initiation	SCVSD

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	**Timing**	**Responsible Party**
flycatcher and/or yellow-billed cuckoo) shall be conducted to determine presence/absence of the species within the study area. These shall be conducted in accordance with the Least Bell's Vireo Survey Guidelines, A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher and A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. If surveys verify absence of all species, no further action is required. If surveys determine that these species are present within 500 feet of the project site, *SCVSD shall coordinate with CDFW and USFWS prior to Project initiation to develop an Avoidance Plan that includes conservation measures required to ensure vireo, flycatcher, and cuckoo are not adversely affected by Project activities. Such measures may include, but not be limited to, pre-construction nest surveys, screening materials to separate the Project site from adjacent habitat, and noise reduction/attenuation techniques to reduce Project-related noise to a maximum hourly average of 60 A-weighted decibels (dBA) or existing ambient levels, whichever is greater, at the edge of adjacent habitat.* ~~and avoidance of the nesting bird season (Mitigation Measure BIO-3) is not feasible, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no more than 10 decibels (dBA) above pre-construction ambient noise levels) at an active nest or occupied habitat.~~ If construction must take place within 500 feet of an active nest of either the least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo, a qualified biologist will monitor noise levels to ensure that they do not exceed ~~10 dBA above~~ pre-construction ambient noise levels. If this is not feasible, ~~installation of~~ temporary construction noise barriers may be installed to reduce noise levels to an acceptable level. If the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded. *Avoidance measures*		

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	Timing	Responsible Party
requiring installation (sound walls, for example) shall be in place prior to March 15 and shall remain operational until September 15, of each year. *SCVSD shall coordinate with CDFW to obtain CESA take authorization for vireo, flycatcher, and cuckoo. Appropriate take authorization may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options. Coordination with CDFW shall begin as soon as possible to discuss the appropriate take authorization for the Project. SCVSD shall obtain take authorization prior to Project initiation.*		
Mitigation Measure #4: Conservation Easement - A wildlife conservation easement shall be recorded on compensatory mitigation lands to protect existing fish and wildlife resources in perpetuity. The grantee named on the conservation easement instrument shall be an entity that meets the requirements identified in Section 815 of the California Civil Code. Mitigation lands shall be perpetually managed, maintained, and monitored by a designated land manager. Funding for the perpetual management, maintenance, and monitoring of the site shall be provided through the establishment of an endowment.	Prior to Project Initiation	SCVSD
Mitigation Measure #5: Dry Season Work - Project activities shall occur only in the dry season only, and only in areas that do not contain ponded or flowing water.	During Project Activities	SCVSD

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	**Timing**	**Responsible Party**
Mitigation Measure #6: Mitigation Measure BIO-1 – SCVSD shall revise Mitigation Measure BIO-1 Rare Plants to incorporate underlined language and omit language in strikethrough: ~~Preconstruction~~ Focused special-status plant surveys *shall be conducted* within areas containing suitable habitat throughout the project site during the appropriate blooming periods for Catalina mariposa lily, chaparral ragwort, Hubby's phacelia, Nuttall's scrub oak, Palmer's grappling hook, Peirson's morning glory, Plummer's mariposa lily, slender mariposa lily and southern California black walnut. ~~Throughout the project site.~~ Plant surveys shall be conducted in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW March 20, 2018). If special-status plants are found to be present within or near the project impact area, a suitable area around the plants (as determined by a qualified biologist) shall be avoided and demarcated with orange-mesh construction fencing to impacts to special-status plant species. *If special-status plants are found to be present within or near an area of the Project where direct impacts cannot be avoided (for example, within the alignment of the retaining wall), SCVSD shall coordinate with CDFW to determine appropriate mitigation for Project impacts.* If restoration, translocation and/or seed collection is used to mitigate impacts to special-status plants, a restoration/translocation plan shall be developed for CDFW approval prior to any disturbance to special-status plants and shall include, but shall not be limited to, the following information: identification of documented populations of the specie(s) within the project site, estimated impacts to the population on-site, proposed restoration methods (e.g., translocation, seed collection, etc.), expected timeline, success criteria, performance standards, funding source(s) and responsible	Prior to Project Initiation	SCVSD

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	**Timing**	**Responsible Party**
parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program. *If CESA-listed or NPPA-listed plants are found to be present within or near the Project impact area, SCVSD shall coordinate with CDFW to determine whether take authorization is required. Such authorization may include an Incidental Take Permit, among other options. Take authorization shall be obtained prior to Project initiation.*		
Recommendation #1: Nest Sites Notification - If Crotch's bumble bee nest or overwintering sites are discovered or can be documented, CDFW recommends SCVSD contact CDFW at wildlifemgt@wildlife.ca.gov, as well as the CDFW staff contact listed at the end of this letter.		
Recommendation #2: Mitigation Ratios - CDFW recommends SCVSD reevaluate the habitat impacts and proposed mitigation and provide justification in the EIR for the replacement-to-impact ratios.		
Recommendation #3 Aquatic Resources Revision - CDFW recommends the EIR is revised to discuss the possibility of flowing or ponded water overlapping the Project site.		

Docusign Envelope ID: C91418E2-B4FC-46ED-B5DE-1100CDF94C9E

Mitigation Measure	Timing	Responsible Party
Recommendation # 4: Feasibility Evaluation - CDFW recommends SCVSD reevaluate the feasibility of avoidance and no-work buffers in areas of the Project where the footprint cannot be adjusted.		

From:	Diaz-Barriga, Frida@Wildlife
To:	Huffman, Mandy
Cc:	Fisher, Kelly@Wildlife; Gibson, Steve@Wildlife; Rieman, Frederic (Fritz)@Wildlife; Tang, Victoria@Wildlife; Turner, Jennifer@Wildlife; OPR State Clearinghouse
Subject:	Draft Environmental Impact Report for the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project; SCH NO. 2023110644
Date:	Monday, September 9, 2024 12:23:44 PM
Attachments:	Outlook-jmpjnisi.png 2023110644 DEIR LA County Sanitation Valencia WRP Retaining Wall.pdf

---

CAUTION: EXTERNAL EMAIL.

Hello Mandy,

Please see the attached document for your records. If you have any questions, please direct them to Kelly Fisher at Kelly.Fisher@wildlife.ca.gov or at (858) 354-5083.

Thank you.

Frida Diaz (She/Her) | Staff Services Analyst
South Coast Region 5
3030 Old Ranch Parkway, Suite 400
Seal Beach, CA 90740
Work Cell 858-203-5876

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:
mandyhuffman@lacsd.org
Mandy Huffman, Environmental Planner
Santa Clarita Valley Sanitation District
1955 Workman Mill Road
Whittier, CA 90601

August 30, 2024

Draft Environmental Impact Report (EIR) for the Proposed Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project (Proposed Project) (SCH No. 2023110644)

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to review the above-mentioned document. The Santa Clarita Valley Sanitation District (SCVSD) is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. To provide context, South Coast AQMD Staff (Staff) has provided a brief summary of the project information and prepared the following comments.

South Coast AQMD Staff's Summary of Project Information in the Draft EIR

Based on information provided in the Draft EIR, the Proposed Project consists primarily of improvements to a retaining wall at the Valencia Water Reclamation Plant (VWRP) located at 28185 The Old Road, Valencia in unincorporated Los Angeles County, California.[1] The VWRP, whose western boundary is adjacent to the Santa Clara River (SCR), serves the City of Santa Clarita as well as a portion of unincorporated Los Angeles County.[2] Recent studies identified that in the event of a major flood and earthquake, the retaining wall along the western boundary of the VWRP may be undermined, specifically a 1,000 foot-long middle section of the retaining wall.[3] Proposed Project improvements to aid in the long-term protection of this section of the retaining wall consist of: 1) installing an underground retaining wall structure to reinforce the existing middle section retaining wall; 2) upgrades to two existing concrete pipe discharge structures; and 3) addition of riprap along the southern portion of the VWRP wall.[4] Construction, which would effect approximately 3.26 acres just outside of the VWRP, may begin as early as the 4th quarter of 2025 and last approximately 23 months.[5, 6]

2a

South Coast AQMD Staff's Comments

South Coast AQMD Air Permits and Role as a Responsible Agency

The Draft EIR states that during the construction phase of the Proposed Project, cement would be imported and mixed onsite at a cement batch plant. [7] The DEIR does not specifically state,

2b

[1] Draft EIR for the VWRP Middle Section Retaining Wall Ground Improvement Project (DEIR). Project Description, p. 2-1.
[2] *Ibid.* Executive Summary, p. ES-1 & ES-2.
[3] *Ibid.* Project Description, p. 2-1.
[4] *Ibid.* Executive Summary, p. ES-2.
[5] *Ibid.*
[6] *Ibid.* Air Quality, p. 3.1-22.
[7] *Ibid.* Project Description, p. 2-12.

though, if a South Coast AQMD permit will be needed for the cement batch plant.[8, 9] If implementation of the Proposed Project would require the use of new stationary sources, including but not limited to cement batch plants, emergency generators, fire water pumps, boilers, etc., air permits from South Coast AQMD will be required and the role of South Coast AQMD would change from a Commenting Agency to a Responsible Agency under CEQA. In addition, if South Coast AQMD is identified as a Responsible Agency, per CEQA Guidelines Section 15086, the Lead Agency is required to consult with South Coast AQMD. CEQA Guidelines Section 15096 sets forth specific procedures for a Responsible Agency, including making a decision on the adequacy of the CEQA document for use as part of evaluating the applications for air permits. For these reasons, the Final EIR should include a discussion about any new stationary equipment requiring South Coast AQMD air permits and identify South Coast AQMD as a Responsible Agency for the Proposed Project. 2b Cont.

The Final EIR should also include calculations and analyses for construction and operation emissions for any new stationary sources, as this information will also be relied upon as the basis for the permit conditions and emission limits for the air permit(s). Please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385 for questions regarding what types of equipment would require applications for new air permits. For more general information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits.

Conclusion

As set forth in California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(a-b), the Lead Agency shall evaluate comments from public agencies on the environmental issues and prepare a written response at least 10 days prior to certifying the Final EIR. As such, please provide South Coast AQMD written responses to all comments contained herein at least 10 days prior to the certification of the Final EIR. In addition, as provided by CEQA Guidelines Section 15088(c), if the Lead Agency's position is at variance with recommendations provided in this comment letter, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided.

Thank you for the opportunity to provide comments. South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Evelyn Aguilar, Air Quality Specialist, at eaguilar@aqmd.gov should you have any questions. 2c

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

EA:SW
LAC240717-10
Control Number

[8] *Ibid.* Appendix A: Initial Study. Environmental Checklist, p. 3.
[9] South Coast AQMD Permits, Portable Equipment Units. Access here: https://www.aqmd.gov/home/permits/equipment-registration/perp/portable-equipment-units

From:	Evelyn Aguilar
To:	Huffman, Mandy
Cc:	Sam Wang
Subject:	South Coast AQMD Staff's Comments on the Draft EIR for the Proposed VWRP Middle Section Retaining Wall Ground Improvement Project
Date:	Friday, August 30, 2024 2:08:14 PM
Attachments:	LAC240717-10 DEIR Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project.pdf

---

CAUTION: EXTERNAL EMAIL.

Dear Mandy Huffman,

Attached are South Coast AQMD staff's comments on the Draft Environmental Impact Report for the Proposed Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project (SCH No. 2023110644) (South Coast AQMD IGR Control Number: LAC240717-10). Please contact me if you have any questions regarding these comments.

Thank you,

Evelyn Aguilar
Air Quality Specialist, CEQA-IGR
Planning, Rule Development & Implementation
South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
Phone: 909-396-3148
E-mail: eaguilar@aqmd.gov
Hours of operation:
Tuesday - Friday 7:00 AM to 5:30 PM

South Coast AQMD

Cleaning the air that we breathe……™

AG 3 - Los Angeles County Department of Regional Planning 9/3/2024

From:	Patricia Hachiya
To:	Huffman, Mandy
Cc:	Samuel Dea
Subject:	Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project
Date:	Tuesday, September 3, 2024 3:56:34 PM
Attachments:	Outlook-tmhx0ksy.png

CAUTION: EXTERNAL EMAIL.

Good afternoon -

This email is regarding the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project DEIR.

One of the mitigation measures (Bio-12) in the DEIR did state that the project is subject to the County's Significant Ecological Areas (SEAs) Ordinance. At this point, without additional information from the lead agency, the County is unable to determine which SEA permitting process this project is subject to since it is an existing public facility (which could potentially qualify as a county project). The County requests that the DEIR lists the County's Department of Regional Planning as one of the public agencies that may issue a permit on Table 2-3 in page 2-13. 3a

If you have any questions, please contact let me know.

PATRICIA L. HACHIYA, AICP (she/her/hers)
SUPERVISING REGIONAL PLANNER, General Plan/Transit-Oriented Communities
Office: (213) 974-6461
Email: phachiya@planning.lacounty.gov

Los Angeles County Department of Regional Planning
320 West Temple Street, 13th Floor, Los Angeles, CA 90012
planning.lacounty.gov

LA COUNTY PLANNING SHAPING TOMORROW

Our field offices are currently open to the public. Please visit planning.lacounty.gov for information about available services, public meeting schedules, and planning projects.

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

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

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

October 2, 2024

IN REPLY PLEASE
REFER TO FILE: LD-4

Ms. Mandy Huffman
Santa Clarita Valley Sanitation District
1955 Workman Mill Road
Whittier, CA 90601

Dear Ms. Huffman:

ENVIRONMENTAL PLAN (RPPL2023006637)
DRAFT ENVIRONMENTAL IMPACT REPORT
VALENCIA WATER RECLAMATION PLANT
MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT

4a

As requested, Public Works reviewed the Draft Environmental Impact Report for the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement project. The proposed project includes a new ground, retaining-wall structure to fortify the middle section of the wall and protect the Valencia Water Reclamation Plant during a flood scour event and design-level earthquake.

1. **General Comment:**

1.1. The proposed project is in a Federal Emergency Management Agency (FEMA) Zone AE (one percent annual chance flood area with defined Base Flood Elevations). This Zone AE also has a regulatory floodway. The proposed project appears to encroach into the regulatory floodway. 44 CFR 60.3 (d)(3) prohibits encroachments into FEMA's regulatory floodways that result in any increase in the Base Flood Elevation unless the project proponent obtains a Conditional Letter of Map Revision (CLOMR) from FEMA prior to construction. FEMA's regulations also require the project proponent, within six months after construction completion, to apply to FEMA for a final Letter of Map Revision (LOMR) showing the As-Built conditions.

4b

1.2. If the proposed project constitutes a "fill" project, then a Conditional Letter of Map Revision Based on Fill (CLOMR-F) and a final Letter of Map Revision Based on Fill (LOMR-F) are required. Please note that FEMA has suspended issuances of CLOMR-Fs and LOMR-Fs in Los Angeles County until the agency has completed an Endangered Species Act, Section 7, consultation for its mapping regulations.

1.3. The project's Environmental Impact Report should discuss how the proposed project will affect the FEMA flood hazard, the County Floodplain, and Floodway boundaries. 4c

2. **Section 3.7.1, Hydrology and Water Quality, page 3.7-1:**

2.1. Provide a map to show that the scope of work is not encroaching in a FEMA flood hazard nor in a County floodway/floodplain. Although it is stated, based on Figure 2-3, it appears that work is being proposed in the flood hazard. 4d

For questions regarding comments 1 and 2, please contact Patricia Wood of Public Works, Stormwater Engineering Division, at (626) 458-6132 or pwood@pw.lacounty.gov.

3. The following are applicable to any work subject to Los Angeles County Flood Control District permit:

3.1. Permittee shall not prevent Public Works staff from performing their duties including, but not limited to, performing vehicular surveillance of the Santa Clara River.

3.2. Permittee shall provide a schedule and notify Public Works, Stormwater Engineering Division (Operations Section), at (626) 458-6177, 72 hours prior to any river access.

3.3. Access within river limits will require a five-day clear forecast from the National Weather Service.

3.4. Construction activities within the channels are prohibited during storm season (October 15 through April 15). 4e

3.5. Please note that the work is located within an active flood control channel. If there will be equipment in the channel, surface water diversion systems must be implemented to maintain design capacity of channels as follows:

3.5.1. April 16 to May 31: 33% of channel design capacity.

3.5.2. June 1 to August 31: 5% of channel design capacity.

3.5.3. September 1 to October 14: 33% of channel design capacity.

3.5.4. October 15 to April 15: 100% of channel design capacity (no work will take place in the channel).

3.6. Permittee shall be responsible for resolution of any complaints deriving from the construction or maintenance activities (i.e., smell, noise, etc.).

3.7. Permittee shall repair any damage to District facilities caused by the construction or maintenance activities.

For questions regarding comment 3, please contact Diana Ibarra of Public Works, Stormwater Engineering Division, at (626) 458-6132 or dibarra@pw.lacounty.gov.

4e Cont.

If you have any questions or require additional information, please contact Toan Duong of Public Works, Land Development Division, at (626) 458-4921 or tduong@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works



CIARA BARNETT, PE
Assistant Deputy Director
Land Development Division

DK:la
P:\ldpub\SUBPCHECK\Plan Checking Files\Projects submitted by Other Agencies\RPPL2023006637 - 28185 The Old Road\2024-07-31 Submittal\DPW_Cleared_2024-09-17_RPPL2023006637.docx

From:	Daniel Keyribaryan
To:	Huffman, Mandy
Cc:	Toan Duong; Ed Gerlits
Subject:	Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project
Date:	Thursday, October 3, 2024 10:52:45 AM
Attachments:	DPW_Cleared_2024-10-02_RPPL2023006637 (la).pdf

CAUTION: EXTERNAL EMAIL.

Hello,

Here is Public Works comment letter for the subject project.

Thanks,

Daniel Keyribaryan
Senior Civil Engineering Assistant
Los Angeles County Public Works
Office: (626) 458-4915

TRI 1 - Fernandeño Tataviam Band of Mission Indians 7/17/2024

Fernandeño Tataviam Band of Mission Indians
Tribal Historic & Cultural Preservation Department
Cultural Resources Management Division

Rudy J. Ortega, Jr.
Tribal President

Tribal Historic & Cultural Preservation Committee
Lucia Alfaro
Chairperson
Jorge Salazar
Joseph Bodle
Mark Villaseñor

July 17, 2024

SUBJECT: Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project

Dear Brianna Mendez,

Thank you for the opportunity to review the Draft Environmental Impact Report for the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project. The Cultural Resources Management Division of the Fernandeño Tataviam Band of Mission Indians is in agreement with Mitigation Measures TCR-1 and TCR-2 presented in the Draft Environmental Impact Report. This communication concludes the Cultural Resources Management Division of the Fernandeño Tataviam Band of Mission Indians' input on this project, and no additional consultation pursuant to CEQA is required unless there is an unanticipated discovery of cultural resources during project implementation.

TRI 1-1

Please don't hesitate to reach out if you have any questions or require any additional information at this time.

Sincerely,

Sarah Brunzell

Sarah Brunzell
Manager of the Cultural Resources Management Division
Cultural Resources Management Division

From:	CRM
To:	Mendez, Brianna
Cc:	Huffman, Mandy; El Jack, Ziad; Hong, Deborah
Subject:	RE: NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC MEETING for the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project
Date:	Wednesday, July 17, 2024 2:23:27 PM
Attachments:	image001.png Valencia Water Reclamation Plan Middle Section Retaining Wall Ground Improvement_FTBMI Consultation Conclusion.pdf

CAUTION: EXTERNAL EMAIL.

Good afternoon Brianna,

Please see attached.

Kind Regards,

Sarah Brunzell
Manager
Cultural Resources Management Division
Tribal Historic and Cultural Preservation Department

Fernandeño Tataviam Band of Mission Indians
1019 Second Street
San Fernando, California 91340
Office: (818) 837-0794
Website: http://www.tataviam-nsn.us

From: Mendez, Brianna <briannamendez@lacsd.org>
Sent: Wednesday, July 17, 2024 11:38 AM
Cc: Huffman, Mandy <mandyhuffman@lacsd.org>; El Jack, Ziad <ziadeljack@lacsd.org>; Hong, Deborah <DHong@lacsd.org>
Subject: NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC MEETING for the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project

[CAUTION] EXTERNAL Email. Exercise caution.

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC MEETING for the
Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project

The Santa Clarita Valley Sanitation District (SCVSD or District), as the Lead Agency, has prepared a Notice of Availability and a Draft Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the *Valencia Water Reclamation Plant* (VWRP) *Middle Section Retaining Wall Ground Improvement Project* (proposed project). SCVSD is requesting input on the Draft EIR from public agencies, residents, and other interested project stakeholders. The Draft EIR is being circulated for a 49-day review period. All comments to the Draft EIR are due no later than 5:00 p.m. on September 3, 2024.

Two scoping meetings will be held on August 14, 2024. One virtual public meeting will be held at 10:00 a.m. on Zoom, and a second public meeting will be held at 6:00 p.m. in person at The Centre in Santa Clarita. Both public meetings will include a brief presentation, providing an overview of the proposed

project and the CEQA process. Verbal comments may be made during the meetings.

The NOA is attached. The NOA and the Draft EIR are available online at the SCVSD website (https://www.lacsd.org/documents/other/documents-for-public-review) for review.

Brianna Mendez
Secretary I | Facilities Planning
562-908-4288 ext. 2702
briannamendez@lacsd.org

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Website | Facebook | X (Twitter) | Instagram | YouTube

ORG 1 - Santa Clarita Organization for Planning and the Environment (SCOPE) and Friends of the Santa Clara River, Lynne Plambeck and James M. Danza 9/3/2024

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386

Friends of the Santa Clara River
PO Box 7713 Ventura, California 90006 (805) 320-2265
fscr.org

September 3, 2024

Mandy Huffman
Environmental Planner
Los Angeles County Sanitation Districts--Santa Clarita Valley Sanitation District
1955 Workman Mill Road
Whittier, CA 90610

Sent via email to: Mandyhuffman@lacsd.org

Re: VALENCIA WATER RECLAMATION PLANT MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) SCH# 2023110644

Dear Mandy Huffman:

Santa Clarita Organization for Planning and the Environment is a local conservation group that has focused on planning issues in the Santa Clarita Valley for over 35 years. We are particularly concerned with the preservation of the Santa Clara River, Los Angeles County's last free flowing river, its flood plain, habitat and its many endangered species.

Friends of the Santa Clara River is a watershed group formed in 1993 that spans the area of the Santa Clara River in both Los Angeles and Ventura Counties. Its mission is to protect and restore the river and its habitat.

We jointly make these comments and ask that the District address the following issues in the DEIR comment responses, elaborated in more detail below:

- Need for the project, especially approval as an emergency
- Incursion into the Fish and Wildlife Conservation Easement
- Endangered Species and mitigation to avoid nesting bird season and other disruptions
- Alternatives.

1a

Not an Emergency

The objective of the Project is to construct a new ground retaining wall structure to fortify the middle section of an existing retaining wall for the Valencia Water Reclamation Plant (VWRP). Santa Clarita Valley Sanitation District has determined that under current circumstances, the VWRP is in danger of damage due to erosion or earthquakes. The intention of the new retaining wall is to protect the VWRP during such events. In addition, the project includes updates to two

1b

existing outfall structures, and clearing a long-term operations and maintenance area. Construction work will occur along the VWRP boundary as well as within an existing CDFW Conservation Easement (CE) to the west.

In response to SCOPE's public records request dated January 10th 2024, the Sanitation District (the "District") provided a number of reports, memos and emails which we include by reference. The documentation provided was dated in 2015 to 2016 (except for some more recent emails referring to studies from those dates and the 2023 GeoSyntec Alternatives Study). While we understand the district's desire to ensure that its facility is safe from flooding, a project concept that was conceived nine years ago and is still in the study stages can hardly be considered an emergency. 1b Cont.

We further note that the existing middle section retaining wall (or North Wall as it seems to be referred to by the Sanitation District), survived the high rainfall years of the 1990s, the 2005 flooding and the recent high precipitation of the 2022-2024 extreme rain events where, according to staff and observation, water did not get closer than 100 yards to this existing wall, in contradiction to the modeling. (See rainfall records attached as Exhibit 1). Sometimes modeling predictions are not accurate, and what is occurring in real time needs to be accepted. It appears that the modeling here is not accurately predicting what is acutally occurring with the river flows. 1c



This wall and the Valencia Plant also survived the intense shaking of the magnitude 6.7 Northridge earthquake that occurred in 1994. In any case, the DEIR does not explain how installation of a new retaining wall would contain damage to the plant from an earthquake further than the major Northridge earthquake that it has already withstood. Therefore, we question the need for this project. 1d

One last note, the EIR says on page 3.7-2:

> "Although the Santa Clara River is located adjacent to the project site, the southwestern site boundary is not located within an area mapped as a flood hazard area on FEMA's Flood Insurance Rate Map or the LA County DPW Floodway Map (FEMA 2023). As a result, the project site would not be at risk from 100-year and 500-year flood hazards." 1e

If the District's own DEIR states there is no flood hazard, we continue to be led to question the need for this project.

Conservation Easement

As the District is aware, there is an existing conservation easement held by California Fish and Wildlife, granted as a mitigation measure for previous impacts to the floodplain of the Santa Clara River and endangered species in the area. (Exhibit 2). We do not support any incursions into this easement. Easements are not meant to be musical chairs that can be extinguished at a whim and moved around They are permanent commitments. As we previously stated, this project is not an 1f

emergency. It appears that it is only stated thusly in an effort to avoid the District's obligations to protect and avoid impacts to this conservation easement. We therefore support one of the many alternatives to the proposed project (including those not listed, but discussed and provided as part of our public records act request – see Exhibit 5). 1f Cont.

Endangered Species in the Project Area

There are several endangered and threatened species in the general project area including but not limited to the Least Bell's Vireo, Willow Flycatcher, Arroyo Toad and Unarmored Three-spined Stickleback. We therefore believe that a biological evaluation or a Biological Assessment should have been prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

As requested in SCOPE's NOP comments, please provide recent surveys for these species and identify how your agency plans to reduce impacts and avoid them if construction proceeds. We note that in the email in Exhibit 3, the District states there are no recent surveys. 1g

The DEIR fails to discuss, disclose and promulgate mitigation measures for the numerous endangered species in the project area that would be affected by impacts to the conservation easement, noise, dust and dewatering. We have attached a list of species in Exhibit 4 that was assembled by US Fish and Wildlife for listed species that may be affected by the Old Road Project in the immediate vicinity (listed on DEIR page 3-13 as being only 800 feet away).

Birds

The USFW letter attached in Exhibit 4 for the immediately adjacent Old Road Project (described above) provides considerable links regarding migratory birds and protections they are afforded. That is because at least two endangered migratory birds are present in the project area. These include the Southwestern Willow Fly Catcher and the Least Bell's Vireo. The Yellow-billed Cuckoo is also listed as occurring in this area. Nesting sites of these endangered migratory birds must be avoided.

There is a long-standing concern that construction noise may be detrimental to wildlife, and especially birds, which relies heavily on acoustic communication. The Endangered Species Act provides additional, compelling, motivation for understanding the effects of traffic and construction noise on federally listed bird species that are in danger of extinction. Effects of construction may be significant when the noise adds to existing ambient noise levels. Construction noise that adds significantly to natural ambient noise has the possibility of producing a suite of significant short- and long-term behavioral and physiological changes in birds. These may include changes in foraging location and behavior; interference with acoustic communicate between conspecifics; failure to recognize other important biological signals, such as sounds of predators and/or prey; decreasing hearing sensitivity temporarily or permanently; and/or increasing stress and altering steroid hormone levels. Any of these effects could have long-term consequences and enduring impacts that include interference with breeding by individuals and populations, thereby threatening the survival of individuals or species. 1h

These impacts must be avoided by scheduling any approved construction in a manner that avoids nesting season. These impacts must be disclosed and discussed. We do not support mitigation for these impacts by buying into a mitigation bank elsewhere. These birds, fish and amphibians are facing extinction because of the continued loss of habitat areas already designated as critical. Scheduling construction to avoid nesting season must be included as a mitigation measure.

Fish

We did not see any discussion of the effect of dewatering or potential sediment on fish species. The endangered UTS fish which can be found downstream and upstream from this project, along with other species, require clear and flowing water to exist. Please discuss theses impacts and how they will be avoided. 1i

Oaks

While the DEIR states that surveys did not identify any oaks in the construction area, only Freemont cottonwoods, we believe this is inaccurate and will provide pictures at a later date. 1j

Section 3.03 Cumulative Impacts

ESA, the EIR preparer, proposes that addressing cumulative impacts is merely a matter of making a list of nearby projects. (DEIR p. 3-11). We disagree. Please see attached footnote for requirements which include descriptions on impacts[1] and US Fish and Wildlife letter attached as Exhibit 4. 1k

While the list *does* include a few sections that describe additional impacts, this section neglects to describe the very considerable biological impacts, especially on endangered species, of several

[1] **Cal. Code Regs. tit. 14 § 15130**
Current through Register 2024 Notice Reg. No. 33, August 16, 2024
Section 15130 - Discussion of Cumulative Impacts**(a)** An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. **(1)** As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.**(2)** When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant.**(3)** An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.**(b)** The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:**(1)** Either: **(A)** A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or**(B)** A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.**(2)** When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.**(3)** Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.**(4)** A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available, and**(5)** A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects…….

nearby projects. The most obvious of these is the nearby (only 800 feet away) proposed Old Road Widening which would also include - dewatering, impacts to the floodplain, impacts to nesting and migrating endangered birds through noise and impact to nesting areas, and fish. If these two projects were to occur at the same time without coordination regarding dewatering and nesting seasons, the impacts could be devastating to endangered fish (UTS) and birds (Least Bell's Vireos, Willow Flycatchers and others. Failure to discuss cumulative biological impacts, especially to endangered species in the area is an EIR deficiency. 1k Cont.

Jurisdictional Waters

The DEIR does not identify whether this project will affect jurisdictional waters of the US in the introductory chapters. Instead it discusses the recent Supreme Court Sacket Decision regarding adjacent and interstate wetlands. (p. 3.2-25) This is obviously not an issue of adjacent wetlands, since the project is concerned with flood flow of the Santa Clara River itself and alteration of its floodplain. This obtuse discussion of Sacket and failure to even determine whether or not the project will affect jurisdictional waters (see Exhibit 3) is a glaring EIR deficiency. Later the DEIR mentions that it may affect one acre or more (Figure 3.2-7) or on another page, less than one acre elsewhere (p. 3.2-20). We assert that construction will be within jurisdictional waters, will require a 404 permit and 401 certification, and that this document should have been noticed as an EIR/EIS. 1l

The District proposes to mitigate these impacts with **BIO-11. "**Impacts to previously restored habitat (inclusive of 4 mitigation trees) associated with the VWRP Retaining Wall Extension Project shall require coordination with CDFW under the existing Streambed Alteration Agreement Notification No. 1600-2016-004-R5." Please explain how mitigation for a previous and separate project will mitigate new impacts and how a streambed alteration agreement for a previous project will apply to the requirements for a new streambed alteration agreement. 1m

BIO-12 states that impacts to the Santa Clara River Significant Ecological Area (SEA) will be mitigated by a Conditional Use permit obtained from Los Angeles County**. This seems to defer mitigation to a future time where perhaps it will not be required at all. This is not acceptable.** We request to be notified when the District applies for this future CUP. 1n

FEMA Notification

We note that this project plans to permanently modify the floodplain by placing an additional retaining wall and abutment into it. This must trigger FEMA notification and notices to downstream property owners who might be affected by changes to the flood flow. It seems that the District intends to ignore this requirement. We note that all these requirements could be eliminated by choosing an alternative that avoids the CDFW and Army Corps jurisdictional area. 1o

Alternatives

The District included only two alternatives for analysis (p.5-5):

- Alternative 1: No Project Alternative
- Alternative 2: VWRP-Side Improvement

As we previously stated, we do not understand the need for this project since even in the most recent high rain/flood water event last year, the water did not approach close to the existing retaining wall and the wall and facility already survived a magnitude 6.7 earthquake in 1994 without apparent or discussed damage. Therefore, we would support the no project alternative. If the District persists in its assertion that a new wall should be built, even at an unneeded expense to tax-payers, than we believe that Alternative 2 is the appropriate choice since according to the 1p

EIR, it would reduce or eliminate most impacts, and particularly impacts to the river, the conservation easement and the riparian corridor:

"**Biological Resources**

Under Alternative 2, the improvements would occur within the VWRP and would not result in permanent impacts to vegetated areas along the riverside of the VWRP associated with the underground wall of the proposed project. Construction work related to the proposed wall for Alternative 2 would not impact aquatic resources, critical habitat, or the CDFW conservation easement. Therefore, this alternative would result in fewer impacts to biological resources when compared to the proposed project." (page 5-8)

Interestingly, the District seems to have chosen to use the alternatives analysis by GeoSyntec because it gave them the project that they wanted. We note that, as a result of our Public Records Request, other possible alternatives suggested in a PACE Engineering study (attached as exhibit 5) where not included. 1p Cont.

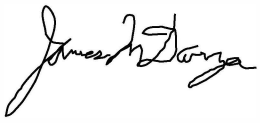
We urge the District to broaden its range of alternatives in order to find a way to honor its commitment to the existing Conservation Easement to which they are legally bound.

Thank you in advance for addressing our concerns.

Sincerely,



President



James M. Danza, MS, AICP
Chair, Friends of the Santa Clara River

Attachments:

1. Summary of Annual Precipitation in the SCV from 2002 to present, compiled by Santa Clarita Valley Water Agency, Newhall County Water District Gauge 1973 to 2007
2. CA Fish and Wildlife recorded Conservation Easement
3. Email provided thru PRA request, no recent surveys, no determination of jurisdictional waters.
4. US Fish and Wildlife Letter and Species list for the adjacent Old Road project in the immediate area of the proposed retaining wall.
5. Pace Engineering alternatives.

Exhibit 1

Summary of Annual Precipitation in the SCV from 2002 to present, compiled by Santa Clarita Valley Water Agency, Newhall County Water District Gauge 1973 to 2007

Santa Clarita Valley Water Agency

Summary of Annual Precipitation

October 1st through September 30th

(Total in Inches)

	2002-03	*2003-04*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*	*2012-13*
October	0.00	1.10	4.79	1.91	0.42	0.25	0.09	4.04	1.34	1.97	0.15
November	3.01	0.63	0.64	0.59	0.05	0.50	1.78	0.08	1.87	2.50	2.20
December	5.85	2.57	8.54	0.14	0.83	2.67	3.01	4.28	11.97	1.19	1.54
January	0.00	0.65	17.06	3.27	1.66	17.54	0.69	9.13	0.96	1.23	1.94
February	9.03	8.07	16.69	3.78	1.38	1.82	6.78	4.96	5.36	0.13	0.42
March	2.38	0.37	2.70	5.68	0.17	0.10	1.18	0.69	8.86	4.99	1.21
April	2.35	0.20	1.42	4.22	0.71	0.07	0.07	2.40	0.12	4.02	0.00
May	1.70	0.00	0.45	0.99	0.00	0.17	0.01	0.07	0.74	0.01	0.74
June	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00
July	0.02	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.08
August	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
September	0.00	0.00	0.17	0.00	1.32	0.00	0.00	0.00	0.00	0.02	0.00
TOTAL	**24.34**	**13.59**	**52.55**	**20.58**	**6.58**	**23.12**	**13.64**	**25.65**	**31.27**	**16.07**	**8.28**

	2013-14	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*
October	0.11	0.32	0.17	0.43	0.00	0.52	0.01	0.04	1.22	0.08	0.00
November	1.41	0.64	0.21	1.49	0.06	1.87	2.61	0.14	0.04	1.89	0.79
December	0.37	6.16	0.49	3.44	0.01	2.77	5.12	1.40	13.86	6.02	4.13
January	0.06	1.44	6.07	10.30	3.18	8.08	0.54	2.08	0.40	10.20	1.14
February	5.26	0.74	0.69	8.98	0.35	8.56	0.12	0.03	0.00	8.82	12.29
March	1.64	1.09	2.75	0.33	7.50	4.15	5.81	0.84	1.96	6.73	4.29
April	0.31	0.16	0.37	0.09	0.02	0.09	4.45	0.01	0.12	0.00	0.75
May	0.00	0.66	0.09	0.26	0.01	1.60	0.16	0.00	0.00	0.67	0.00
June	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
July	0.02	0.87	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
August	0.05	0.00	0.02	0.07	0.00	0.00	0.00	0.03	0.00	5.71	
September	0.00	0.78	0.00	0.13	0.02	0.03	0.01	0.00	0.12	0.31	
TOTAL	**9.23**	**12.87**	**10.87**	**25.53**	**11.15**	**27.68**	**18.84**	**4.57**	**17.72**	**40.43**	**23.39**

Data Source: 2000 - February 2022 SCV Water's Pine Street office; March 2022 onward L.A. County Department of Public Works Newhall - Soledad Canyon Rain Gauge

NEWHALL COUNTY WATER DISTRICT

Summary of Annual Rainfall

Oct,1 Thru Sept, 30

(Totals in inches)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Oct	0.20	1.24	0.38	0.48	0.04	0.10	0.00	0.00
Nov	1.63	0.25	0.00	2.11	0.05	3.03	0.89	0.00
Dec	1.21	4.32	0.21	0.92	7.11	1.89	1.19	0.00
Jan	10.24	0.28	0.00	5.98	11.21	12.44	10.36	4.76
Feb	0.00	3.70	6.43	0.07	14.39	3.20	14.63	1.66
Mar	4.55	5.68	1.14	2.03	11.48	6.01	4.84	5.50
Apr	0.02	3.72	0.53	0.00	2.86	0.00	0.36	0.46
May	0.00	0.00	0.16	4.41	0.00	0.02	0.40	0.00
Jun	0.00	0.00	0.53	0.01	0.00	0.00	0.00	0.00
Jul	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	2.89	0.00	0.00	0.00	0.00
Sep	0.00	0.02	3.01	0.00	2.24	0.00	0.00	0.00
TOTAL	**17.93**	**19.21**	**12.42**	**18.90**	**49.38**	**26.69**	**32.67**	**12.38**

	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Oct	0.58	0.25	1.74	0.16	0.54	0.68	3.47	0.78
Nov	3.62	5.34	5.04	3.87	5.11	1.55	3.84	0.92
Dec	0.22	2.95	5.13	8.13	0.70	0.24	4.60	7.14
Jan	3.33	8.67	0.00	0.78	5.84	2.10	3.27	0.89
Feb	1.21	6.85	0.00	1.20	6.65	0.61	3.39	4.13
Mar	9.50	13.07	0.27	1.04	5.39	1.69	1.16	1.30
Apr	1.09	4.61	0.07	0.14	0.88	0.14	3.98	0.30
May	0.13	0.20	0.00	0.07	0.00	0.90	0.09	0.00
Jun	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00
Aug	0.00	1.17	0.00	0.00	0.00	0.02	0.00	0.00
Sep	1.02	1.05	0.05	0.12	1.78	0.00	0.10	0.62
TOTAL	**20.70**	**44.16**	**12.30**	**15.57**	**26.94**	**7.03**	**24.10**	[illegible]

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Oct	0.86	0.00	0.50	1.55	0.57	0.78	0.00	1.30
Nov	0.37	0.63	0.00	0.00	0.75	0.71	0.00	1.06
Dec	0.01	0.01	5.69	7.25	1.76	1.94	2.33	8.70
Jan	2.89	1.11	3.28	17.11	0.48	21.98	2.97	6.64
Feb	4.23	5.72	16.34	11.73	5.31	1.93	6.73	0.23
Mar	0.22	11.33	9.73	4.27	2.33	8.30	2.08	0.00
Apr	0.48	0.00	0.15	0.00	0.42	0.72	0.13	0.00
May	0.88	0.00	0.34	0.00	0.00	0.26	0.68	0.00
Jun	0.00	0.00	0.00	0.65	0.00	0.75	0.00	0.05
Jul	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
TOTAL	**9.94**	**18.80**	**36.53**	**42.56**	**11.62**	**37.38**	**14.92**	**18.51**

NEWHALL COUNTY WATER DISTRICT

Summary of Annual Rainfall

October 1st Thru September 30th

(Totals in inches)

1989-90	*1990-91*	*1991-92*	*1992-93*	*1993-94*	*1994-95*	*1995-96*	*1996-97*	*1997-98*
0.86	0.00	0.50	1.55	0.57	0.78	0.00	1.30	0.00
0.37	0.63	0.00	0.00	0.75	0.71	0.00	1.06	3.73
0.00	0.01	5.59	7.25	1.76	1.94	2.33	8.70	6.72
2.89	1.11	3.28	17.11	0.48	21.98	2.97	6.64	3.49
4.23	5.72	16.64	11.73	5.31	1.93	6.73	0.23	22.00
0.22	11.33	9.73	4.27	2.33	8.30	2.08	0.00	5.15
0.48	0.00	0.15	0.00	0.42	0.72	0.13	0.00	2.28
0.88	0.00	0.34	0.00	0.00	0.26	0.68	0.00	5.50
0.00	0.00	0.00	0.65	0.00	0.76	0.00	0.00	0.06
0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.05	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.21
9.93	**18.80**	**36.53**	**42.56**	**11.62**	**37.38**	**14.92**	**18.51**	**49.14**

1998-99	*1999-00*	*2000-01*	*2001-02*	*2002-03*	*2003-04*	*2004-05*	*2005-06*	*2006-07*
0.33	0.00	1.13	0.22	0.00	1.10	4.79	1.91	0.42
1.39	0.00	0.00	3.18	3.01	0.63	0.64	0.59	0.05
1.39	0.05	0.00	1.30	5.85	2.57	8.54	0.14	0.83
2.08	1.21	5.84	1.55	0.00	0.65	17.06	3.27	1.66
0.65	9.43	10.76	0.51	9.03	8.07	16.69	3.78	1.38
3.00	3.15	3.38	0.38	2.38	0.37	2.70	5.68	0.17
3.78	2.10	2.56	0.05	2.35	0.20	1.42	4.22	0.71
0.00	0.00	0.00	0.12	1.70	0.00	0.45	0.99	
0.48	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	
0.00	0.31	0.00	0.00	0.00	0.00	0.09	0.00	
0.01	0.00	0.00	0.02	0.00	0.00	0.17	0.00	
13.11	**16.25**	**23.67**	**7.34**	**24.34**	**13.59**	**52.55**	**20.58**	**5.22**

Exhibit 2

CA Fish and Wildlife recorded Conservation Easement

93 1486854

After Recording, Mail To:
STATE OF CALIFORNIA
WILDLIFE CONSERVATION BOARD
801 K ST STE 806
SACRAMENTO CA 95814

RECORDED/FILED IN OFFICIAL RECORDS
RECORDER'S OFFICE
LOS ANGELES COUNTY
CALIFORNIA
31 MIN. PAST 1 P.M. AUG 2 1993

FREE R

12

CONSERVATION EASEMENT GRANT

THIS CONSERVATION EASEMENT GRANT is made this 12th day of August, 1992, by **COUNTY SANITATION DISTRICT NO. 32 OF LOS ANGELES COUNTY**, a special district organized under the County Sanitation District Act (Health and Safety Code Section 4700 et seq.) ("Grantor"), in favor of the **STATE OF CALIFORNIA, DEPARTMENT OF FISH AND GAME** ("Grantee").

WITNESSETH:

WHEREAS, Grantor is a County Sanitation District organized and discharging its responsibilities pursuant to the County Sanitation District Act, Health and Safety Code Section 4700 et seq.; and

WHEREAS, Grantor is the sole owner in fee simple of certain real property in unincorporated Los Angeles County, State of California, more particularly described in Exhibit "A" attached hereto and incorporated by this reference (the "Property"); and

WHEREAS, the Property possesses wildlife and native habitat values (collectively, "conservation values") of great importance to Grantee, the people of Los Angeles County and the people of the State of California; and

WHEREAS, the Property provides high quality habitat for the native flora and fauna and contains riparian areas; and

WHEREAS, the Grantee has, pursuant to California Fish and Game Code Section 1802, jurisdiction over the conservation, protection, and management of fish, wildlife, native plants and the habitat necessary for biologically sustainable population of those species; and

DOC #1013193

Grant of Easement #208

Valencia WRP Stage IV Mitigation

WHEREAS, Grantor intends to convey to Grantee the right to preserve and protect the conservation values of the Property in perpetuity; and

WHEREAS, Grantee agrees by accepting this grant to honor the intentions of Grantor stated herein and to conserve, protect, restore, and enhance in perpetuity the conservation values of the Property in accordance with the terms of this Conservation Easement for the benefit of this generation and the generations to come;

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of California and Civil Code Section 815, et seq., Grantor hereby voluntarily grants and conveys to Grantee a conservation easement in perpetuity over the hereinafter set forth ("Easement").

1. Purpose. The purpose of this Easement to assure that the Property will be retained forever in a natural condition and to prevent any use of the Property that will significantly impair or interfere with the conservation values of the Property. Grantor intends that this Easement will confine the use of the Property to such activities, including without limitation, those involving the conservation, protection, restoration, and enhancement of native species and conservation purposes of this Easement.

2. Rights of Grantee. To accomplish the purpose of this Easement, the following rights are conveyed to Grantee by this Easement:

(a) To conserve, protect, restore, and enhance the conservation values of the Property;

(b) To prevent any activity on or use of the Property that is inconsistent with the habitat conservation purposes of this Easement and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use;

(c) All mineral, air and water rights required to protect and to sustain the biological resources of the easement lands; and

(d) All present and future development rights.

3. Prohibited Uses. Any activity on or use of the Property inconsistent with the habitat conservation purposes of this Easement is prohibited. Without limiting the generality of the foregoing,

93 1486854

unseasonal watering, use of herbicides, rodenticides, or weed abatement activities, incompatible fire protection activities and any and all other uses which may adversely affect the preservation purposes of this Easement are prohibited. Grantor shall undertake all reasonable actions to prevent the unlawful entry and trespass by persons whose activities may degrade or harm the biological values of the land. Grantor shall not authorize the use by Grantor, Grantor's agents, or any third party of off-road vehicles, grazing or surface entry for exploration or extraction of minerals.

4. Reserved Rights. Grantor reserves to itself, and to its personal representatives, heirs, successors, and assigns, all rights accruing from its ownership of the Property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not prohibited herein and are not inconsistent with the purpose of this Easement.

5. Grantee's Remedies. If Grantee determines that Grantor is in violation of the terms of this Easement or that a violation is threatened, Grantee shall give written notice to Grantor of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantor fails to cure the violation within fifteen (15) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a fifteen (15) day period, fail to begin curing such violation with the fifteen (15) day period, or fail to continue diligently to cure such violation until finally cured, Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement, to enjoin the violation, ex parte as necessary, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any conservation values protected by this Easement, including damages for the loss of scenic, aesthetic, or environmental values, and to require the restoration of the Property to the condition that existed prior to any such injury. Without limiting Grantor's liability, therefore, Grantee, in its sole discretion, may apply any damages recovered to the cost of undertaking any corrective action on the Property. If Grantee, in its sole discretion, determines that circumstances required immediate action to prevent or mitigate significant damage to the conservation values of the Property, Grantee may pursue its remedies under this paragraph without prior notice to Grantor or without waiting for the period provided for cure to expire. Grantee's rights under this paragraph apply equally in the event of either actual or threatened violations of the terms of this Easement, and Grantor agrees that Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described

in this paragraph shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. Furthermore, the provisions of Civil Code Section 815, et seq., are incorporated herein by this reference and this grant is made subject to all of the rights and remedies set forth therein. If at any time in the future Grantor or any subsequent transferee uses or threatens to use such lands for purposes not in conformance with the stated conservation purposes contained herein, notwithstanding Civil Code 815 et seq., California Attorney General or third-party entities organized for conservation purposes have standing as interested parties in any proceeding affecting this Easement.

5.1 Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantor, including, without limitation, costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation or negligence under the terms of this Easement shall be borne by Grantor.

5.2 Grantee's Discretion. Enforcement of the terms of this Easement shall be at the discretion of Grantee, and any forbearance by Grantee to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantor shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver.

5.3 Acts Beyond Grantor's Control. Nothing contained in this Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Property resulting from causes beyond Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

6. Access. This agreement does not convey a general right of access to the public, however, access for scientific research and interpretive purposes shall be reserved to the Grantee or its designee.

7. Costs of Liabilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property.

7.1 Taxes. Grantor shall pay before delinquency all taxes, assessments, fees, and charges of whatever description levied on or assessed against the Property by competent authority (collectively "taxes"), including

any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request.

7.2 Hold Harmless. Grantor shall hold harmless, indemnify, and defend Grantee and its members, directors, officers, employees, agents, and contractors and the heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from and against all liabilities, penalties, costs, losses, damages, expense, causes of action, claims, demands, or judgments, including without limitation, reasonable attorneys' fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damages to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, unless due to the negligence of any of the Indemnified Parties; (2) the obligations specified in paragraphs 6, 7, and 7.1; and (3) the existence or administration of this Easement.

7.3 Condemnation. The habitat conservation purposes are presumed to be the best and most necessary public use as defined at CCP Section 1240.680 notwithstanding CCP Sections 1240.690 and 1240.700.

8. Assignment. This Easement is transferable, but Grantee may assign its rights and obligations under this Easement only to an organization that is a qualified organization at the time of transfer under Section 170 (h) of the Internal Revenue Code of 1954, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder, and authorized to acquire and hold conservation easements under Civil Code Section 815, et seq. (or any successor provision then applicable). As a condition of such transfer, Grantee shall require that the conservation purposes that this grant is intended to advance, continue to be carried out and notice of such restrictions shall be recorded in the county where the property is located.

9. Subsequent Transfers. Grantor agrees to incorporate the terms of this Easement in any deed or other legal instrument by which they divest themselves of any interest in all or a portion of the Property, including, without limitation, a leasehold interest. Grantor further agrees to give written notice to Grantee of the intent to transfer of any interest at least fifteen (15) days prior to the date of such transfer. Grantee shall have the right to approve all subsequent transfers to insure that all subsequent claimants or transfers have notice of the included restrictions. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.

10. Estoppel Certificates. Upon request by Grantor, Grantee shall within fifteen (15) days execute and deliver to Grantor any document, including estoppel certificate, which certifies Grantor's compliance with

any obligation of Grantor contained in this Easement and otherwise evidences the status of this Easement as may be requested by Grantor.

11. Notices. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor: Chief Engineer and General Manager
County Sanitation District No. 32 of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998

To Grantee: Department of Fish and Game Region V
State of California
Department of Fish and Game
Legal Advisor's Office
1416 Ninth Street, 12th Floor
P.O. Box 944209
Sacramento, California 95814-2090

or to such other address as either party from time to time shall designate by written notice to the other.

12. Recordation. Grantor shall promptly record this instrument in the official records of Los Angeles County, California and immediately notify the Grantee through the mailing of a conformed copy of the recorded easement. Grantee may rerecord it at any time as may be required to preserve its rights in this Easement.

13. General Provisions.

(a) Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of California.

(b) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of this Easement and the policy and purpose Civil Code Section 815, et seq. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purposes of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(d) Severability. If any provision of this Easement, or the application thereof to any person

or circumstances, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(e) Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein.

(f) No Forfeiture. Nothing contained herein will result in a forfeiture of reversion of Grantor's title in any respect.

(g) Successors. The Covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.

(g) Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

(h) Counterparts. The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

93 1486854

IN WITNESS WHEREOF, Grantor and Grantee have entered into this Easement the day and year first above written.

GRANTEE:

DEPARTMENT OF FISH AND GAME REGION V
STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

By: _____
W. John Schmidt
Executive Director
Wildlife Conservation Board

APPROVED AS TO FORM:

By: _____
Eugene V. Toffoli
Legal Advisor
California Department of Fish and Game

GRANTOR:

COUNTY SANITATION DISTRICT NO. 32
OF LOS ANGELES COUNTY

By: _____
Chairperson, Board of Directors

AUG 1 2 1992

ATTEST:

By: _____
Secretary

APPROVED AS TO FORM:

KNAPP, MARSH, JONES & DORAN

By: _____
District Counsel

APPROVED:
DEPARTMENT OF GENERAL SERVICES

By _____
F. WARREN CALDWELL, Senior Real Estate Officer
Office of Real Estate and Design Services

TR93-088 D

93 1486854

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

On July 1, 1993 before me, M. Long-Molson, personally appeared W. John Schmidt, ~~personally known to me~~ proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) and that by his/her/their signature(s) on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature M Long-Molson (Seal)

Commission Expires 7/11/95

93 1486854

ALL-PURPOSE ACKNOWLEDGMENT

STATE OF CALIFORNIA } ss.
COUNTY OF LOS ANGELES }

93 1486854

On August 12, 1992, (DATE) before me, PATRICIA S. GJERDE, NOTARY PUBLIC (NAME, TITLE OF OFFICER - E.G. "JANE DOE, NOTARY PUBLIC")

personally appeared JILL KLAJIC and LONNY DIRKS

[X] personally known to me - OR - [ ] proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

OFFICIAL SEAL
PATRICIA S GJERDE
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My comm. expires APR 4, 1991

Witness my hand and official seal.

Patricia S Gjerde
SIGNATURE OF NOTARY

CAPACITY CLAIMED BY SIGNER

- [ ] INDIVIDUAL(S)
- [ ] CORPORATE OFFICER(S)
- [ ] PARTNER(S)
- [ ] ATTORNEY-IN-FACT
- [ ] TRUSTEE(S)
- [ ] SUBCRIBING WITNESS
- [ ] GUARDIAN/CONSERVATOR
- [X] OTHER Public Agency

OFFICERS: Chairperson

Secretary

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

County Sanitation District No. 32 of Los Angeles County

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to unauthorized document.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Title or Type of Document Conservation Easement Grant - Valencia WRP

Number of Pages 8 Date of Document (8/12/92 executed by Dist) date of execution by State

Signer(s) Other Than Named Above on behalf of State of California Dept. of Fish and Game, Region V

EXHIBIT A

LEGAL DESCRIPTION

Those portions of Lots 6 and 11 as shown on map filed in Book 27, pages 28 and 29 of Record of Surveys in the Office of the Recorder of the County of Los Angeles, described as follows:

Beginning at a point distant North 44°24'30" West 658.96 feet along the northeasterly line of said Lot 11 from the southwesterly line of State (Old Alignment) Highway as shown on said map (now vacated per O.R. 9500-283); thence South 45°35'30" West 320.82 feet to a point hereinafter referred to as "Point A"; thence South 44°24'30" East 324.11 feet; thence South 29°19'19" East 297.50 feet to a point hereinafter referred to as "Point B"; thence continuing South 29°19'19" East 78.34 feet to a point hereinafter referred to as "Point C"; thence continuing South 29°19'19" East 237.53 feet to a point hereinafter referred to as "Point D"; thence continuing South 29°19'19" East 603.62 feet; thence South 74°19'19" East 155.56 feet; thence North 89°23'31" East 121.36 feet to a point hereinafter referred to as "Point E"; thence continuing North 89°23'31" East 354.16 feet to a point hereinafter referred to as "Point F".

Parcel 1:

Beginning at Point A as hereinabove described; thence North 45°35'30" East 84.95 feet; thence South 39°15'49" East 483.78 feet; thence South 23°10'30" East 126.77 feet; thence South 60°40'49" West 67.61 feet; thence North 29°19'19" West 257.50 feet; thence North 44°24'30" West 324.11 feet to the Point of Beginning.

Parcel 2:

Beginning at Point B as hereinabove described; thence North 60°40'47" East 44.26 feet; thence South 23°10'14" East 36.61 feet; thence South 44°24'30" West 41.78 feet; thence North 29°19'19" West 47.27 feet to the Point of Beginning.

Parcel 3:

Beginning at Point C as hereinabove described; thence North 44°24'30" East 38.22 feet; thence South 23°10'15" East 29.43 feet; thence South 29°09'13" East 116.68 feet; thence South 44°24'30" West 34.59 feet; thence North 29°19'19" West 145.00 feet to the Point of Beginning.

Parcel 4:

Beginning at Point D as hereinabove described; thence South 78°09'34" East 70.18 feet; thence South 29°09'11" East 106.15 feet; thence South 40°13'06" East 86.50 feet; thence South 26°57'38" East 287.73 feet; thence South 44°24'30" East 192.66 feet; thence North 74°19'19" West 151.55 feet; thence North 29°19'19" West 603.62 feet to the Point of Beginning.

93 1486854

Parcel 5:

Beginning at Point E as hereinabove described; thence North 44°24'30" East 161.91 feet; thence South 44°24'30" East 155.29 feet; thence South 89°23'31" West 224.32 feet to the Point of Beginning.

Parcel 6:

Beginning at Point F as hereinabove described; thence North 88°13'30" East 23.28 feet; thence South 50°30'12" East 596.71 feet; thence South 05°46'43" East 21.72 feet; thence North 50°30'00" West 630.22 feet to the Point of Beginning.

93 1486854

Valencia Water Reclamation Plant
(Stage IV Expansion Wall)
Mitigation Project
Los Angeles County

17

CERTIFICATE OF ACCEPTANCE

THIS IS TO CERTIFY that the interest in real property conveyed by the deed or grant, dated August 12, 1992, from the County Sanitation District No. 32 of Los Angeles County to the STATE OF CALIFORNIA, is hereby accepted by the undersigned officer on behalf of the State of California, pursuant to authority conferred by authorization of the Fish and Game Commission, Department of Fish and Game, Resources Agency, State of California, adopted on June 18, 1993, and the grantee consents to the recordation thereof by its duly authorized officer.

APPROVED:
DEPARTMENT OF GENERAL SERVICES

By F. Warren Caldwell
F. WARREN CALDWELL, Senior Real Estate Officer
Office of Real Estate and Design Services
TR93-0880

STATE OF CALIFORNIA
Resources Agency
Department of Fish and Game

By W. John Schmidt
W. John Schmidt
Executive Director
Wildlife Conservation Board

Date 7-1-93

93 1486854

Exhibit 3

Email provided thru PRA request, no recent surveys,
no determination of jurisdictional waters.

From: Huffman, Mandy
Sent: Wednesday, April 26, 2023 10:33 AM
To: Ibarra, Martha
Cc: El Jack, Ziad
Subject: RE: VWRP Middle Section Retaining Wall Ground Improvements Project RFP 04063
Attachments: VWRP Middle Section Retaining Wall Ground Improvements Project RFP Question 4 As-Builts.pdf; DMS-3797966.PDF.DRF

Hi Martha,

Please see responses in blue below. The documents mentioned below are attached here (the PDF is for question 4 and DM 3797966 is the Valencia WRP Overall Hydraulics Study for questions 5, 6, and 7). Also, just a reminder to please provide an addendum with the award date updated from 90 to 120 days from the receipt of proposal in item 6 of the Terms and Conditions.

Please let me know if you have any questions or concerns and thank you for your assistance.

Mandy

From: Ibarra, Martha <mibarra@lacsd.org>
Sent: Monday, April 24, 2023 12:06 PM
To: Huffman, Mandy <mandyhuffman@lacsd.org>
Subject: RE: VWRP Middle Section Retaining Wall Ground Improvements Project RFP 04063

Hi Mandy,
The following are the questions received. Please provide a response at your earliest convenience. Also, see response to your question below.

1. Do recent surveys exist for the adjacent segment of the river including avian, fish, amphibian surveys as well as any recent Jurisdictional water reports? If so, could we receive a copy of these documents? There are no recent avian, fish, and amphibian surveys nor jurisdictional water report adjacent to the project site.

2. Does the estimated value for the scope of work ($200,000) include Item 1.16, Permits or is there flexibility? It is anticipated that the work required for permit assistance would push the total budget over the estimated limit. **All** the scope of work listed in the RFP shall be addressed in the technical proposal and reflected in the proposed budget.

4. Can the District provide as-builts of the existing MSE Wall if available? Please see attached as-built plans (1993). **Please also note that the current "Middle Section MSE Wall" was referred to as the "North Wall" in the as-builts.**

5. Are there any existing hydraulic studies of the Santa Clara River that the District can provide? Please see attached Valencia WRP Overall Hydraulics Study.

6. Have any previous scour studies been performed that the District can provide? Please see attached Valencia WRP Overall Hydraulics Study.

7. What are the "Capital Flood Conditions?" Please see attached Valencia WRP Overall Hydraulics Study.

8. Are there any preferred hydraulic software requirements? HEC-RAS, HydroCAD, Other? There are no preferred hydraulic software requirements for the required CEQA analyses.

Martha Ibarra
Senior Buyer | Purchasing & Risk Management Section
562-908-4288 ext. 1423
mibarra@lacsd.org

100 YEARS LOS ANGELES COUNTY SANITATION DISTRICTS A Century of Service

Website | Facebook | Twitter | Instagram | YouTube

From: Huffman, Mandy <mandyhuffman@lacsd.org>
Sent: Monday, April 24, 2023 8:10 AM
To: Ibarra, Martha <mibarra@lacsd.org>
Cc: Tan, Maribeth <BTan@lacsd.org>; El Jack, Ziad <ziadeljack@lacsd.org>
Subject: VWRP Middle Section Retaining Wall Ground Improvements Project RFP 04063

Good morning Martha,

Since Beth is out, I want to check with you if we have received any questions from the proposers for the subject project RFP. The questions were due from the proposers last Thursday 4/20, and the responses will be due this Wednesday 4/26.

Also, the award date for the project was originally set to July 2023, but I have since found out that the SCV board will go dark in July and the next meeting would be September (they're also going dark in August). The award date would be beyond 90 days of the receipt of proposal, as stated in item 6 of the Terms and Conditions (page 23 and 24 of 41 of attached). Even though the terms also said the award date is not guaranteed, can the 90 days be updated to 120 days as a courtesy to the proposers when we send out the responses to questions? Yes, we can create an addendum for this.

Thank you,
Mandy

Mandy Huffman *(she/her/hers)*
Environmental Planner • Wastewater Planning
562-908-4288 ext. 2743
mandyhuffman@lacsd.org

100 YEARS LOS ANGELES COUNTY SANITATION DISTRICTS A Century of Service

Website | Facebook | Twitter | Instagram | YouTube

Exhibit 4

US Fish and Wildlife Letter and Species list for the adjacent Old Road project
in the immediate area of the proposed retaining wall

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958
Email Address: FW8VenturaSection7@FWS.Gov
https://www.fws.gov/Ventura

In Reply Refer To: January 02, 2024
Project Code: 2024-0031581
Project Name: The Old Road Over Santa Clara River and Southern Pacific Transportation Company Bridge Et Al Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

PROJECT SUMMARY

Project Code: 2024-0031581

Project Name: The Old Road Over Santa Clara River and Southern Pacific Transportation Company Bridge Et Al Project

Project Type: Bridge - Replacement

Project Description: Los Angeles County Public Works (LACPW) proposes to implement the proposed action (improve The Old Road over the Santa Clara River bridge), which would increase regional roadway capacity, reduce congestion, and enhance safety in the project area through implementation of various roadway improvements along The Old Road between Henry Mayo Drive and Magic Mountain Parkway. Additionally, the proposed action would include an extension of the County of Los Angeles Multi-purpose Regional River Trail.

The proposed action is being proposed to improve existing traffic operations and accommodate future traffic projections along the roadway. The improvements primarily consist of reconstruction and widening of The Old Road, replacement of two bridges, reconstruction and widening of Rye Canyon Road, and reconstruction and widening of Sky View Lane, including reconfiguration of its intersection with The Old Road. Current traffic demand in the project area meets or exceeds roadway capacity for many arterial roadways. Substantial increases in traffic demand are anticipated over the next few years based on projected growth in the area. As such, the widening of The Old Road to six lanes is critical to the passage of traffic and emergency vehicles in the area.

The Old Road over the Santa Clara River bridge is currently not high enough to allow the volume of water of a LACPW Capital Flood event (defined as a 50-year burned and bulked storm) to pass under it. Replacing the bridge at a higher elevation would provide a minimum freeboard of 2.5 feet to allow a Capital Flood event to pass under it. Additionally, emergency repairs were performed on the superstructure, piers, and abutment seats of the bridge immediately following the 1994 Northridge earthquake. Nonetheless, the bridge is currently classified as structurally deficient per Federal FHWA standards. Replacing the bridge as part of this proposed action would eliminate that classification.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.43139325,-118.59040825435582,14z



Counties: Los Angeles County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 16 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

AMPHIBIANS

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad *Anaxyrus californicus*	Endangered

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/3762

FISHES

NAME	STATUS
Unarmored Threespine Stickleback *Gasterosteus aculeatus williamsoni*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7002

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRUSTACEANS

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni*	Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/8148

Vernal Pool Fairy Shrimp *Branchinecta lynchi*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/498

FLOWERING PLANTS

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened

CRITICAL HABITATS

There are 3 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad *Anaxyrus californicus* https://ecos.fws.gov/ecp/species/3762#crithab	Final
Least Bell's Vireo *Vireo bellii pusillus* https://ecos.fws.gov/ecp/species/5945#crithab	Final
Southwestern Willow Flycatcher *Empidonax traillii extimus* https://ecos.fws.gov/ecp/species/6749#crithab	Final

IPAC USER CONTACT INFORMATION

Agency:	AECOM
Name:	Andrew Fisher
Address:	401 West A Street
Address Line 2:	Suite 1200
City:	San Diego
State:	CA
Zip:	92101
Email	andrew.fisher@aecom.com
Phone:	6199371086

Exhibit 5

Pace Engineering alternatives

LA County Sanitation WRP – Santa Clara River
Stream Bank Revetment Protection Study – Alternative Revetment Comparison

Alt. No.	Alternative	Description	Const. Cost ($)	Dewatering Required	Distance Beyond Conservation Easement	Advantage	Disadvantage
1A	**Soil Cement**	Soil cement is a highly compacted mixture of native soil, Portland Cement, and water which is installed as a large mass compared to other structural revetments. As the cement hydrates, it hardens into a strong, durable, low-permeable material with comprehensive strengths that generally exceed 1,000 psi. The percentage by weight for the cement content can range from 8 to 12% depending on the mechanical grain sizes of the source material and amount of fines / clays. The soil cement is generally mixed in a centralized portable batch plant at the site, which allows for quality control of the design mix and has a water content of about 90% when ready for installation. The soil cement mixture is applied in 6" to 9" lifts and are equal in width to the spreading equipment, generally 10 feet. A roller then compacts the material after each lift is applied.	**$1.577M**	YES	**118 feet**	• Construction with onsite materials • Low maintenance costs and durable • Construction as part of grading operation • Acceptable by County as a flood control facility • Used on other portions of the Santa Clara River so performance as bank protection facility is known • Low unit costs for construction because part of grading operation and low cost materials	• Encroachment into conservation area • May require environmental regulatory permitting which is significant time delay • May require environmental mitigation which adds costs • Batch plant for mixing soil cement required • Dewatering required for excavation below groundwater level and requires dewatering permit from RWQCB • Would require treatment of pump dewatered groundwater unless if dewatering can be sent to treatment plant • Dewatering is a significant cost that cannot be accurately estimated because of the large volume of water to be pumped and the potential treatment
1B	**Soil Cement and Keystone Block**	Combination of two different revetment materials, using soil cement for the below ground portion to the toedown elevation and the keystone block for the above ground portion of the wall. Soil cement used for the lower portion of the wall because it is so large and massive that it can be buried since it does not really require maintenance and functions as a gravity wall because of its mass. [see description for "keystone" and "soil cement"]	**$1.703M**	YES	**94 feet**	• Allows almost vertical wall system • Does not require footing structure • Allows vegetative growth on wall so has the potential to camouflage the wall • Reduces encroachment into conservation easement • Keystone flexible wall system and responds to adjustment in foundation or settlement • Soil cement has low maintenance cost and requirements	• Geogrid may extend horizontally into some of the proposed structures and may have conflict • Encroachment into conservation area • May require environmental regulatory permitting which is significant time delay • May require environmental mitigation which adds costs • Dewatering required for excavation below groundwater level and requires dewatering permit from RWQCB • Would require treatment of pump dewatered groundwater unless if dewatering can be sent to treatment plant • Potential for migration of soil materials through block from hydraulic river forces
2A	**Steel Sheet Pile**	Steel sheet piles or concrete can be used to construct a vertical earthen retaining wall system and have been utilized for flood control systems. The sheet piles consist of standard "Z-pile" section dimensions. The piles selected based on the structural design requirements for the earth retaining systems is very large AZ 28-700 because of soil load. The pile lengths can easily be field adjusted since they can be cut in the field. The sheet	**$6.450M**	NO	NONE	• Vertical wall system • Eliminates construction encroachment into conservation easement • Does not require excavation except for placement of deadman • Eliminates dewatering requirements • All construction from landward side of river bank and reduces regulatory permit impacts	• Requires pile driving equipment and vibration may damage existing facility or environmental disturbance • Extremely large length of piles may exceed standard length and require field fabrication to extend length • Deadman required because of pile length which may interfere with site utilities • Requires cathodic protection to prevent long term corrosion and

LA County Sanitation WRP – Santa Clara River
Stream Bank Revetment Protection Study – Alternative Revetment Comparison

Alt. No.	Alternative	Description	Const. Cost ($)	Dewatering Required	Distance Beyond Conservation Easement	Advantage	Disadvantage
		piles requires two different heights of deadman anchors because of the high wall height and the tip exceed scour depth					ensure life expectancy • Vertical exposed wall is safety hazard that requires fencing
2B	**Steel Sheet Pile and Keystone Block**	Combination of two different revetment materials, using sheet pile for the below ground portion to the toedown elevation and the keystone block for the above ground portion of the wall. Sheet pile used for the below ground portion because it eliminated the need for dewatering excavation. [see description for "keystone" and "soil cement"]	**$6.177M**	NO	NONE	• Vertical wall system • Eliminates construction encroachment into conservation easement • Does not require excavation except for placement of deadman • Eliminates dewatering requirements • All construction from landward side of river bank and reduces regulatory permit impacts • Reduces length of sheet pile with Keystone wall for upper portion • Allows for vegetative growth on the upper wall	• Requires pile driving equipment and vibration may damage existing facility or environmental disturbance • Extremely large length of piles may exceed standard length and require field fabrication to extend length • Deadman required because of pile length which may interfere with site utilities • Requires cathodic protection to prevent long term corrosion and ensure life expectancy • Vertical exposed wall is safety hazard that requires fencing
3A	**Jet Grouting with Soil Cement**	Combination of two different revetment materials, using jet grouting for the below ground portion to the toedown elevation and the soil cement for the above ground portion of the wall. In situ deep soil mixing installed with jet grouting used to install large soil cement columns in-place. A steel probe is jetted into the ground and once it reaches the required toedown depth then high-pressure cement grout is injected into the soil while the probe is spinning in a circular direction to create columns will it is being extracted in an updawrd direction. The resulting soil-cement columns are approximately 4-feet in diameter and will result in a continuous vertical soil cement wall	**$2.043M**	NO	**39 feet**	• Eliminates dewatering because no excavation below groundwater required • Reduces the amount of encroachment into conservation area • Soil cement and jet grouting materials very similar so less discontinuity at the interface • Primarily onsite materials used with mixing of cement • Reduces regulatory permit requirements in streambed area • Extremely durable and low maintenance system because it is so massive	• Slope of soil cement results in permanent encroachment into conservation area • Two type of materials so there is an interface where the material changes and will be the weakest point • Regulatory permits more difficult because of permanent encroachment into conservation area
3B	**Jet Grouting with Keystone Block**	Combination of two different revetment materials, using jet grouting for the below ground portion to the toedown elevation and the Keystone block for the above ground portion of the wall. Jet grouting used for below ground to avoid dewatering and excavation.	**$1.566M**	NO	NONE	• Almost a vertical wall system • Avoids encroachment into the streambed or the conservation area • Eliminates dewatering requirements since no excavation required below groundwater • Low cost materials since primary on-site materials because jet grouting is done "in-situ" •	• Two different revetment materials required so there is a discontinuity or interface which is the weak link • Environmental concerns related to cement migrating into groundwater
4	**Keystone Block**	Precast concrete block wall which anchors the geogrid into the facing block units. Each individual block is interconnected vertically with pins to the adjacent blocks, while the geogrids mats are installed at vertical intervals based on the structural requirements. The fundamental principle of retained earth	**$2.696M**	YES	TEMPORARY / NO PERMANENT 45 feet	• Earth reinforced system so is not dependent on foundation for structural integrity and is flexible to settlement issues • Allows for vegetative growth on the surface of the wall • Almost a vertical wall system so eliminates "permanent" encroachment into conservation area	• Temporary excavation for toedown construction required which will encroach into conservation area and streambed • Dewatering required for excavation below groundwater level and requires dewatering permit from RWQCB • Would require treatment of pump

Alt. No.	Alternative	Description	Const. Cost ($)	Dewatering Required	Distance Beyond Conservation Easement	Advantage	Disadvantage
		system lies in the mobilization of the bearing pressure of the soil. The stability of a soil reinforced retaining systems is derived from the composite action of the horizontal reinforcing elements which extend within the reinforced soil mass behind the slope or wall face. The resulting structure behaves as a unit with the reinforcing elements providing tensile strength to the soil mass. A retained earth wall system can be thought of as a gravity dam supporting itself and the earth behind it.					dewatered groundwater unless if dewatering can be sent to treatment plant • Dewatering is a significant cost that cannot be accurately estimated because of the large volume of water to be pumped and the potential treatment • Keystone is a proprietary construction material which increases costs • Potential for migration of soil materials through block from hydraulic river forces

From: SCOPE
To: Huffman, Mandy
Subject: SCOPE & Friends of the SC River Comments on Sanitation District Retaining Wall DEIR
Date: Tuesday, September 3, 2024 3:39:16 PM
Attachments: DEIR comments.pdf

CAUTION: EXTERNAL EMAIL.

Please find our comment letter attached. Mandy, would you please acknowledge receipt?
Thanks

Lynne Plambeck: Oh, okay, the unmute sign didn't show up. So, I hope that if you are asking people to speak, you'll stick it up there, so we can unmute. Um, First, am I the only speaker this morning?

Maria Rosales-Ramirez: So far. Yes, you're the only one.

Lynne Plambeck:
Yes, because I think it's unreasonable to limit it to 2 minutes, but probably I can get it done in 2 minutes. Our concern, I'm speaking on behalf of Santa Clarita organization for planning and the environment. My name is Lynne Plambeck. 1a

We did send in comments on the Notice of Preparation. While we understand why you might be concerned about your retaining wall, you already did put the retaining wall in the conservation easement. The conservation easement and the significant ecological area are our big concerns, and we would like to see you avoid particularly the State Conservation Area, because that was mitigation for other impacts to the river, and it seems as though what happens is we make mitigation, and then, later on, we get rid of the mitigation. 1b

So, as was stated, there are endangered species in the area, and not just Least Bell's Vireo, but probably the Unarmored Three-Spine Stickleback. 1c

I was interested that you would say that downstream - I don't know why you say hydrology is not an issue. Did you study? I haven't looked to see this, but we were concerned when the flood maps from Los Angeles County were changed, which is, I imagine, what you are basing the need for this on, besides the erosion downstream. And when we brought up that there was not a really good review of those flood maps and the hydrology that they suggested, we lost in court because the court said, there's not a project yet. So, you are the first project using those maps. So, we believe that a full hydrological study should be included in the EIR. I don't know if it is because we haven't had an opportunity to fully review that, I'll take a look and maybe make more additional comments tonight. 1d

The other issue is noise, you know. You can drive the nesting, endangered birds away with noise. So, noise certainly is an issue, and has to be mitigated, and I would suggest that you don't build in the nesting season at all. 1e

But the biggest thing is, we would support an alternative that doesn't impact the conservation easement. 1f

And I don't know why, if you just built the other retaining wall in 2016, suddenly it's not adequate for earthquake standards. You know, it sort of seems like having to redo the 1g

whole thing is kind of a waste of taxpayers' money. I mean, I don't understand why it wasn't earthquake safe in the first part, on the first wall. And I would hope that you will have something in there about why it's not earthquake safe, which we will be looking for.

1g Cont.

So, I guess, we will include the court order in our comments that said that more work needs to be done once there's a project. So anyway, thank you for the opportunity to comment, and probably see you tonight.

1h

PUB 2 - In-Person Public Meeting Bracketed Comments - August 14, 2024, 6 p.m.

Good morning, Lynne Plambeck, and I'm representing Santa Clarita Organization for Planning in the Environment. We have submitted NOP comments and I was here this morning and I appreciate the slide that you made showing between the retaining wall that you improved in 2016. 2a

I'd like to read one portion of your EIR. It says, "Although the Santa Clara river is located adjacent to the project site, the southwestern site boundary not located within an area mapped as a flood hazard area on FEMA's Flood Insurance Rate Map or the LA County DWP Floodway Map (FEMA 2003). As a result, the project site would not be at risk from the 100-year and 500-year flood hazards." That seems to directly contradict the building of the wall. I also had the opportunity to go out and look at the wall and talked to some of the staff before the sanitation district, he said most rain we that we've had probably in 3 decades was in the last year, the water didn't come closer than 50 ft of wall. 2b

So, I would just like to reiterate our concerns that there are several significant, several endangered species in the area. There would be significant biological impacts moving forward with this. One of them that you have particularly not examined is the impact of noise on nesting birds and as you reiterated in the evening there is least Bell's vireo. There are also many other endangered birds such as southwestern willow flycatcher, National reptiles, amphibians in the area; there's the Unarmored threespine stickleback. We can go through the greater detail in the comments. 2c

I'd like another 2 minutes as there's nobody else in the room with me and I'd like to speak again. I just want to reiterate that we understand why you might be concerned about this although we think based on what happened last year that the concern is maybe not as urgent as you say, but also we would support either of the 2 alternatives to reinforce the existing wall and stay out of conservation easement. We think it is really wrong to provide the conservation easement and then later have that conservation easement disappear because you say there is an emergency and then have it go away. That area is really important and should be protected, you agreed to protect it and agreed to set it aside and now becomes a new __??__ and you don't set it aside any more. 2d

We also would like to close with the idea, the question or statement that we cannot understand how this is not a federal document as well. Assuming the Santa Clara river is in the jurisdiction of the Clean Water Act, we are unclear why it's not an EIR/EIS. It seems that it should be and it certainly should require federal review as well because of the endangered species. 2e

This page intentionally left blank

CHAPTER 3
Revisions, Clarifications, and Corrections to the Draft Environmental Impact Report

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15132, this chapter of the Final Environmental Impact Report (EIR) provides revisions, clarifications, additions, and corrections to the Draft EIR that have been made to clarify, correct, or supplement the information provided in that document. These revisions, clarifications, additions, and corrections are the result of the responses to public and agency comments received on the Draft EIR, other information added to the Draft EIR that has become available since its publication for review and comment, or recognition of inadvertent errors or omissions.

3.1 Revisions, Clarification, and Corrections Made In Response to Comments

The revisions herein include, but are not limited to, the following minor modifications to the proposed project.

The revisions, clarifications, additions, and corrections provided in this chapter do not add significant new information or support a conclusion that the Draft EIR, in whole or in part, needs to be recirculated before it may be certified. More specifically, CEQA requires recirculation of a Draft EIR only when "significant new information" is added to a Draft EIR after public notice of the availability of the Draft EIR has occurred (Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5) but before the EIR is certified. CEQA Guidelines Section 15088.5(a) specifically states the following:

> *New information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. 'Significant new information' requiring recirculation includes, for example, a disclosure showing that:*
>
> *(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
>
> *(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted to reduce the impact to a level of insignificance.*
>
> *(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.*

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

CEQA Guidelines Section 15088.5(b) and (e) states the following:

*Recirculation is not required where the new information added to the EIR **merely clarifies or amplifies or makes insignificant modifications in an adequate EIR** … A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record..*

As demonstrated in this Final EIR, including any changes to the environmental analysis in Chapter 3 of the Draft EIR, the changes presented in this chapter do not constitute new significant information warranting recirculation of the Draft EIR as set forth in CEQA Guidelines Section 15088.5. Rather, the Draft EIR is comprehensive, substantive, and prepared in accordance with CEQA. These revisions to the Draft EIR are incorporated herein as part of the Final EIR. Revised language or new language is underlined. Deleted language is indicated by ~~strikethrough~~ text.

Draft EIR Section 2.7, Proposed Project Approvals

Page 2-13 Table 2-3 under Section 2.7, *Proposed Project Approvals*, is revised to state as follows:

TABLE 2-3
REGULATORY PERMITS AND AUTHORIZATIONS

Agency	Type of Approval	Needed for
California Regional Water Quality Control Board, Los Angeles Region	Construction General Permit	Construction-related stormwater discharges
	401 Water Quality Certification	Discharge of dredge or fill material into waters of the State if any
California Department of Fish and Wildlife	Lake or Streambed Alteration Agreement (Section 1602 of Fish and Game Code)	Activity that may substantially modify a river, stream, or lake if any
US Army Corps of Engineers	404 Permit	Discharge of dredge or fill material into waters of the US, if any
Los Angeles County Department of Regional Planning	Significant Ecological Area (SEA) Ordinance permit	Development within SEA
Los Angeles County Department of Public Works	Los Angeles County Flood Control District permit	Work subject to Los Angeles County Flood Control District permit

Draft EIR Section 3.2, Biological Resources

Pages 3.2-30 to 3.2-31 The text under Section 3.2.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

Fish

Flowing water within the Santa Clara River (when present) provides suitable habitat for the Arroyo chub, Santa Ana sucker, and unarmored threespine stickleback. All three species have been documented within the Santa Clara River as recently as 2007 for the Santa Ana sucker and unarmored threespine stickleback, and 2011 for the Arroyo chub

(CDFW 2024a). In addition, on February 13, 2025, the California Fish and Game Commission adopted findings adding the Southern California steelhead to the list of endangered species under the California Endangered Species Act (CESA; Fish and Game Code, Section 2050 et seq. The proposed project would include upgrades to Discharge Outfalls 001 and 002, resulting in disturbance to the immediate vicinity, as depicted in Figure 3.2-7. However, the proposed project would install a bypass structure during upgrades to Outfall 001 in order to ensure that flow is not disrupted during construction activities. Outflow from the VWRP would be re-routed immediately downstream (~50 feet) of Outfall 001, and flow along Drainage 1-Outfall 001 to the Santa Clara River would remain the same. Additionally, conditions immediately downstream of Outfall 001 are not consistent with natural conditions found along the Santa Clara River and do not provide suitable habitat for special-status fish (i.e., increased flow velocity). The proposed addition of riprap along the southern portion of the proposed project area would take place during the dry season (May-September) and would not encroach into ~~the~~ flowing or ponded areas associated with ~~channel of~~ the Santa Clara River; and therefore, ~~and thus~~ would not remove suitable fish habitat. ~~;~~ If flows within the Santa Clara River increase and inundate the project site during construction, activities will cease until water levels recede, and construction activities may recommence. ~~however, all three~~ Fish species have the potential to occur within the river ~~in this area~~, within close proximity to the project site~~. T~~ and the installation of riprap could result in indirect water quality impacts to special-status fish. Application of standard water quality best management practices, such as the installation of erosion control measures (e.g., silt fencing and straw wattles) and secondary containment, and parking/fueling of equipment at least 100 feet away from flowing water would avoid and minimize these potential water quality impacts to a less-than-significant level.

Page 3.2-32 The text under Section 3.2.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

BIO-1: Rare Plants. Preconstruction focused special-status plant surveys shall be conducted within areas containing suitable habitat throughout the project site during the appropriate blooming periods for Catalina mariposa lily, chaparral ragwort, Hubby's phacelia, Nuttall's scrub oak, Palmer's grappling hook, Peirson's morning glory, Plummer's mariposa lily, slender mariposa lily and southern California black walnut. ~~Throughout the project site.~~ Plant surveys shall be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW March 20, 2018). If special-status plants are found to be present within or near the project impact area, a suitable area around the plants (as determined by a qualified biologist) shall be avoided and demarcated with orange-mesh construction fencing to alert construction workers and to avoid impacts to special-status plant species.

If avoidance is not feasible, SCVSD shall coordinate with CDFW to determine a replacement ratio (i.e., 1:1 or greater if required by CDFW) and to determine whether take authorization is required prior to construction. SCVSD shall prepare and implement a restoration/relocation plan. ~~If restoration, translocation and/or seed collection is used to mitigate impacts to special-status plants, a~~A restoration/translocation plan shall be developed for CDFW approval prior to any disturbance to special-status plants and shall include, but shall not be limited to, the following information: identification of documented populations of the specie(s) within the project site, estimated impacts to the population on-site, proposed restoration methods (e.g., translocation, seed collection, etc.), expected

timeline, success criteria, performance standards, funding source(s) and responsible parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program.

Page 3.2-33 The text under Section 3.2.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

BIO-5: Special-Status Bird Surveys. Prior to the start of construction, focused surveys for the three listed bird species with potential to occur within the project area (least Bell's vireo, southwestern willow flycatcher and/or yellow-billed cuckoo) shall be conducted to determine presence/absence of the species within the study area. These shall be conducted in accordance with the Least Bell's Vireo Survey Guidelines,[1] A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher[2] and A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo.[3] If surveys verify absence of all species, no further action is required.

If surveys determine that these species are present within 500 feet of the project site, and avoidance of the nesting bird season (Mitigation Measure BIO-3) is not feasible, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no more than 10 decibels (dBA) above pre-construction ambient noise levels) at an active nest or occupied habitat. If construction must take place within 500 feet of an active nest of either the least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo, a qualified biologist will monitor noise levels to ensure that they do not exceed 10 dBA above pre-construction ambient noise levels. If this is not feasible, installation of temporary construction noise barriers may be installed to reduce noise levels to an acceptable level. If the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded~~.~~, or as determined appropriate in coordination with CDFW. Avoidance measures requiring installation (sound barriers) shall be in place prior to March 15 and shall remain until September 15 of each year of project construction.

Pages 3.2-35 to 3.2-36 The text under Section 3.2.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

BIO-10: Crotch's Bumble Bee. A qualified entomologist, approved by CDFW, shall conduct a focused survey in suitable habitat (e.g., Fremont cottonwood forest, blue elderberry woodland, California rose briars, and non-native grasses and forbs), in accordance with the ~~California Bumble Bee Atlas Point Surveys~~[6] *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* protocol to determine presence/absence of the species. Surveys shall be conducted within one year prior to vegetation removal activities and a minimum of three surveys shall be conducted

1 U.S. Fish and Wildlife Service (USFWS). 2001. *Least Bell's Vireo Survey Guidelines*. January 19, 2001.

2 United States Geological Survey (USGS). 2010. *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher.*

3 USGS. 2016. *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo.* May 2016.

during peak flying season (April-August), when the species is most likely to be detected above ground. If surveys verify absence, no further action is required.

If surveys determine that Crotch's bumble bees are currently utilizing the study area or~~,~~ within 500 feet of the project site, project oversight and construction staff shall coordinate with CDFW staff to develop appropriate avoidance and minimization measures and determine if take authorization will be required. Appropriate take authorization shall be obtained prior to project initiation ~~a qualified entomologist shall identify the location of all nests within and adjacent to the project site. A 15-meter no disturbance buffer zone shall be established around any identified nest(s) to reduce the risk of disturbance or incidental take. A qualified entomologist shall expand the buffer zone as necessary to prevent disturbance or take. If impacts to a nest from proposed construction is unavoidable, consultation with the CDFW shall occur to determine if take authorization may be necessary. If take authorization is granted, the qualified entomologist will relocate the nest to a suitable location, through coordination with the CDFW. Various considerations shall be made to further reduce impacts during the relocation, such as 1) delaying relocation until the queen has the opportunity to emerge and 2) relocating within the home range of the nest.~~

If Crotch's bumble bee is determined present, portions of the project site impacted by project activities shall be revegetated, in coordination with CDFW, to mitigate impacts to nectaring/foraging sources for the species. The revegetation effort shall include local native nectar resources that can be expected to bloom at any given time during the Colony Active Season (February 1 - October 31). A diverse assemblage of herbs, forbs, vines, and sub-shrubs, as well as annual and perennial plant species, shall be used. Nectar- and pollen-producing plants that may be used by the Crotch's bumble bee include, but are not limited to, the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Phacelia*, and *Salvia* in the families Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae, and Boraginaceae. Nectar resources shall be weed and pest free (e.g., Argentine ants), pathogen-free, and have not been treated with pesticides.

Page 3.2-35 The footnote in Section 3.2 is revised as follows:

~~[6] California Bumble Bee Atlas. 2023. Point Surveys. https://www.cabumblebeeatlas.org/point-surveys.html#:~:text=Note%20the%20start%20time%20of,that%20plant%20with%20a%20photo..~~

Draft EIR Section 3.7, Hydrology and Water Quality

Page 3.7-2 The text under Section 3.7.1, *Environmental Setting*, is revised to state as follows:

Flooding

Flooding is inundation of normally dry land as a result of a rise in surface water levels or rapid accumulation of stormwater runoff during storm events. The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping (FIRM) program, designates areas where urban flooding could occur during 100-year and 500-year flood events. A 100-year flood event has a one-percent probability of occurring in a single year. 100-year floods can occur in consecutive years or periodically throughout a decade.

A 500-year flood event has a 0.2 percent probability of occurring in a single year. A Capital Flood, or 50-year flood event, has a two-percent (2%) probability of occurring in a single year. Although the Santa Clara River is located adjacent to the project site, the ~~southwestern site boundary~~VWRP is not located within an area mapped as a 100- and 500-year flood hazard area on FEMA's Flood Insurance Rate Map ~~or the LA County DPW Floodway Map~~ (FEMA 2021~~3~~). However, the Los Angeles County 50-year Flood Zone as mapped in 2022 does encroach onto the VWRP facility at the southwestern site boundary and the proposed project area as shown on **Figure Hydro-3**. As a result, the ~~project site~~VWRP would not be at risk from 100-year and 500-year flood hazards, but would be within the County's 50-year flood zone.

Page 3.7-11 The text under Section 3.7.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

Drainage Patterns

Impact 3.7-3: The proposed project could 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.

Underground Retaining Wall Improvement and Outfall Structures

Construction and Operation

The retaining wall improvements are designed to be and would occur entirely underground, and the upgraded outfall structures would occupy approximately the same footprint they do now. Therefore, there would be no change to drainage patterns in the project area. The LA County DPW floodway map identifies potential severe flood hazard areas associated with the County's Capital Flood (LA County DPW 2024). On June 28, 2022, the LA County Board of Supervisors adopted an ordinance for new floodway maps, including for the main stem of the Santa Clara River (LA County DPW 2024). The LA County DPW Floodway Maps reflect updated hydrologic and topographic data, modern hydraulic engineering modeling, and physical changes that have already taken place in this reach of the Santa Clara River over the years, and thus the 2024 DPW Floodway Map more accurately assesses the areas of potential flood hazard associated with the Capital Flood along the Santa Clara River (LA County DPW 2024). As shown in Figure Hydro-3, the LA County DPW 50-year flood zone encroaches onto the existing VWRP at the southwestern site boundary and the proposed project area. The proposed project would be designed to reinforce the exterior VWRP retaining wall to prevent damage during a County Capital Flood event, without modifying the floodplain extent. Since the retaining wall improvements would not substantially alter the floodplain from its existing condition, the proposed project would not substantially alter the existing drainage pattern or floodway course in the surrounding area of the project or impede or redirect flood flows. In addition, SCVSD has and will continue to comply with local, state, and federal flood control regulations and to coordinate with LA County DPW and FEMA, as needed, to ensure compliance with existing regulatory requirements. Therefore, relative to changes to drainage patterns on the site or area or the alteration of the course of a stream or river

through the addition of impervious surfaces, project impacts ~~there~~ would be less than significant ~~no impact~~.

Mitigation Measures

None Required

Significance Determination

~~No~~ Less than Significant Impact

Page 3.7-14 The text under Section 3.7.4, *References*, is revised to state as follows:

Los Angeles County Department of Public Works (LACDPW). 2024. The Los Angeles County Flood Zone Determination Website. https://dpw.lacounty.gov/floodzone/moreinfo.cfm, accessed on August 19, 2024.

Draft EIR Section 3.8, Noise

Page 3.8-19 The text under Section 3.8.4, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

Off-Site Construction

On a maximum day, project construction would result in 20 worker trips, 8 ~~4~~ vendor trips, and 10~~8~~ haul truck trips per day.

3.1.1 Conclusion: Revisions, Clarifications, and Corrections Made in Response to Comments

The revisions outlined in this Final EIR Section 3.1 do not modify the conclusions included in the Draft EIR and do not constitute new significant information warranting recirculation of the Draft EIR as set forth in CEQA Guidelines Section 15088.5.

3.2 Lead Agency Initiated Changes

Draft EIR Executive Summary

Page ES-2 The text under Section ES.3, *Project Description*, is revised to state as follows:

The VWRP is one of two water reclamation plants owned by the SCVSD and serves the City of Santa Clarita and a portion of unincorporated Los Angeles County. Continuous operations of the VWRP are critical for the ability of the SCVSD to provide essential service to its customers. Recent studies identified that scour of the Santa Clara River under a Capital Flood may erode materials to the point that facilities of the VWRP may be damaged or destroyed. The proposed project would include reinforcement of the existing middle section retaining wall along the southwestern side of the VWRP, upgrades to two existing outfall structures, and the addition of riprap along the southern portion of the VWRP wall. A maintenance area would be cleared around the existing VWRP outfall

structures for long-term maintenance of the outfall structures. The proposed project would impact approximately 3.26 acres just outside of the VWRP. The proposed project would not require any road closures during construction and no new permanent lighting would be required for the proposed new structures.

Draft EIR Section 3.7, Hydrology and Water Quality

In response to comments received expressing concern regarding hydrology impacts, **Figure Hydro-1** has been added to the Final EIR to show the cross sections of the project area showing that the elevation of the adjacent floodplain would not change from existing conditions except for the small area of riprap placement related to the project. **Figure Hydro-2** has been added to show the most current FEMA flood maps in relation to the project site and the VWRP in general. **Figure Hydro-3** has been added to the Final EIR to correctly show the most current LA County DPW 50-year Flood Zone Determination in relation to the project site and the VWRP in general.

Additionally, a 2024 technical report prepared by Geosyntec Consultants Inc. summarizing the hydraulics and scour protection analyses conducted for the VWRP has been included in the Final EIR as **Appendix B**.

Draft EIR Section 3.1, Air Quality

The text in Section 3.1, *Air Quality*, of the Draft EIR has been revised to provide clarification and identify corrections on air quality modeling as discussed and shown below. Since air emission calculations for the cement batch plant were conservatively modelled and likely overestimated, the text under Section 3.1.3 was revised to clarify the overestimation and note that the proposed project would result in less impacts.

Page 3.1-23 The text under Section 3.1.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

Earthwork would require a net import of approximately 6,000 cy of riprap and 113 cy of granular bedding material for construction of the underground retaining wall and outfalls. The proposed project would excavate to a maximum depth of approximately 70 feet below grade and approximately four feet wide for installation of a secant pile wall (SPW) and approximately 40 to 70 feet deep and 8-foot diameter individual columns for Cement Deep Soil Mixing (CDSM). This would result in approximately 19,000 cy of soil spoils due to CDSM activities to be exported offsite. The proposed project would include import of 4,500 cy of concrete for the secant piles and 5,000 tons of concrete for the CDSM piles. Cement would be mixed on-site at a concrete batch plant. Export materials will be hauled to the closest landfill. For purposes of this analysis, conservative emissions estimates were modelled using U.S. EPA AP-42, *Compilation of Air Emissions Factors from Stationary Sources* (USEPA 2023) and were based on an import of 27,000 cy of concrete for the CDSM piles and 3,355 cy of concrete for the secant piles, for a total of 30,355 cy of concrete. Conservatively, the amount of material analyzed would be the greatest amount required by the project, any lesser amount of material would result in an impact less than reported herein. Refer to Appendix C for detailed calculations.

Since the preparation and completion of the Draft EIR on July 17, 2024, revisions were made to the construction information and construction equipment requirements for the proposed project. As shown

below, revisions to the modeling calculations have been updated. Tables 3.1-7 and 3.1-8 of the Draft EIR, were updated to include the most up–to-date construction and construction equipment modeling calculations. A footnote was added to Table 3.1-7 and 3.1-8 to clarify the inclusion of Concrete Batch Plant emissions within reported PM10 and PM2.5 emissions. To provide an analysis that captures the scope of the proposed project, the most conservative estimates of concrete amounts would be the greatest amount required by the proposed project; if the proposed project were to use any lesser amount of material, impacts would be less than reported. Additionally, the attached **Appendix C**, Air Quality Emissions and Calculations, replaces Appendix B included in the Draft EIR and **Appendix D**, Noise Data and Calculations, replaces Appendix F included in the Draft EIR.

Page 3.1-27 Table 3.1-7 under Section 3.1.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

TABLE 3.1-7
ESTIMATED MAXIMUM UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY)

Phase and Year	VOC	NO_X	CO	SO_2	PM10[a]	PM2.5[a]
Maximum Daily Emissions per Phase						
Demolition – 2026	2.64 ~~2.14~~	23.46 ~~19.21~~	23.47 ~~17.62~~	0.04 ~~0.03~~	1.22 ~~0.97~~	0.92 ~~0.77~~
Grading/Excavation – 2026	2.06	15.43	19.15	0.05	1.14	0.65
Underground Retaining Wall/Outfall Structures – 2026	1.72	15.23	21.04	0.04	2.19	0.80
Underground Retaining Wall/Outfall Structures – 2027	1.69	14.48	20.94	0.04	2.15	0.76
Maximum Daily Emissions	2.64 ~~2.14~~	23.46 ~~19.21~~	23.47 ~~20.94~~	0.05 ~~0.04~~	2.19	0.92 ~~0.80~~
SCAQMD Numeric Indicators	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

a. Emissions include fugitive dust control measures consistent with SCAQMD Rule 403. PM emissions include additional daily emissions of onsite Concrete Batch Plants (1.0 pound/day for PM10; 0.15 pound/day for PM2.5).

SOURCE: ESA, VWRP Middle Section Retaining Wall Ground Improvement Project Air Quality Memorandum, February 2024.

Page 3.1-28 Table 3.1-8 under Section 3.1.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

TABLE 3.1-8
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY)

Phase	NO_X	CO	PM10[a]	PM2.5[a]
Demolition – 2026	23.20 ~~19.00~~	22.30 ~~17.00~~	0.92 ~~0.80~~	0.85 ~~0.73~~
Grading/Excavation – 2026	14.70 ~~10.50~~	17.60 ~~13.50~~	0.72 ~~0.55~~	0.54 ~~0.39~~
Underground Retaining Wall/Outfall – 2026	14.00	19.30	1.67	0.66
Underground Retaining Wall/Outfall – 2027	13.30	19.30	1.63	0.62
Maximum Localized (On-Site) Emissions	23.20 ~~19.00~~	22.30 ~~19.30~~	1.67	0.85 ~~0.73~~
SCAQMD Screening Numeric Indicator[b]	**273**	**8,174**	**131**	**74**
Exceed Screening Numeric Indicator?	No	No	No	No

NOTES:

Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

a. Emissions include fugitive dust control measures consistent with SCAQMD Rule 403. PM emissions include additional daily emissions of onsite Concrete Batch Plants (1.0 lb/day for PM10; 0.15 lb/day for PM2.5).
b. The SCAQMD LSTs are based on Source Receptor Area 13 (Santa Clarita) for a 1-acre site with sensitive receptors conservatively assumed to be located 500 meters from the nearest sensitive receptor.

SOURCE: ESA, VWRP Middle Section Retaining Wall Ground Improvement Project Air Quality Memorandum, February 2024.

Page 3.1-34 The text under Section 3.1.4, *References*, is revised to state as follows:

USEPA. 2023j. AP-42, Compilation of Air Pollutant Emissions Factors from Stationary Sources, last updated May, 2023. https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors-stationary-sources. Accessed February 2024.

Draft EIR Section 3.5, Greenhouse Gas Emissions

Since the preparation and completion of the Draft EIR on July 17, 2024, the fleet mix of construction vehicles for the proposed project was modified by the SCVSD due to additional information regarding proposed project construction. As such, SCVSD has made the following changes below to the text to account for the modifications to the construction vehicle fleet mix. Although greenhouse gas emissions did increase for the construction of this proposed project, the pre-amortization greenhouse gas emissions total of 1,306 MTCO2e would still be less than the SCAQMD screening threshold of 3,000 $MTCO_2e$. Additionally, revised air quality and greenhouse gas emissions calculations were included as Appendix C to this Final EIR. These changes constitute a minor change to the information provided in the Draft EIR, do not change the conclusions included in the Draft EIR, and would not constitute new significant information of a substantial increase in the severity of an environmental impact.

Page 3.5-22 Table 3.5-3 under Section 3.5.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

TABLE 3.5-3
ESTIMATED CONSTRUCTION GREENHOUSE GAS EMISSIONS

Construction Year	CO_2e (Metric Tons per Year)[a,b]
2026	709 ~~618~~
2027	597
Total Emissions	**1,306 ~~1,215~~**
Amortized Emissions (30 years)	**44**

a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B ~~AQ~~.
b. CO_2e emissions are calculated using the global warming potential values from the Intergovernmental Panel on Climate Change Fourth Assessment Report.
c. Consistent with Senate Bill 1020, the proposed general plan buildout would use 100 percent renewable electricity by 2045. In addition, the general plan buildout would not include any natural gas infrastructure.
SOURCE: ESA, 2024

Page 3.5-23 Table 3.5-4 under Section 3.5.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

TABLE 3.5-4
UNMITIGATED ANNUAL GREENHOUSE GAS EMISSIONS

Project Emissions Sources	CO_2e (Metric Tons per Year)[a,b]
Operational Emissions (same as existing)	0
Construction Emissions (amortized over 30 years)	44 ~~41~~
Annual Emissions	**44 ~~41~~**
SCAQMD Screening Threshold	**3,000**
Exceed Threshold?	**No**

a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B ~~AQ~~.
b. CO_2e emissions are calculated using the global warming potential values from the Intergovernmental Panel on Climate Change Fourth Assessment Report.
c. Consistent with Senate Bill 1020, the proposed general plan buildout would use 100 percent renewable electricity by 2045. In addition, the general plan buildout would not include any natural gas infrastructure.
SOURCE: ESA, 2024

The following changes were made to correct the appendix call out for the Air Quality Emissions and Calculation Appendix included in the Draft EIR.

Page 3.5-21 The text under Section 3.5.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

A complete listing of the construction equipment by phase and construction phase duration assumptions used in this analysis is included within the CalEEMod printout sheets in Appendix B~~AQ~~ of this Draft EIR.

Page 3.5-22 The text under Section 3.5.3, *Impact Analysis and Mitigation Measures*, is revised to state as follows:

A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Appendix B~~AQ~~ of this Draft EIR.

3.2.1 Conclusion: Lead Agency Initiated Changes

The revisions outlined in this Final EIR Section 3.2 do not modify the conclusions stated in the Draft EIR and do not constitute new significant information warranting recirculation of the Draft EIR as set forth in CEQA Guidelines Section 15088.5.

CHAPTER 4
Mitigation Monitoring and Reporting Program

4.1 Introduction

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to Public Resources Code Section 21081.6, which requires a Lead Agency to adopt a "reporting or monitoring program for changes to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." Additionally, Section 15097(a) of the California Environmental Quality Act (CEQA) Guidelines requires that a public agency adopt a program for monitoring or reporting mitigation measures and project revisions, which it has required to mitigate or avoid significant environmental effects. This MMRP has been prepared in compliance with the requirements of CEQA, Public Resources Code Section 21081.6, and Section 15097 of the State CEQA Guidelines.

The Santa Clarita Valley Sanitation District (SCVSD or District) of Los Angeles County is the Lead Agency for the Valencia Water Reclamation Plant (VWRP) Middle Section Retaining Wall Ground Improvement Project (proposed project) and, therefore, is responsible for administering and implementing the MMRP. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation. However, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the MMRP.

This MMRP summarizes potentially significant impacts and mitigation commitments identified in the EIR. **Table 4-1** provides the MMRP, which includes all mitigation measures, monitoring process, monitoring timing, and responsible agency/entity for implementation. Issue areas are organized in the same order as in the EIR. The columns in the table provide the following information:

- **Mitigation Measures:** This column lists the action(s) that will be taken to reduce, avoid, minimize, rectify, or compensate for the impact.
- **Monitoring Process:** This column outlines the appropriate steps to implement and verify compliance with the mitigation measures.
- **Time Frame for Implementation:** This column indicates the general schedule for conducting each monitoring task, either prior to reconstruction, during construction, and/or after construction.
- **Responsible Agency/Entity:** This column lists the agency/entity responsible for ensuring implementation of the mitigation measure.

TABLE 4-1
MITIGATION MONITORING AND REPORTING PROGRAM – VWRP MIDDLE SECTION RETAINING WALL GROUND IMPROVEMENT PROJECT

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
Biological Resources				
BIO-1: Rare Plants. Preconstruction focused special-status plant surveys shall be conducted within areas containing suitable habitat throughout the project site during the appropriate blooming periods for Catalina mariposa lily, chaparral ragwort, Hubby's phacelia, Nuttall's scrub oak, Palmer's grappling hook, Peirson's morning glory, Plummer's mariposa lily, slender mariposa lily and southern California black walnut. Plant surveys shall be conducted in accordance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW March 20, 2018). If special-status plants are found to be present within or near the project impact area, a suitable area around the plants (as determined by a qualified biologist) shall be avoided and demarcated with orange-mesh construction fencing to alert construction workers and to avoid impacts to special-status plant species. If avoidance is not feasible, SCVSD shall coordinate with CDFW to determine a replacement ratio (i.e., 1:1 or greater if required by CDFW) and to determine whether take authorization is required prior to construction. SCVSD shall prepare and implement a restoration/relocation plan. A restoration/translocation plan shall be developed for CDFW approval prior to any disturbance to special-status plants and shall include, but shall not be limited to, the following information: identification of documented populations of the specie(s) within the project site, estimated impacts to the population on-site, proposed restoration methods (e.g., translocation, seed collection, etc.), expected timeline, success criteria, performance standards, funding source(s) and responsible parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program.	• Include mitigation measure in design specifications and construction contractor specifications • Conduct preconstruction plant surveys • If special-status plants are present within or near the project impact area, avoid and demarcate suitable area around the plants • If avoidance is not feasible, coordinate with CDFW and prepare a restoration/translocation plan	• Prior to construction • Prior to construction • Prior to construction • Prior to construction	SCVSD Qualified Biologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
BIO-2: General Minimization and Avoidance Measures. The following measures shall be implemented to avoid and minimize impacts to sensitive wildlife during construction activities. • Prior to commencement of the project, a Workers Environmental Awareness Program (WEAP) shall be prepared and presented to construction crews. The WEAP shall provide an overview of all sensitive resources that occur or may occur within the study area, and the appropriate steps that shall be taken, shall such resources be observed during construction activities. The WEAP shall concentrate on the proper identification of sensitive resources while in the field, suggested strategies in avoiding impact to such resources, and the proper reporting methods for field crews in the event that such resources are observed during construction activities. • SCVSD construction personnel shall cover all excavations at the end of each workday to prevent the entrapment of wildlife. Alternatively, a ramp no greater than 2:1 slope shall be constructed in each excavation to allow trapped wildlife to escape. Prior to the commencement of construction each day, SCVSD construction personnel shall check excavations each morning to ensure that wildlife has not become trapped in any excavation overnight. • Prior to the commencement of construction activities, SCVSD construction personnel shall check under stationary equipment to ensure no wildlife species are present. • All project-related trash shall be collected daily and taken offsite for proper disposal.	• Include mitigation measure in design specifications and construction contractor specifications • Prepare and present a WEAP prior to construction • Cover all excavations at the end of each workday • Check excavations each morning for wildlife • Check under stationary equipment prior to construction • Collect all project-related trash daily for proper disposal	• Prior to construction • Prior to construction • During construction • During construction • During construction • During construction	SCVSD	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
BIO-3: Nesting Birds and Raptors. To avoid impacts to nesting birds and raptors, work activities within 500 feet of suitable nesting habitat shall be timed to avoid the season when nests may be active (i.e., January 15 to September 15). If work activities occur within the nesting season, a qualified biologist shall conduct a focused survey within 30 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of the development footprint. If an active nest is found, the nest shall be avoided and a suitable buffer zone shall be delineated in the field where no impacts shall occur until the chicks have fledged the nest, or has otherwise been deemed inactive by a qualified biologist. Construction buffers shall be 300 feet for passerines or up to 500 feet for raptors; however, avoidance buffers may be reduced at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.	• Include mitigation measure in design specifications and construction contractor specifications • Time work activities to avoid active nesting season • Conduct a focused survey if work activities occur within the nesting season • If an active nest is found, the nest shall be avoided and a suitable buffer zone shall be delineated in the field	• Prior to construction • Prior to construction • Prior to construction • During construction	SCVSD Qualified Biologist	
BIO-4: Nighttime Construction. To avoid disrupting the movement of wildlife within the Santa Clara River, construction activities shall be restricted to daylight hours (7:00 am-7:00 pm) whenever feasible. When construction must take place during nighttime hours (i.e., outfall bypass), all light sources shall be shielded and directed away from the river corridor, to minimize impacts to wildlife foraging, breeding and/or movement.	• Include mitigation measure in design specifications and construction contractor specifications • Restrict construction activities to daylight hours • Shield and direct away light sources during nighttime hours	• Prior to construction • During construction • During construction	SCVSD	
BIO-5: Special-Status Bird Surveys. Prior to the start of construction, focused surveys for the three listed bird species with potential to occur within the project area (least Bell's vireo, southwestern willow flycatcher and/or yellow-billed cuckoo) shall be conducted to determine presence/absence of the species within the study area. These shall be conducted in accordance with the Least Bell's Vireo Survey Guidelines, A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher and A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. If surveys verify absence of all species, no further action is required. If surveys determine that these species are present within 500 feet of the project site, and avoidance of the nesting bird season (Mitigation Measure BIO-3) is not feasible, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no	• Include mitigation measure in design specifications and construction contractor specifications • Conduct focused special-status bird surveys prior to construction • If surveys determine that these species are present within 500 feet of the project site, and avoidance of the nesting bird season is not feasible, comply with appropriate measures	• Prior to construction • Prior to construction • During construction	SCVSD Qualified Biologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
more than 10 decibels (dBA) above pre-construction ambient noise levels) at an active nest or occupied habitat. If construction must take place within 500 feet of an active nest of either the least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo, a qualified biologist will monitor noise levels to ensure that they do not exceed 10 dBA above pre-construction ambient noise levels. If this is not feasible, installation of temporary construction noise barriers may be installed to reduce noise levels to an acceptable level. If the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded, or as determined appropriate in coordination with CDFW. Avoidance measures requiring installation (sound barriers) shall be in place prior to March 15 and shall remain until September 15 of each year of project construction.				
BIO-6: Habitat Replacement. Impacts to aquatic resources, critical habitat and habitat occupied by a federally-listed species, CDFW sensitive natural communities, or areas covered by a conservation easement shall be replaced at a minimum replacement ratio of 1:1 for temporary impacts (excluding developed land cover) and at the following ratios for permanent impacts: • Aquatic resources, critical habitat and habitat occupied by a federal-listed species, or CDFW sensitive natural communities – 4:1 ratio • CDFW conservation easement – Disturbed habitat, Giant reed marshes, non-native annual grasses and forbs and tamarisk – 2:1 ratio – All other natural communities and land cover types (excluding developed land cover) – 4:1 ratio • SEA categories 1 and 3: – SEA Category 1 – 4:1 ratio – SEA Category 3– 2:1 ratio Mitigation options for habitat replacement may include the creation or restoration of habitat on- or off-site, or through the purchase of mitigation credits at a suitable mitigation bank as follows: • **On- or off-site restoration.** A restoration plan shall be developed to address habitat impacts that, at a minimum, includes the following information:	• Follow outlined habitat replacement measures and ratios.	• Post construction	SCVSD	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
estimated impacts to habitat, proposed restoration methods (e.g., hydroseeding, container planting, etc.), expected timeline, success criteria/performance standards, funding source(s) and responsible parties, maintenance methods and schedule, irrigation methods and schedule, adaptive management strategies, and a minimum 5-year monitoring and reporting program. The proposed mitigation strategy for the creation/restoration of occupied federally-listed species habitat shall be developed in coordination with and at the approval of the USFWS and/or CDFW. • **Mitigation Bank.** Mitigation credits shall be purchased at a mitigation bank suitable for replacement of the impacted habitat type, and will be determined in consultation with the USFWS and/or CDFW.				
BIO-7: Bats. Construction activities shall take place outside of the bat roosting season (March 01-August 31 to avoid impacts to roosting and/or breeding bats where feasible. If this is not feasible, a pre-construction survey shall be completed within suitable habitat by a qualified biologist to identify active roosts within 500-ft of construction activities: • If a day roost (non-breeding) is present, prior to the removal of any trees supporting a day roost, the biologist will ensure that all roosting individuals disperse from the location prior to removal of the vegetation to prevent direct mortality. • If a maternity roost (lactating females and dependent young) is observed, the biologist will determine whether construction activities are likely to disturb breeding activities. If it is determined that the vegetation supporting the roost must be removed or activities are expected to disturb the breeding activities, a Bat Exclusion Plan shall be prepared for CDFW approval. At a minimum, the plan shall include avoidance and minimization measures (if deemed necessary, with noise reduction measures), to reduce potential impacts to breeding bats during construction activities and prescribed methods to evict bats safely and humanely from the roost to minimize any potential impacts.	• Include mitigation measure in design specifications and construction contractor specifications • If the bat roosting season cannot be avoided, conduct a pre-construction survey to identify active roosts within 500-ft of construction activities • If active roosts are observed, follow appropriate measures.	• Prior to construction • Prior to construction • Prior to construction/ During construction	SCVSD Qualified Biologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
BIO-8: Non-listed, Special-Status Mammals and Herpetofauna. A qualified biologist shall conduct a pre-construction survey of suitable habitat within 300 feet of proposed construction, for the American badger, coastal whiptail, coast horned lizard, San Diegan legless lizard and two-striped garter snake. If an individual of the aforementioned species is observed within the project site, a qualified biologist shall relocate the species to a location at least 300 feet from any potential impact areas. If an active nest/den is encountered incidentally during the clearance survey, it shall be replaced and left undisturbed until the eggs have hatched (e.g., coastal western whiptail, coast horned lizard, etc.) and/or live young have matured enough (i.e., American badger) for the biologist to deem it inactive and/or to relocate any individuals outside of disturbance areas.	• Include mitigation measure in design specifications and construction contractor specifications • Conduct pre-construction survey of suitable habitat • If active/nest are encountered, follow appropriate measures.	• Prior to construction • Prior to construction • During construction	SCVSD Qualified Biologist	
BIO-9: Southwestern Pond Turtle. Focused surveys for southwestern pond turtle in accordance with USGS Western Pond Turtle (Emys marmorata) Trapping Survey Protocol for the Southcoast Ecoregion and USGS Western Pond Turtle (Emys marmorata) Trapping Protocol for the Southcoast Ecoregion shall be conducted to determine presence/absence of the species within the study area. If surveys verify absence, no further action is required. If surveys determine that southwestern pond turtles are present within 500 feet of the project site, the following shall be completed as necessary: • Postpone construction and reschedule outside of the breeding season (May-July) or ensure that construction remains 500 feet from known active nests or otherwise occupied (foraging and/or nesting) habitat. If this is not feasible and activities must take place during the nesting season, steps shall be taken to reduce effects to nesting activity by actively reducing construction noise (to no more than 10 decibels (dBA) above pre-construction ambient noise levels) within proximity to occupied habitat and/or installing temporary construction noise barriers. If the active reduction of noise or the blocking of noise using sound barriers is not feasible, work activities shall be postponed until the nest is deemed inactive and/or the breeding season has concluded.	• Include mitigation measure in design specifications and construction contractor specifications • Conduct focused surveys for the southwestern pond turtle to determine presence/absence of the species within the study area • If southwestern pond turtles are present within 500 feet of the project site, follow appropriate measures.	• Prior to construction • Prior to construction • During construction	SCVSD Qualified Biologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
• Prior to construction, a qualified biologist shall conduct a clearance of suitable habitat within 300 feet of proposed construction. If a turtle is observed within or adjacent to the project site, a qualified biologist with approval from the USFWS, shall relocate the individual to a location at least 300 feet from any potential impact areas. If an active nest is encountered during the clearance survey, it shall be left undisturbed until the eggs have hatched and/or the biologist has otherwise deemed it inactive.				
BIO-10: Crotch's Bumble Bee. A qualified entomologist, approved by CDFW, shall conduct a focused survey in suitable habitat (e.g., Fremont cottonwood forest, blue elderberry woodland, California rose briars, and non-native grasses and forbs), in accordance with the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* protocol to determine presence/absence of the species. Surveys shall be conducted within one year prior to vegetation removal activities and a minimum of three surveys shall be conducted during peak flying season (April-August), when the species is most likely to be detected above ground. If surveys verify absence, no further action is required. If surveys determine that Crotch's bumble bees are currently utilizing the study area or~~,~~ within 500 feet of the project site, project oversight and construction staff shall coordinate with CDFW staff to develop appropriate avoidance and minimization measures and determine if take authorization will be required. Appropriate take authorization shall be obtained prior to project initiation. If Crotch's bumble bee is determined present, portions of the project site impacted by project activities shall be revegetated, in coordination with CDFW, to mitigate impacts to nectaring/foraging sources for the species. The revegetation effort shall include local native nectar resources that can be expected to bloom at any given time during the Colony Active Season (February 1 - October 31). A diverse assemblage of herbs, forbs, vines, and sub-shrubs, as well as annual and perennial plant species, shall be used. Nectar- and pollen-producing plants that may be used by the Crotch's bumble bee include, but are not limited to, the genera *Asclepias*, *Chaenactis*, *Lupinus*, *Phacelia*, and *Salvia* in the families Fabaceae, Apocynaceae, Asteraceae,	• Include mitigation measure in design specifications and construction contractor specifications • Conduct focused Crotch's bumble bee surveys within one year prior to vegetation removal activities and a minimum of three surveys during peak flying season • Coordinate with CDFW if surveys determine that Crotch's bumble bees are within 500 feet of the project site • Coordinate with CDFW for revegetation activities to mitigate impacts to nectaring/foraging sources	• Prior to construction • Prior to construction • Prior to construction • Post construction	SCVSD Qualified Entomologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae, and Boraginaceae. Nectar resources shall be weed and pest free (e.g., Argentine ants), pathogen-free, and have not been treated with pesticides.				
BIO-11. Impacts to previously restored habitat (inclusive of 4 mitigation trees) associated with the 2018 VWRP Retaining Wall Extension Project shall require coordination with CDFW under the existing Streambed Alteration Agreement Notification No. 1600-2016-004-R5.	• Coordinate with CDFW under existing Streambed Alteration Agreement	• Prior to construction/ During construction	SCVSD	
BIO-12: SEA Resources. Impacts to SEA categories and protected trees shall be provided through coordination with the Los Angeles County Planning Department via SEA Counseling and Ministerial Review, and through the application for a Protected Tree Permit and/or SEA Conditional Use Permit.	• Coordinate applicable permits with the Los Angeles County Planning Department	• Prior to construction	SCVSD	
Cultural Resources				
CUL-1: Retain a Qualified Archaeologist and Conduct Construction Worker Training. SCVSD shall retain a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards to conduct construction worker cultural resources sensitivity training prior to the start of ground disturbing activities. In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of archaeological resources that could be encountered within the project site, working with on-site cultural resource monitors, and the procedures to be followed if cultural resources are found. Documentation shall be retained demonstrating that all construction personnel attended the training. The qualified archaeologist shall also oversee an archaeological monitor who shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the project. The qualified archaeologist shall provide technical and compliance oversight of all work as it relates to archaeological resources, shall attend the project kick-off meeting and project progress meetings on a regular basis, and shall report to the site in the	• Include mitigation measure in design specifications and construction contractor specifications • Conduct construction worker cultural resources sensitivity training • Retain a qualified archaeologist • Retain documentation demonstrating that all construction personnel attended the training	• Prior to construction • Prior to construction/ During construction • Prior to construction • During construction	SCVSD Qualified Archaeologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
event potential archaeological resources are encountered.				
CUL-2: Conduct Archaeological Monitoring. The construction contractor will use a qualified archaeological monitor, working under the supervision of a qualified archaeological Principal Investigator during ground disturbing activities including, but not limited to, demolition of foundations and footings, trenching, grading, demolition of outfall structures and over excavation for secant piles within the project site. The archaeological monitor will have the authority to redirect construction equipment in the event potential archaeological resources are encountered. In the event archaeological resources are encountered, SCVSD will be notified immediately and work in the vicinity of the discovery will halt until appropriate treatment of the resource, is determined by the qualified archaeological Principal Investigator in consultation with the County in accordance with the provisions of CEQA.	• Include mitigation measure in design specifications and construction contractor specifications • Retain a qualified archaeological monitor • Halt work in the event archaeological resources are encountered	• Prior to construction • During construction • During construction	SCVSD Qualified Archaeological Monitor	
CUL-3: Final Monitoring Report. The archaeological monitor shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted to the SCVSD, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	• Include mitigation measure in design specifications and construction contractor specifications • Prepare a final report and Site Forms	• Prior to construction • During construction	SCVSD Qualified Archaeological Monitor	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
CUL-4: Human Remains. If human remains are encountered unexpectedly during construction demolition and/or grading activities, Section 7050.5 of the California Health and Safety Code (CHSC) requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California PRC 5097.98. Remains suspected to be Native American are treated under CEQA at CCR 15064.5; PRC 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedure shall be observed: Stop immediately and contact the County Coroner: 1104 N. Mission Road Los Angeles, CA 90033 323-343-0512 (8 am to 5 pm Monday through Friday) or 323-343-0714 (After hours, Saturday, Sunday, and Holidays) • If the remains are determined to be of Native American descent, the Coroner has 24 hours to notify the NAHC. • The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American. • The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods. • If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.	• Include mitigation measure in design specifications and construction contractor specifications • Halt construction activities in the event that human remains are encountered and follow the procedure as outlined	• Prior to construction • During construction	SCVSD Qualified Archaeological Monitor	
Geology, Soils, and Mineral Resources				
GEO-1: Prior to any Project ground disturbance activities, a qualified paleontologist shall be retained by SCVSD to prepare a Worker's Environmental Awareness Program (WEAP) and train all construction personnel prior to the start of any construction activities. The WEAP training shall include, at a minimum, the following information: • Review of local and State laws and regulations pertaining to paleontological resources;	• Include mitigation measure in design specifications and construction contractor specifications • Retain a qualified paleontologist to prepare a WEAP and train all construction personnel	• Prior to construction • During construction	SCVSD Qualified Paleontologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
• Types of fossils that could be encountered during ground disturbing activity in the Saugus Formation; • Photos of example fossils based on the regional LACM collections that could occur on site for reference; and • Instructions on the procedures to be implemented should unanticipated fossils be encountered during construction, including stopping work in the vicinity of the find and contacting a qualified professional paleontologist.				
GEO-2: In the event an unanticipated fossil discovery is made during ground disturbing activities, construction activities shall halt in the immediate vicinity of the fossil, and the qualified professional paleontologist retained by SCVSD shall be notified to evaluate the discovery, determine its significance, and evaluate whether additional mitigation or treatment is warranted. Work in the area of the discovery shall resume once the find is properly documented and authorization is given by the qualified paleontologist to resume construction work. Any significant paleontological resources found shall be prepared, identified, analyzed, and permanently curated in an approved regional museum repository.	• Include mitigation measure in design specifications and construction contractor specifications • Halt construction activities in the event of an unanticipated fossil discovery • Evaluate discovery and follow direction from the qualified paleontologist to prepare and analyze find.	• Prior to construction • During construction • During construction	SCVSD Qualified Paleontologist	
Tribal Cultural Resources				
TCR-1: SCVSD shall retain a professional Tribal monitor procured by the Fernandeño Tataviam Band of Mission Indians to observe all ground-disturbing activities including, but not limited to, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, clearing, driving posts, auguring, blasting, stripping topsoil or similar activity. In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards retained by the SCVSD shall assess the find. The archaeologist and Tribal monitor will have the authority to request ground disturbing activities cease within the area of a discovery. Work on the other portions of the project outside of the buffered area may continue during this assessment period.	• Include mitigation measure in design specifications and construction contractor specifications • Retain a professional Tribal monitor • Cease all work in the event that Native American cultural resources are discovered	• Prior to construction • During construction • During construction	SCVSD Qualified Archaeologist	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
TCR-2: SCVSD shall, in good faith, consult with the Fernandeño Tataviam Band of Mission Indians on the disposition and treatment of any Tribal Cultural Resource encountered during project implementation.	• Include mitigation measure in design specifications and construction contractor specifications • Consult with the Fernandeño Tataviam Band of Mission Indians on the disposition and treatment of any Tribal Cultural Resource encountered	• Prior to construction • During construction	SCVSD	
Wildfire				
WF-1: Fire Prevention Measures. To reduce fire risk and maintain a fire safe worksite, the following Fire Prevention Measures would be implemented for the VWRP construction activities: • Minimize combustible and flammable materials storage on site. • Store any combustible or flammable materials away from ignition sources. • Clear parking areas and fuel or oil storage areas of all grass and brush by a distance of at least 30 feet. • Keep evacuation routes free of obstructions. • Label all containers as to contents and store in the same location as flammable or combustible liquids. • Perform hot works according to fire safe practices and guidelines in a controlled environment and with fire suppression equipment at the job site. • Dispose of combustible waste promptly and according to applicable laws and regulations. • Report and repair all fuel leaks without delay. • Avoid overloading circuits and/or reliance on extension cords where other upgrades would be safer. • Turn off and unplug electrical equipment when not in use. • Restrict use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to outside of the official fire season to the greatest extent feasible. When the above tools are used, water tenders equipped with hoses, shovels, Pulaskis, and axes shall easily be accessible to personnel. • Equip vehicles with a 3A-40BC Dry Chemical Fire Extinguisher, a 5-gallon backpack pump fire extinguisher, and a 48-inch round point shovel.	• Include mitigation measure in design specifications and construction contractor specifications • Implement fire prevention measures outlined	• Prior to construction • During construction	SCVSD	

Measures	Monitoring Process	Timeframe for Implementation	Responsible Agency/Party	Completion Date
WF-2: Red Flag Warning. Construction activities would be limited and precautions may be taken on site during periods of a Red Flag Warning, when conditions such as low humidity and high winds are present. Upon announcement of a Red Flag Warning, red flags will be prominently displayed at the VWRP Facilities entrance gate indicating to employees and contractors that restrictions are in place. Additionally, any "hot work" (work that could result in ignition sources or increase fire risk) or work conducted in close proximity to vegetation would be prohibited during Red Flag Warning conditions. Areas may be evacuated where personnel may be exposed to higher risks. If vehicles are required to be used during Red Flag Warning conditions, vehicles shall remain on paved roads. During significant emergency situations, an evacuation notice may be issued by the site manager or site safety officer. When an evacuation has been called, all site employees must gather at the designated assembly area and the site safety officer will account for all personnel. Once all employees are accounted for, vehicles will safely convoy from the site to safe zones, which are generally areas off site, away from the threat.	• Include mitigation measure in design specifications and construction contractor specifications • Limit construction activities and notify employees and contractors during periods of Red Flag Warnings	• Prior to construction • During construction	SCVSD	

Appendix A
Public Meeting Presentation

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project

CEQA Public Review Meeting



Santa Clarita Valley Sanitation District

August 14, 2024

Overview

- Staff Introduction
- Presentation
  - Purpose of Meeting
  - California Environmental Quality Act (CEQA) Process
  - Project Background
  - Project Description
  - EIR Process
  - Summary of key issues and conclusions
  - Schedule
- Public Comments

Staff Introduction

- Santa Clarita Valley Sanitation District (SCVSD)
- Environmental Science Associates (ESA)

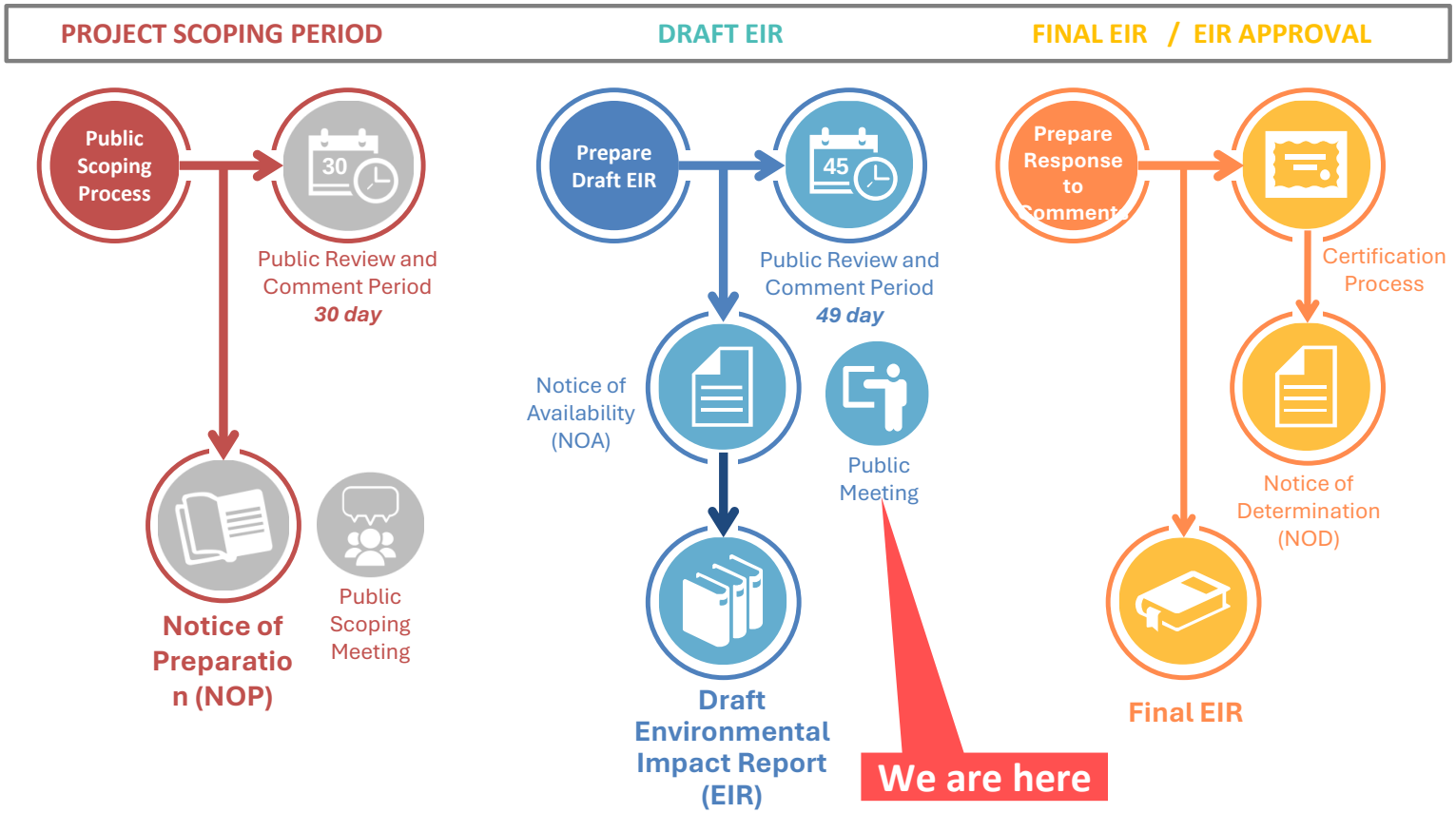
Purpose of Meeting

- Continue the CEQA Process
  - The Notice of Preparation (NOP), was published November 28, 2023, initiated the environmental review process for the Environmental Impact Report (EIR)
  - The NOP Scoping Meeting occurred on December 12, 2023
  - The Draft EIR was published for public review on July 17, 2024
  - 49-day public review and comment period for Draft EIR through September 3, 2024
- Provide information about the Valencia Water Reclamation Plant Middle Section Retaining Wall Ground Improvement Project (proposed project)
  - Overview of project objectives
  - Overview of project description
- Provide information on the Environmental Impact Report (EIR) process
- Summary of key issues and conclusions provided in the DEIR
- Schedule
- Solicit community input on environmental issues or concerns to be addressed in the EIR

California Environmental Quality Act (CEQA)

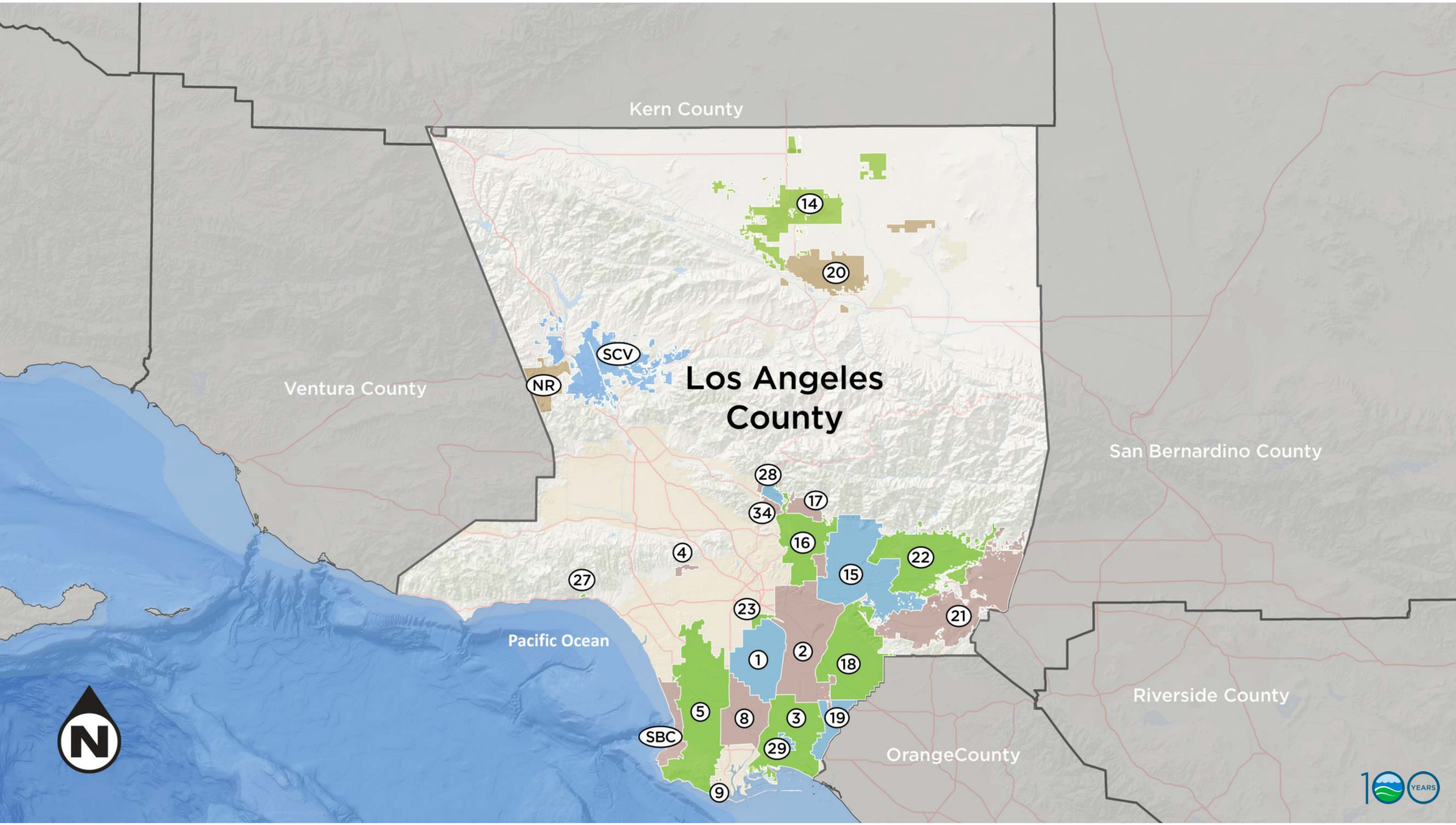


CEQA Process



Organization of Draft EIR

- Executive Summary
- Section 1 Introduction
- Section 2 Project Description
- Section 3 Environmental Impact Analysis
- Section 4 Other CEQA Considerations and Growth Inducement
- Section 5 Alternatives
- Section 6 Report Preparers

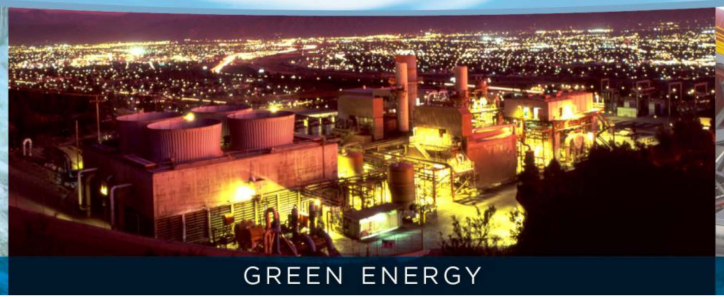

Kern County
Ventura County
Los Angeles County
San Bernardino County
Riverside County
OrangeCounty
Pacific Ocean
SCV
NR
SBC
14
20
28
17
34
16
22
15
4
27
23
21
1
2
18
5
8
3
19
29
9
N
100 YEARS

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

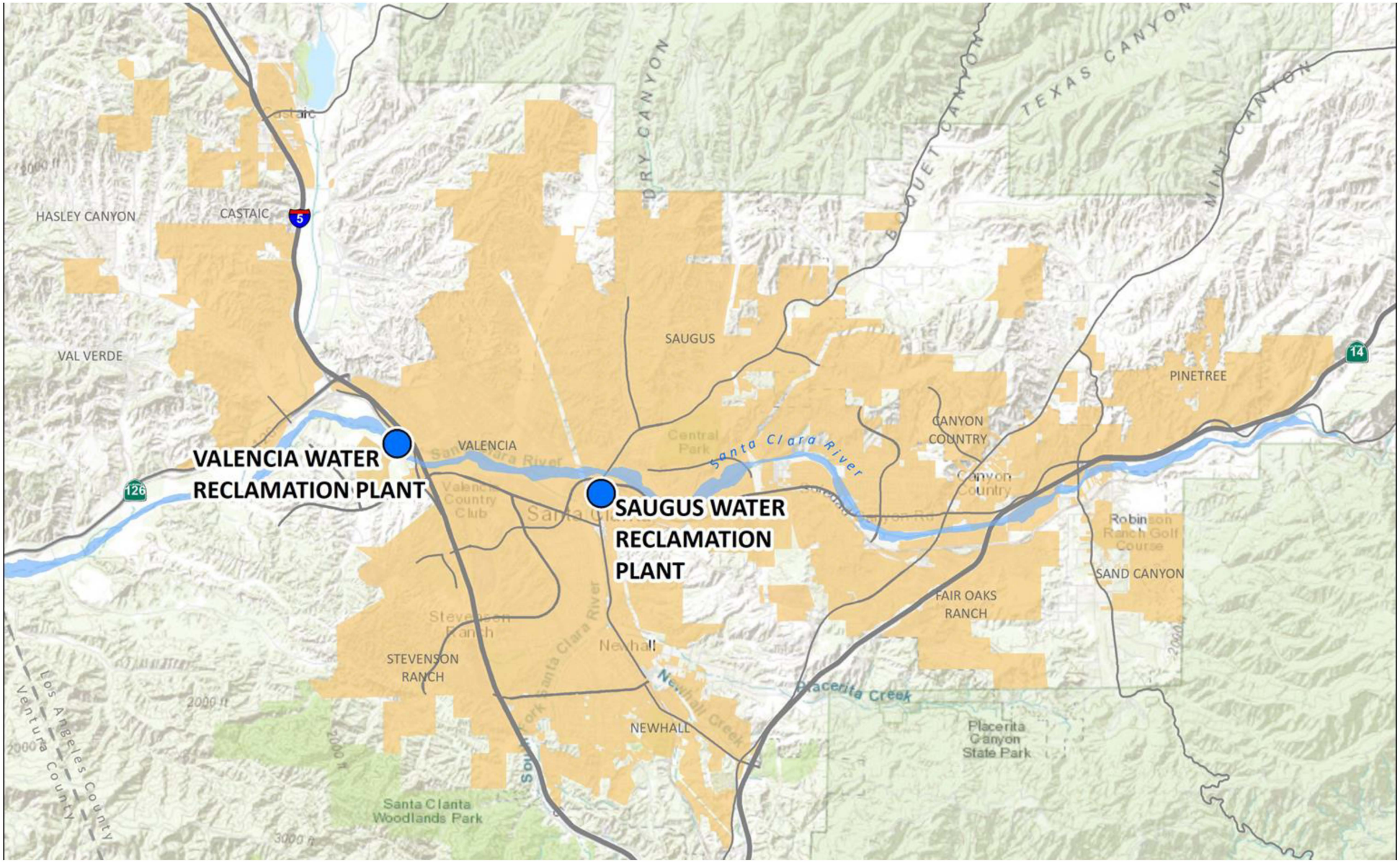
OUR MISSION

To protect public health and the environment through innovative and cost-effective wastewater and solid waste management and, in doing so, convert waste into resources such as recycled water, energy, and recycled materials.


WATER RECYCLING


GREEN ENERGY


MATERIALS RECYCLING


VALENCIA WATER RECLAMATION PLANT
SAUGUS WATER RECLAMATION PLANT
HASLEY CANYON
CASTAIC
VAL VERDE
SAUGUS
VALENCIA
PINETREE
CANYON COUNTRY
SAND CANYON
FAIR OAKS RANCH
STEVENSON RANCH
NEWHALL
Santa Clara River
Placerita Creek
Placerita Canyon State Park
Santa Clarita Woodlands Park
DRY CANYON
BOUQUET CANYON
TEXAS CANYON
MINT CANYON
Los Angeles County
Ventura County

Project Background

- Valencia Water Reclamation Plant (WRP)
  - 28185 The Old Road
  - **Year built**: 1967
  - **Wastewater service**: primary, secondary, and tertiary treatments and anaerobic digestion for SCVSD
  - **Design capacity**: 21.6 million gallons per day (MGD)
  - **Treated flows**: 13 MGD in 2022



Project Background (Continue)

- Previous studies conducted
  - Identified that scour of the Santa Clara River under a Capital Flood may erode facility boundary along the river.
  - Facility boundary may also be damaged during a design-level earthquake.
- SCVSD is looking at different alternatives to address the issues without interrupting Valencia WRP's essential service to the public.
  - Based on an Alternative Selection Report prepared in 2023 by Geosyntec, Alternatives 1 and 2 would impair the VWRP's ability to maintain continuous operations
  - Alternative 3 was chosen as the proposed Project

Project Objectives

- Construct a structure that can withstand Capital Flood scour levels (PACE, 2016) with limited impact to the VWRP area;
- Construct a structure that can withstand a design level earthquake following the Capital Flood scour levels with limited impact to the VWRP area;
- Allow uninterrupted VWRP operation with controlled impact from construction activities;
- Achieve effective tie-ins with the existing deep-scour protection retaining wall on the south and north ends of the proposed construction;
- Improve the condition of discharge outfall sections that will be affected by construction of the proposed structure;
- Maintain permanent improvements within the property limits of the VWRP;
- Minimize permanent impacts to the vegetated area to the riverside of the existing retaining wall;
- Minimize temporary construction impacts to the existing vegetated area riverside of the existing retaining wall;
- Minimize the disturbance of the recently revegetated area alongside the Advanced Water Treatment Facility retaining wall; and
- Develop a cost-effective solution.

Project Description

- Underground Retaining Wall
  - Cover an area of approximately 0.87 acre
  - CDSM structure during northern portion of the wall
  - Add additional 0.05 acre of riprap
- Outfall Structures
  - Updates to two existing outfall structures
  - New maintenance area approximately 0.57 acre



Key Issues

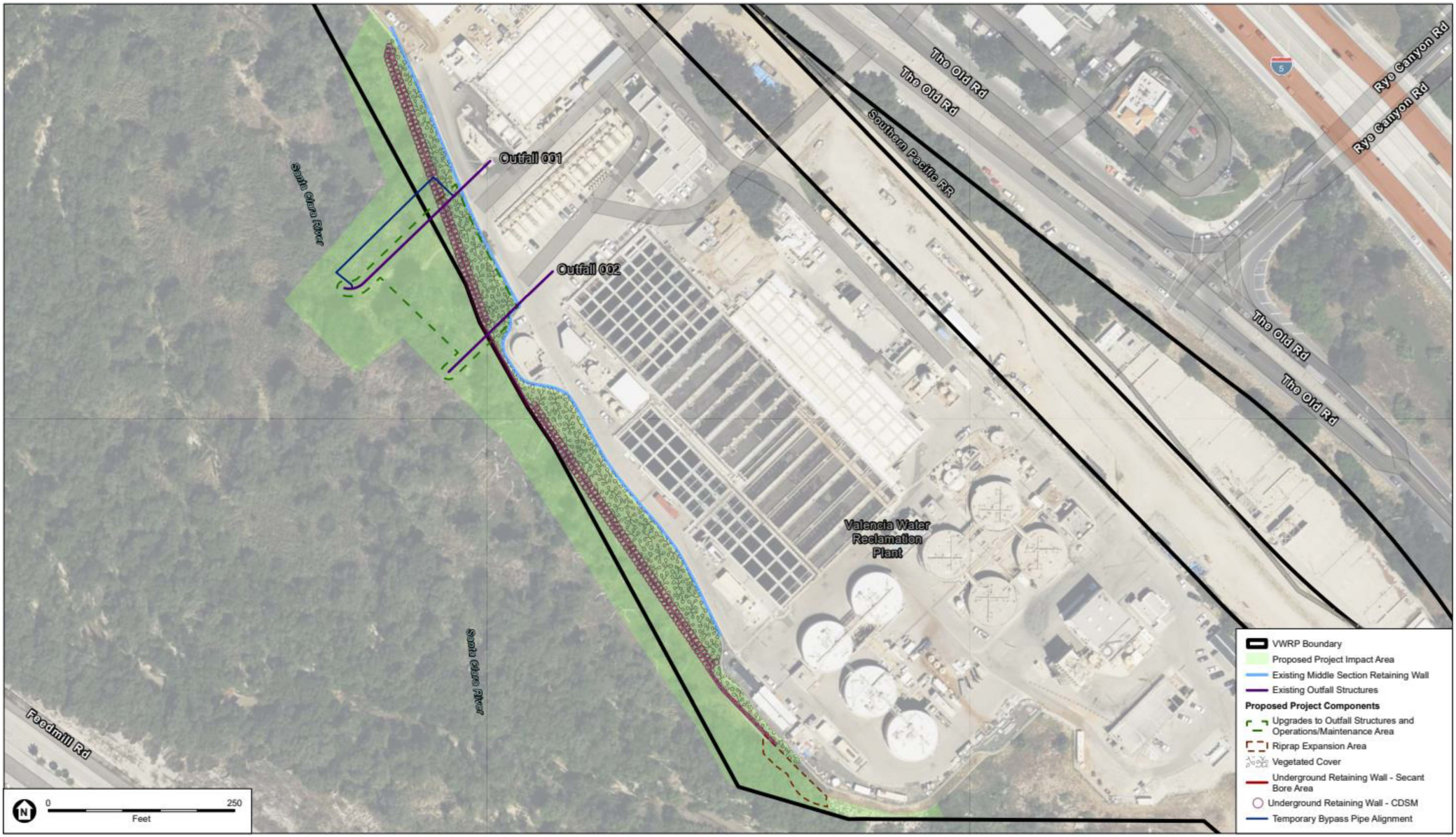
- Impacts to Sensitive Vegetation Communities
  - Grading and Vegetation Removal will occur within a County-designated Significant Ecological Area (SEA) and CDFW conservation easement
  - Permanent loss of riparian habitat potentially within previously established restoration area
  - Known occurrences of Least Bells Vireo in nearby habitat



Key Issues (Continue)

- Impacts to Water Quality
  - Work areas would avoid the Santa Clara River flow channel
  - Site runoff during construction would require Stormwater Pollution Prevention Plan (SWPPP)




Outfall 001
Outfall 002
Santa Clara River
Santa Clara River
The Old Rd
The Old Rd
The Old Rd
The Old Rd
Southern Pacific RR
Rye Canyon Rd
Rye Canyon Rd
5
Valencia Water Reclamation Plant
Feedmill Rd
0
250
Feet
VWRP Boundary
Proposed Project Impact Area
Existing Middle Section Retaining Wall
Existing Outfall Structures
Proposed Project Components
Upgrades to Outfall Structures and Operations/Maintenance Area
Riprap Expansion Area
Vegetated Cover
Underground Retaining Wall - Secant Bore Area
Underground Retaining Wall - CDSM
Temporary Bypass Pipe Alignment

Impact Analysis: No Impact or Less than Significant

- The DEIR concluded no impact or less than significant impacts for the following topics

Aesthetics
Agricultural and Forestry Resources
Air Quality
Energy
Greenhouse Gas Emissions
Hydrology and Water Quality
Land Use
Mineral Resources
Noise and Vibration
Population and Housing
Public Services
Recreation
Transportation
Utilities and Service Systems

Impact Analysis: Less than Significant with Mitigation

- The DEIR concluded less than significant impacts with mitigation for the following topics

Biological Resources
Cultural Resources
Geology, Soils, and Paleontology
Hazards and Hazardous Materials
Tribal Cultural Resources
Wildfire

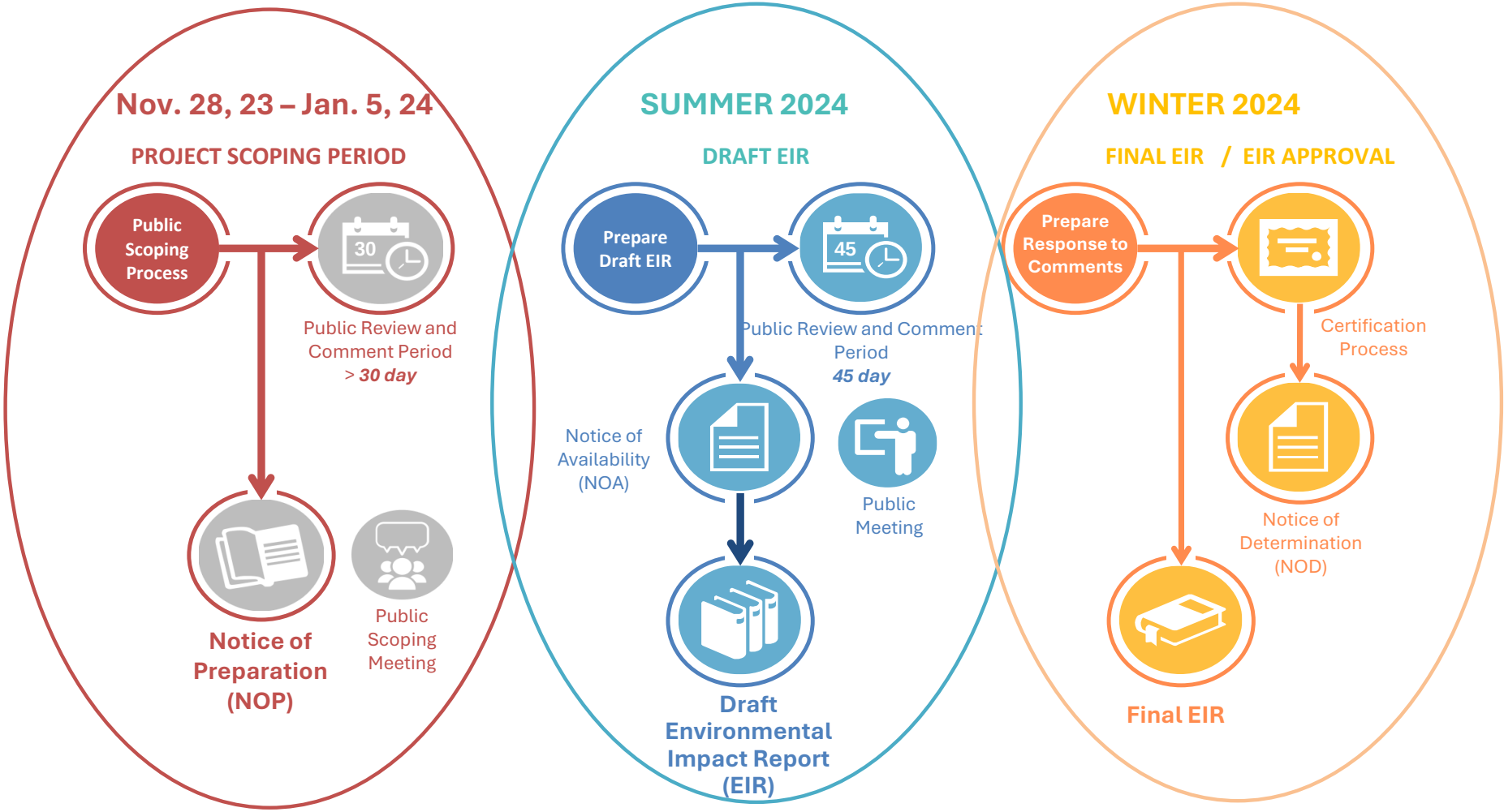
Other Topics Analyzed in the Draft EIR

- Cumulative Impacts
  - Analyze proposed project in context of other projects in geographic scope
  - Less than significant impacts except

- Significant Irreversible Environmental Changes
  - The proposed project would result in the irretrievable and irreversible commitment of nonrenewable resources and energy.
  - However, these types of resources are anticipated to be in adequate supply into the foreseeable future.
  - Impacts due to these irretrievable and irreversible commitments of resources are considered less than significant.

- Other CEQA Considerations
  - Growth Inducement Potential – project would not induce population growth

Schedule


Nov. 28, 23 – Jan. 5, 24
PROJECT SCOPING PERIOD
Public Scoping Process
30
Public Review and Comment Period
> 30 day
Notice of Preparation (NOP)
Public Scoping Meeting
SUMMER 2024
DRAFT EIR
Prepare Draft EIR
45
Public Review and Comment Period
45 day
Notice of Availability (NOA)
Public Meeting
Draft Environmental Impact Report (EIR)
WINTER 2024
FINAL EIR / EIR APPROVAL
Prepare Response to Comments
Certification Process
Notice of Determination (NOD)
Final EIR

Document Availability / Written Comments

DEIR AVAILABILITY

Library

Santa Clarita Valencia Branch Library
23743 West Valencia Boulevard
Santa Clarita, CA 91355

LACSD Joint Administration Office

1955 Workman Mill Road
Whittier, CA 90601

Website

https://www.lacsd.org/documents/other/documents-for-public-review

IN-PERSON MEETING, 6 PM TODAY

20880 Centre Pointe Parkway
Santa Clarita, CA 91350

WRITTEN COMMENTS*

Mail to

Santa Clarita Valley Sanitation District
Attn: Mandy Huffman
1955 Workman Mill Road
Whittier, CA 90601

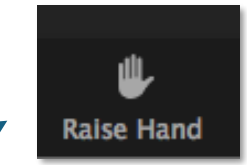
Email

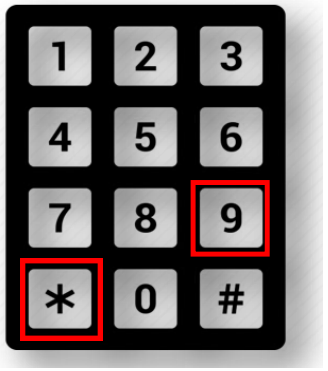
MandyHuffman@lacsd.org

**Comments due by September 3, 2024*

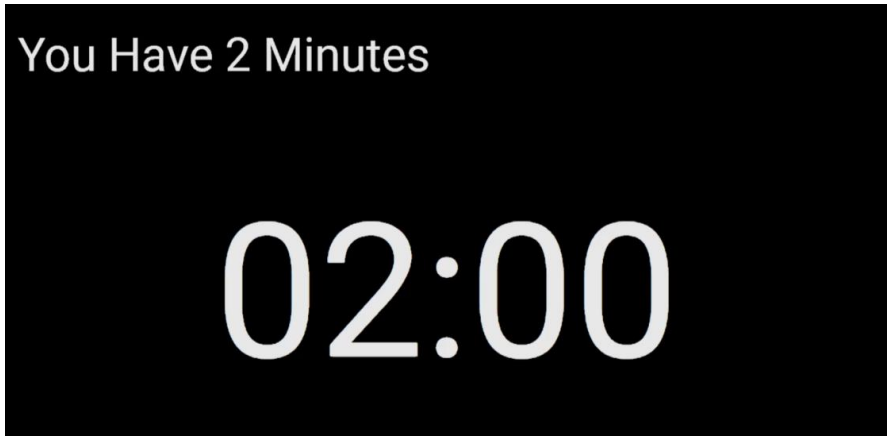
Public Comments

- Raise your virtual hand to provide a comment
  - Raise hand function located at the bottom of the screen
  - Press *9 if you are on the phone
- You will be called upon (by name or last 3 digits of phone number) and unmuted





Telephone Keypad



Thank you

Document Availability / Written Comments

DEIR AVAILABILITY

Library

Santa Clarita Valencia Branch Library
23743 West Valencia Boulevard
Santa Clarita, CA 91355

LACSD Joint Administration Office

1955 Workman Mill Road
Whittier, CA 90601

Website

https://www.lacsd.org/documents/other/documents-for-public-review

IN-PERSON MEETING, 6 PM TODAY

20880 Centre Pointe Parkway
Santa Clarita, CA 91350

WRITTEN COMMENTS*

Mail to

Santa Clarita Valley Sanitation District
Attn: Mandy Huffman
1955 Workman Mill Road
Whittier, CA 90601

Email

MandyHuffman@lacsd.org

**Comments due by September 3, 2024*

Appendix B

Geosyntec Consultants, Hydraulic Study for Valencia Water Reclamation Plant (November 2024)

Geosyntec consultants

engineers | scientists | innovators

HYDRAULICS STUDY FOR VALENCIA WATER RECLAMATION PLANT

Prepared for

Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Prepared by

Geosyntec Consultants, Inc.
1031 S. Broadway, Suite:300
Los Angeles, CA 90017

Project Number: GST8058

June 5, 2024 (Revised November 14, 2024)

HYDRAULICS STUDY FOR VALENCIA WATER RECLAMATION PLANT

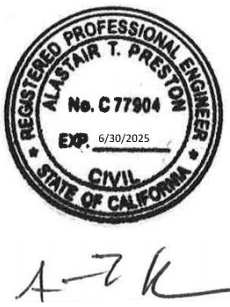
Prepared for

Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Prepared by

Geosyntec Consultants, Inc.
1031 S. Broadway, Suite:300
Los Angeles, CA 90017





Muhammed Mustafa, Ph.D., P.E.
Senior Engineer

Al Preston, Ph.D., P.E.
Principal

Project Number: GST8078

June 5, 2024 (Revised November 14, 2024)

TABLE OF CONTENTS

1. INTRODUCTION 6
2. HYDRAULIC ANALYSIS 9
   2.1 Hydraulic Model Development 9
      2.1.1 Model Geometry and Terrain Data 9
      2.1.2 Boundary Conditions and Flow Data 10
      2.1.3 Existing Vegetation and Bed Roughness 11
   2.2 Modeled Scenarios 11
   2.3 Model Results 12
      2.3.1 Comparison of Water Surface Elevation 13
      2.3.2 Comparison of Flow Depth 15
      2.3.3 Comparison of Flow Velocity 18
3. RIPRAP/LAUNCHABLE ROCK CALCULATION 22
   3.1 Design Approach 23
   3.2 Input Data 24
   3.3 Results 30
4. CONCLUSIONS 34
5. REFERENCES 40

LIST OF TABLES

Table 1. Peak flow rates for various flow frequencies 10
Table 2. Summary of input data to the Riprap calculation tool 29
Table 3. Proposed riprap rock gradation for the transition area 30
Table 4. Equivalent FHWA riprap rock gradation for the transition area 30
Table 5. Proposed riprap rock gradation for the area between the two walls 30
Table 6. Equivalent FHWA rock gradation for the area between the two walls 31
Table 7. Summary of the design and recommended riprap rock gradations and layer thickness . 31
Table 8. Dimension and volume of launchable rocks 33

LIST OF FIGURES

Figure 1. Approximate alignment of the proposed wall. 7
Figure 2. Extent of the HEC-RAS model showing on the existing 2016 LiDAR terrain. 10
Figure 3. Manning's roughness coefficient (n) values within the main river. 11
Figure 4. Profile lines drawn a cross the river near the proposed wall. 12
Figure 5. WSE along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm 13
Figure 6. WSE along the proposed wall, Existing condition vs Proposed condition _ Capital Flood 14
Figure 7. Comparison of WSE along the proposed wall between results from this analysis and results from PACE (2016) 14
Figure 8. Flow Depth comparison, Existing condition vs Proposed condition (plan view) 1% AEP storm 15
Figure 9. Flow depth along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm 16
Figure 10. Flow Depth comparison, Existing condition vs Proposed condition (plan view)_Capital Flood 17
Figure 11. Flow depth along the proposed wall, Existing condition vs Proposed condition _ Capital Flood 17
Figure 12. Flow Velocity comparison, Existing condition vs Proposed condition (plan view) _1% AEP storm 18
Figure 13. Flow Velocity along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm 19
Figure 14. Flow Velocity comparison, Existing condition vs Proposed condition (plan view) _Capital Flood 20
Figure 15. Change in Flow velocity (plan view) _Capital Flood (Change = Proposed velocity-Existing Velocity, i.e., positive values (red color) mean velocity increase in the proposed condition, while negative values (blue color) mean velocity decrease in the proposed condition) 21
Figure 16. Flow Velocity along the proposed wall, Existing condition vs Proposed condition _ Capital Flood 21
Figure 17. Typical section of riprap protection on the upstream end of the wall 22
Figure 18. Typical section of riprap zone between the proposed wall and the existing MSE wall 23
Figure 19. Profile lines across the channel 24

Figure 20. WSEs along Reference XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm 25
Figure 21. WSEs along Design XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm 25
Figure 22. WSEs along Reference XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm 26
Figure 23. WSEs along Design XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm 26
Figure 24. Flow Velocity along Reference XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm 27
Figure 25. Flow Velocity along Design XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP 27
Figure 26. Flow Velocity along Reference XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP 28
Figure 27. Flow Velocity along Design XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP 28
Figure 28. Results of the riprap calculation for the transition area 32
Figure 29. Results of the riprap calculation for the area between the walls 32
Figure 30. Schematic showing the installation of the launchable stone at the transition area in front of the existing MSE wall (Average width is 24 ft, a 2:1 slope is assumed for the stone pile) (not to scale) 33

1. INTRODUCTION

Geosyntec Consultants Inc. prepared this technical report to summarize the hydraulics and scour protection analyses (Study) conducted for a segment of the Santa Clara River adjacent to the Sanitation Districts of Los Angeles County's (the Districts) Valencia Water Reclamation Plant (VWRP) in the City of Santa Clarita, Los Angeles County, California. The services documented in this report were performed in accordance with the Task Agreement Form (TAF) No. 5555-02 executed by the Districts on December 4, 2023, and under CSD Contract No. 5555, issued to Geosyntec on September 13, 2023.

Geosyntec is supporting Districts with a design of a scour protection wall along the west side of the plant to protect a portion of the existing mechanically stabilized earth (MSE) retaining wall from scour during heavy storms and associated high flows in the adjacent Santa Clara River, thus mitigating risk for scour impact to the Plant area. The approximate alignment of the wall is shown in Figure 1a. The proposed wall is designed to be entirely buried underground.

Near the upstream end of the proposed wall, the MSE wall will be protected against scour by a layer of existing rocks. However, there is a short transition area between the proposed wall and the existing rocks where the MSE wall is exposed and needs to be protected (Figure 1a and Figure 1b). Additionally, the surficial zone between the new wall and the existing MSE wall (Figure 1a and Figure 1b), which will be graded after construction of the wall per the design drawings will be exposed to erosive forces during high flows and need to be protected against erosion.

The objective of this analysis is to estimate the size and volume of the rocks required to protect the area on the upstream end of the proposed wall and the transition area to the existing scour protection rocks, and the size and layer thickness of surficial scour protection rocks between the proposed wall and MSE wall. To achieve this, a hydraulic model was developed to determine specific flow parameters in the vicinity of the transition area and near the proposed wall. These parameters were then used to estimate the parameters of the rocks needed for effective protection. Section 2 includes detailed description of the hydraulics model developed and the model results. Section 3 details the riprap/launchable stone calculations and finally the conclusions made from the Study are included in Section 4.

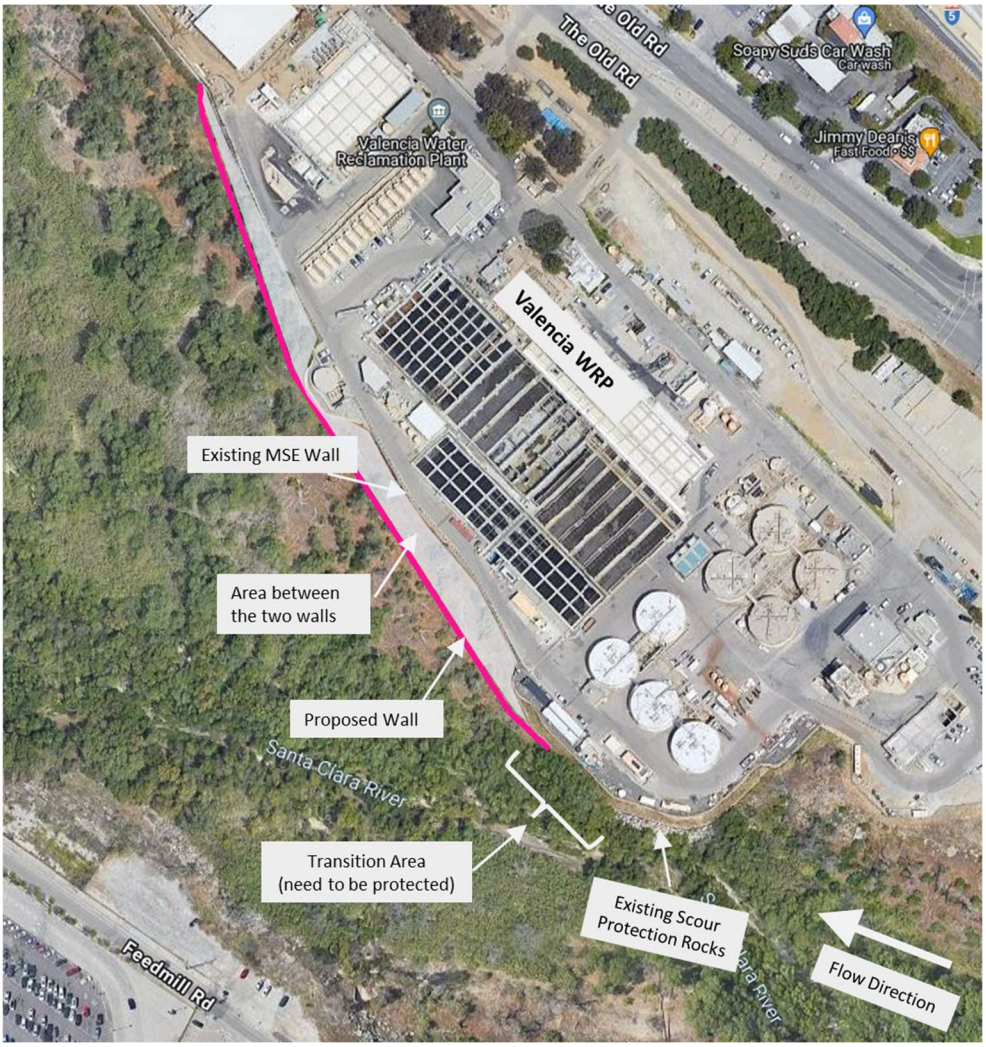


Figure 1a. Approximate alignment of the proposed wall.

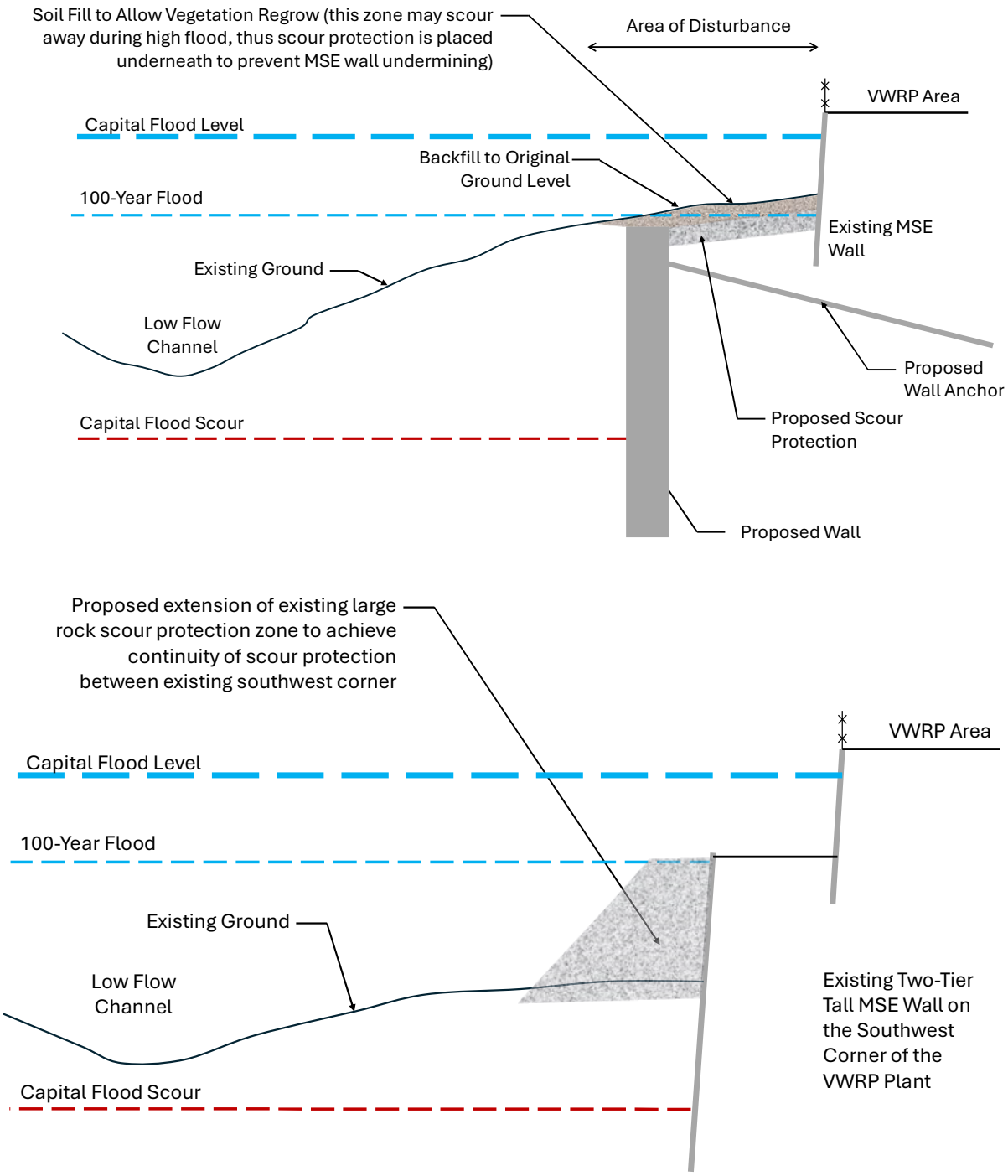


Figure 1b. Top - Typical section of the proposed wall; Bottom – Typical section of the new large rock riprap at the upstream (south) transition between wall and existing riprap protection

2. HYDRAULIC ANALYSIS

Geosyntec developed a hydraulic model using Hydrologic Engineering Center-River Analysis System (HEC-RAS) Version 6.3.1 to perform a 2-dimensional (2D) hydraulic analysis. The developed model included three surface topography conditions:

- Existing condition (Existing) with the topography based on most recent data of as-is conditions;
- Final conditions (Final) with the topography based on the final topographic conditions returned to closely match the existing in the area of wall construction disturbance, and with added large rock riprap on the southern end of the new wall to transition to existing riprap protection; and
- Proposed conditions to assess riprap protection sizing (Proposed) with the topography adjusted to conditions following the construction of the proposed wall and limited scour removing vegetated soil layer on top of smaller rock riprap. The wall design grading returns the grade to conditions as close as feasible to existing condition. However, this will include zone of vegetated soils above the riprap materials between new wall and existing MSE wall. Because the intent of this study is to develop hydraulic parameter to size the smaller rock riprap in this zone, the Proposed condition assumes that the vegetated soils is scoured away during a future capital flood event.

Proposed condition results were used in the calculation of the rock size needed for scour protection as described in Section 3. Comparison of Existing and Final conditions were used to assess if there are any significant impacts to hydraulic conditions as the result of the project as described in section 3.4. This section summarizes the development of the HEC-RAS model, the modeled scenarios, and results obtained from the modeling effort.

2.1 Hydraulic Model Development

2.1.1 Model Geometry and Terrain Data

The HEC-RAS 2D model was developed to cover the interested area of Santa Clara River near the VWRP and it is extended sufficiently upstream and downstream of the interested area to ensure that the uncertainty in the model boundary conditions do not impact the results at the interested area. Figure 2 shows the extent of the HEC-RAS 2D flow area in the HEC-RAS model, along with the terrain data used for modeling Existing condition. The modeled reach starts upstream of the Interstate 5 Bridge and extends downstream for about 6000 ft, with the interested area located at about midpoint of the modeled area. The 2D flow area is composed of approximately 80,000 grid cells of standard grid spacing of 10 ft x 10 ft. Breaklines were added in certain locations, to further refine the mesh and direct the movement of water through the 2D domain. Terrain data for the 2D flow area for Existing conditions were primarily based on 2016 USGS National Elevation Dataset (NED) data with the smaller area along the proposed wall based on the 2023 site specific survey performed by the Districts. For the Proposed condition, a graded surface for the area near the proposed wall, representing after construction condition, was incorporated into the Existing conditions terrain. The horizontal coordinate system and vertical datum used in the model are NAD

1983 State Plane California Zone V and North American Vertical Datum of 1988 (NAVD88 [ft]), respectively.

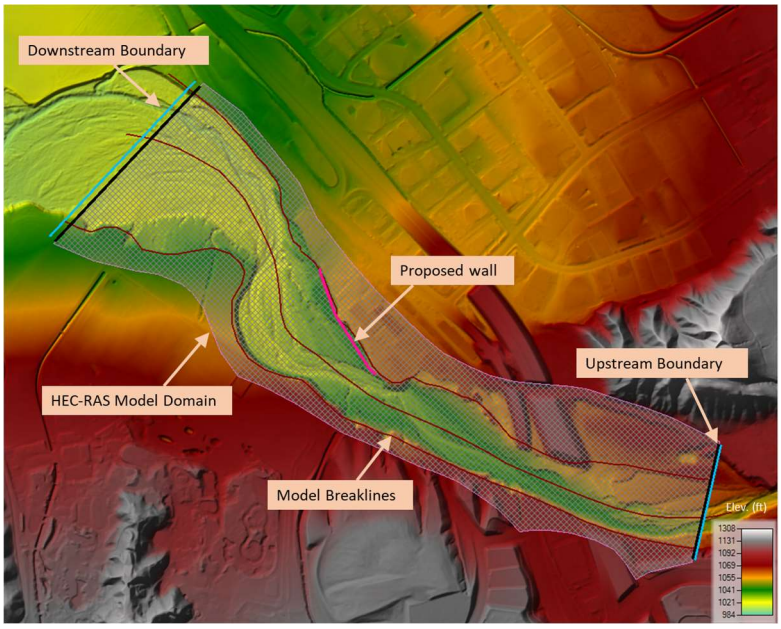


Figure 2. Extent of the HEC-RAS model showing on the existing 2016 LiDAR terrain.

2.1.2 Boundary Conditions and Flow Data

Peak flowrates for various annual exceedance probabilities (AEPs) and Capital Flood, obtained from available Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) report for Los Angeles County dated 2021 and the PACE report (PACE, 2016), are shown in Table 1. Capital flood is the burned and bulked runoff produced by a 2% AEP design storm falling on a saturated watershed. Using Capital Flood in the analysis is a conservative approach, assuming that the entire watershed is burned. The downstream boundary condition of the model was set to normal depth with a bed slope of 0.0063 ft/ft determined from the thalweg profile of the downstream portion of the stream.

Table 1. Peak flow rates for various flow frequencies.

Simulated Storms	Peak flowrate (cfs)	Notes
Capital Flood	115,400	Obtained from PACE report
1% AEP (100-year Storm)	50,270[1]	Obtained from FEMA FIS report
2% AEP (50-year Storm)	35,860	Obtained from FEMA FIS report
10% AEP (10-year) storm	13,250	Obtained from FEMA FIS report

[1] Consistent with the 100-year Storm value in the Pace (2016) report.

2.1.3 Existing Vegetation and Bed Roughness

Land cover data were downloaded from the National Land Cover Database (NLCD) website (NLCD, 2023), and Manning's roughness coefficient (n) values were assigned to each land cover type. Refinements were made to the land cover data for the main river, for the highly vegetated area within the main river, an n-value of 0.08 was used, which covers most of the river. However, at some areas, where less vegetation exists, an n-value of 0.05 was used. A map of the assigned Manning's n values within the main river are shown in Figure 3. For the overbank area an n-value of 0.08 to 0.1 was used (applies for areas outside of the river channel, which are not the focus of this analysis and not shown on Figure 3). It should be noted that the roughness coefficient values were assigned consistent with the typical vegetation conditions observed over the years. Significant removal of vegetation and change of conditions could occur following the major storm, however, the probability of two major storms back-to-back is considered relatively low.

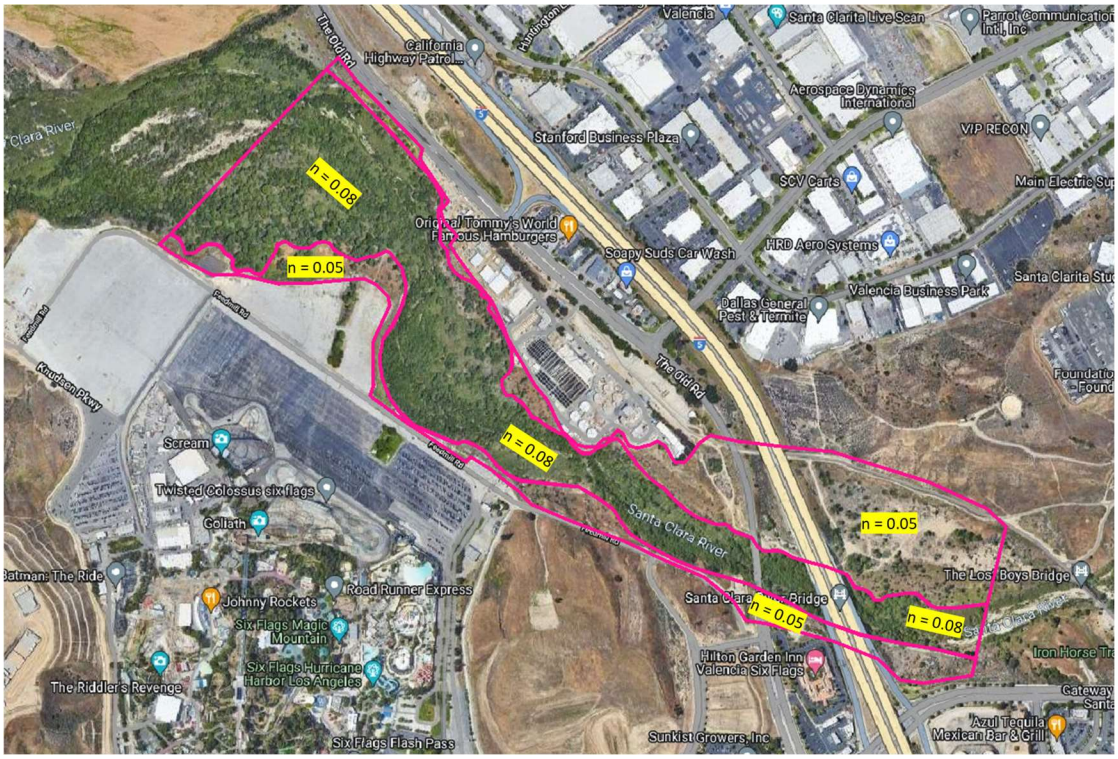


Figure 3. Manning's roughness coefficient (n) values within the main river.

2.2 Modeled Scenarios

To determine flow hydraulic parameters at the vicinity of the proposed wall and near the transition area between the proposed wall and the existing scour protection rocks and evaluate the impacts of the surface grading due to the wall construction, two model scenarios were developed. An Existing condition scenario, using the existing terrain and the flows determined from the PACE

and FEMA FIS reports shown in Table 1, and a Proposed condition scenario using the proposed model terrain and the obtained flows.

Model simulations were made using variable computational timesteps ranging from 1 second to 4 seconds to maintain stable Courant numbers. Maintaining stable Courant numbers ensures model numerical stability. The unsteady flow routing was performed using a Momentum Equation, since it performs better to resolve secondary currents and provides more accurate results compared to the Diffusion Wave Equation.

Hydraulic results, such as flow depths and velocities between the Existing and Proposed scenarios were compared and discussed in the following Section.

2.3 Model Results

This section describes the changes in water surface elevations (WSEs), flow depth, and flow velocities between the Existing and Proposed scenarios for the Capital Flood and 1% AEP storm simulations. For the purpose of comparison, in addition to the plan views of WSEs and flow velocities, a profile line was drawn at the approximate location of the proposed wall as shown in Figure 4, and values of WSEs, flow depth and flow velocities along the profile line were compared.



Figure 4. Profile lines drawn across the river near the proposed wall.

2.3.1 Comparison of Water Surface Elevation

Model results show minimum changes (less than1 ft) in water surface elevation (WSE) along the proposed wall between the existing and proposed conditions during the 1% AEP storm (Figure 5) and Capital Flood (Figure 6) model simulations.

Figure 7 presents a simple comparison of the computed WSE along the proposed wall alignment vs the WSE presented in PACE (2016) report. Since PACE (2016) conducted a 1-D analysis, no variation of WSE across the river was reported. Instead, PACE (2016) provides cross-sectional averaged WSE at distinct locations along the river in the area of interest. Two sets of WSEs were reported in PACE (2016) due to the use of low and high ground roughness coefficient in the model.

This study utilized a 2-D analysis approach, which shows spatial variabilities in WSE across the river. Figure 5 presents computed WSE along the proposed wall alignment. These values fall between the WSEs from the low and high roughness PACE (2016) model results.

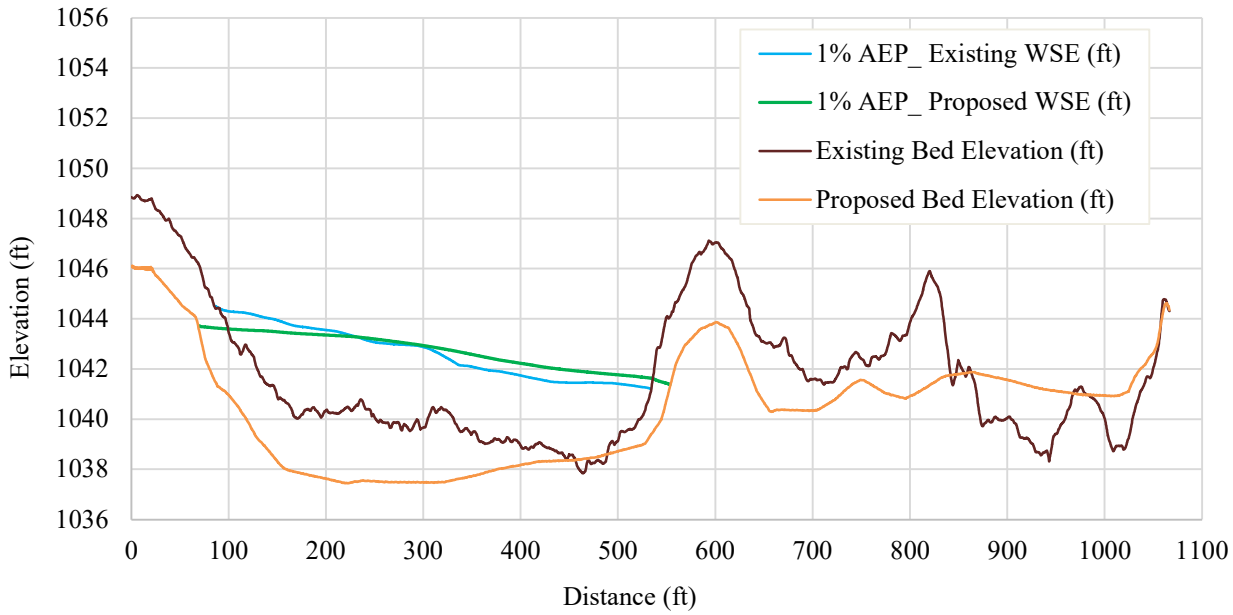


Figure 5. WSE along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm.

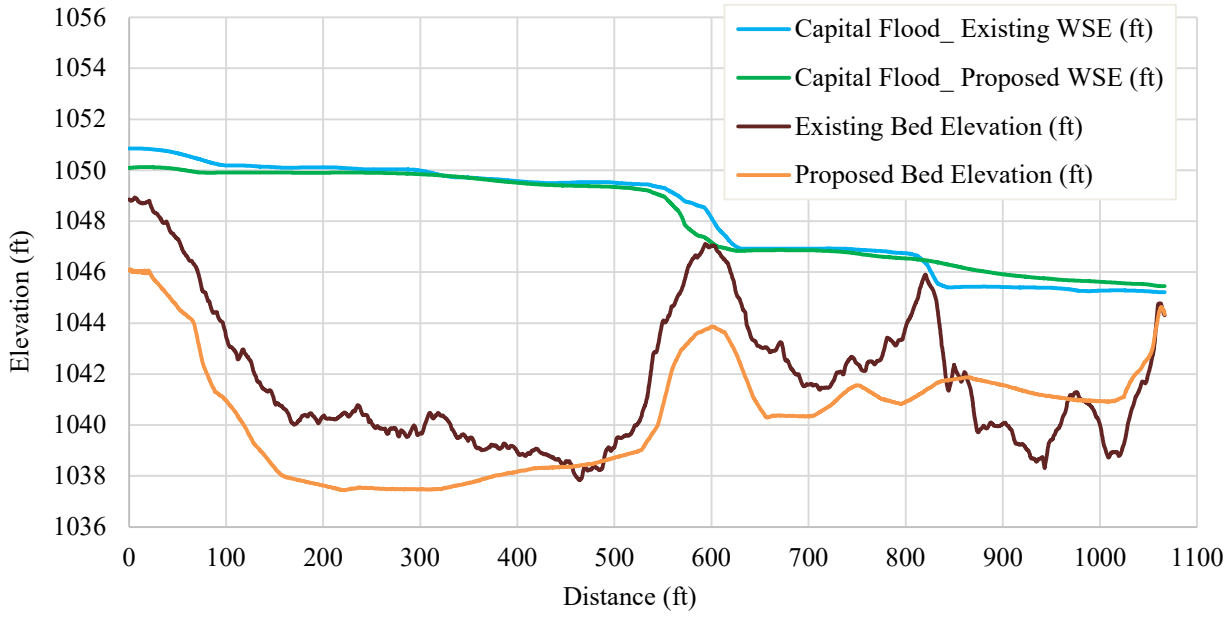


Figure 6. WSE along the proposed wall, Existing condition vs Proposed condition _ Capital Flood.

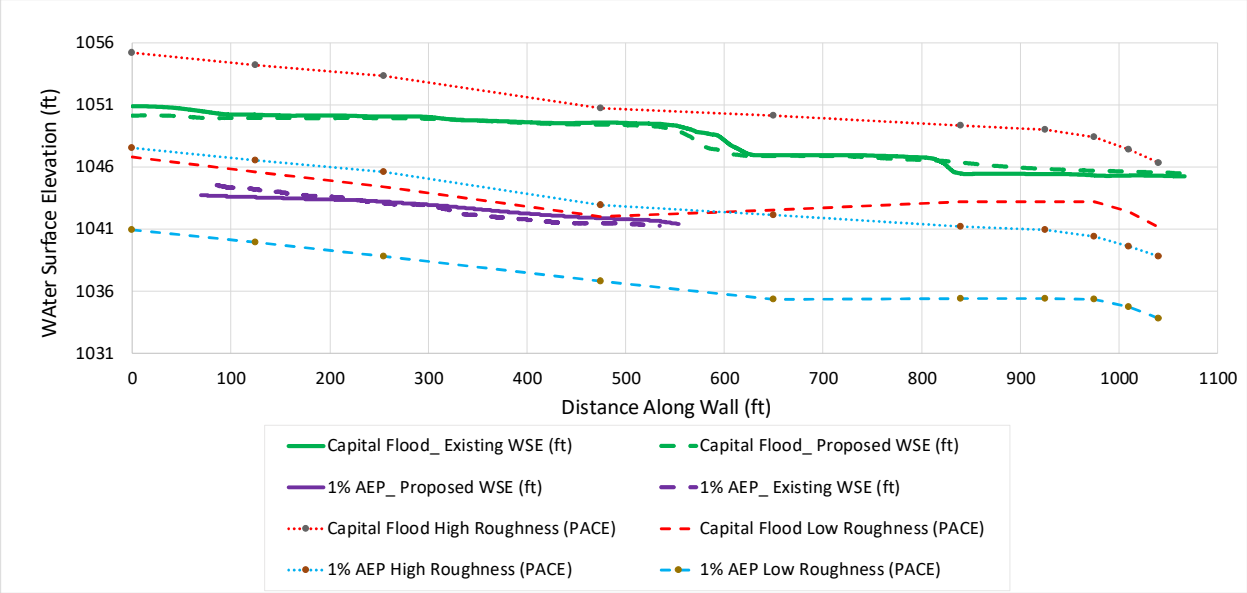


Figure **7**. Comparison of WSE along the proposed wall between results from this analysis and results from PACE (2016).

2.3.2 Comparison of Flow Depth

Model results indicates that the 1% AEP storm will pass through the analyzed reach of the river in both Existing and Proposed condition scenarios without overtopping to the surrounding overbank areas (Figure 8). The flow depth near the proposed wall ranges between 0 ft to approximately 3.5 ft in the Existing condition. However, the flow depth increases significantly in the Proposed condition, near upstream half of the wall (from approximately station 75 ft to 550 ft) due to the proposed gradings near the wall and assumed removal due to scour of the surficial vegetated layer (model assumption), which results in directing more flows to that area. The flow depth in the Proposed condition ranges between 0 ft to approximately 6 ft as shown in Figure 9.

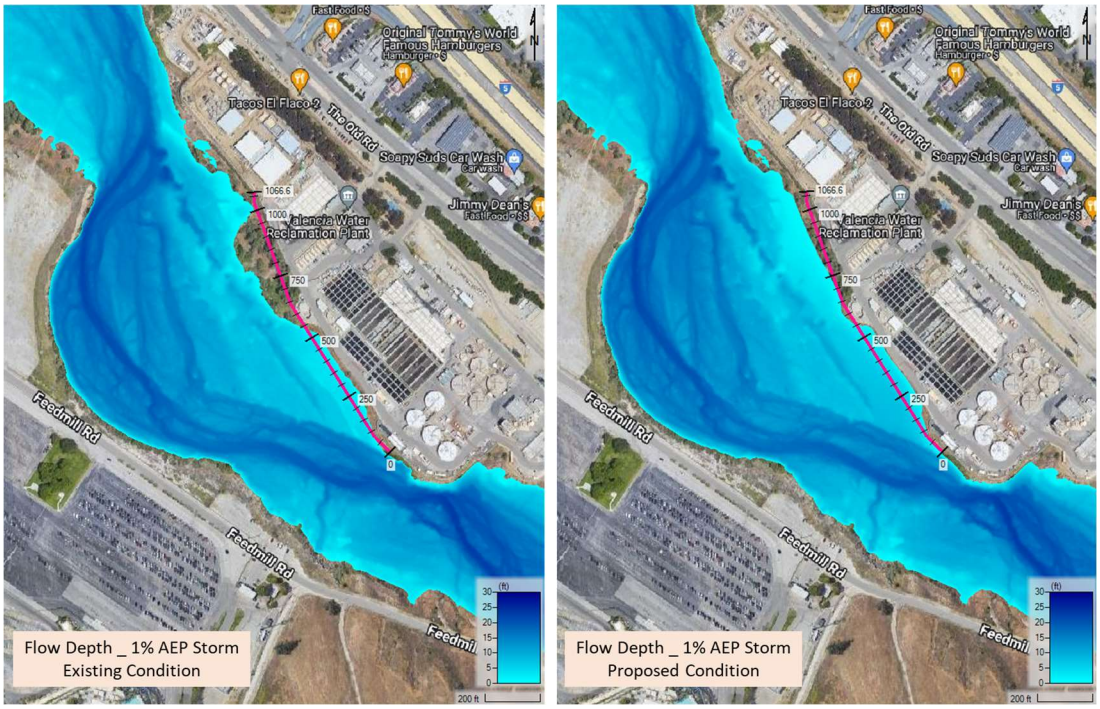


Figure 8. Flow Depth comparison, Existing condition vs Proposed condition (plan view) 1% AEP storm.

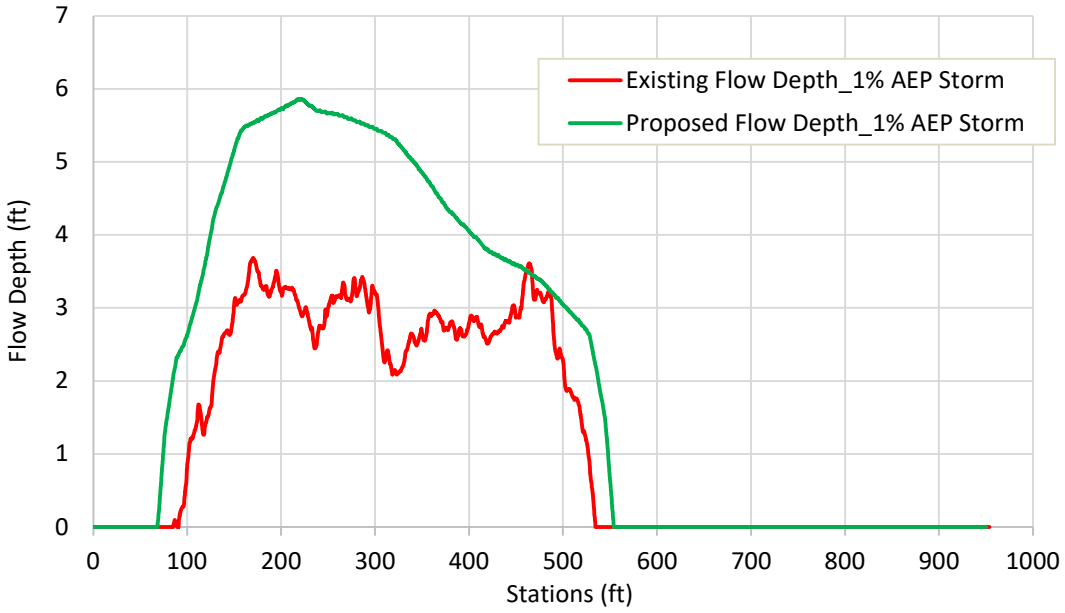


Figure 9. Flow depth along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm.

However, during the Capital Flood model simulation, the flow overtops the riverbanks upstream of the proposed wall to the eastern overbank area and downstream of the proposed wall to the western overbank area in both Existing and Proposed condition scenarios as shown in Figure 10. The overtopped flow to the eastern overbank area inundates a portion of the VWRP with a water depth of less than 0.5 ft.

The flow depth near the proposed wall during the Capital Flood simulation ranges between 0.5 ft to approximately 11.5 ft in the Existing condition and ranges between 3 ft to approximately 12.5 ft in the Proposed condition. The flow depth increases in the Proposed condition due to assumed scour of the vegetated layer, which results in directing more flows to that area. The flow depth along the proposed wall in the Existing and Proposed condition scenarios are shown in Figure 11.

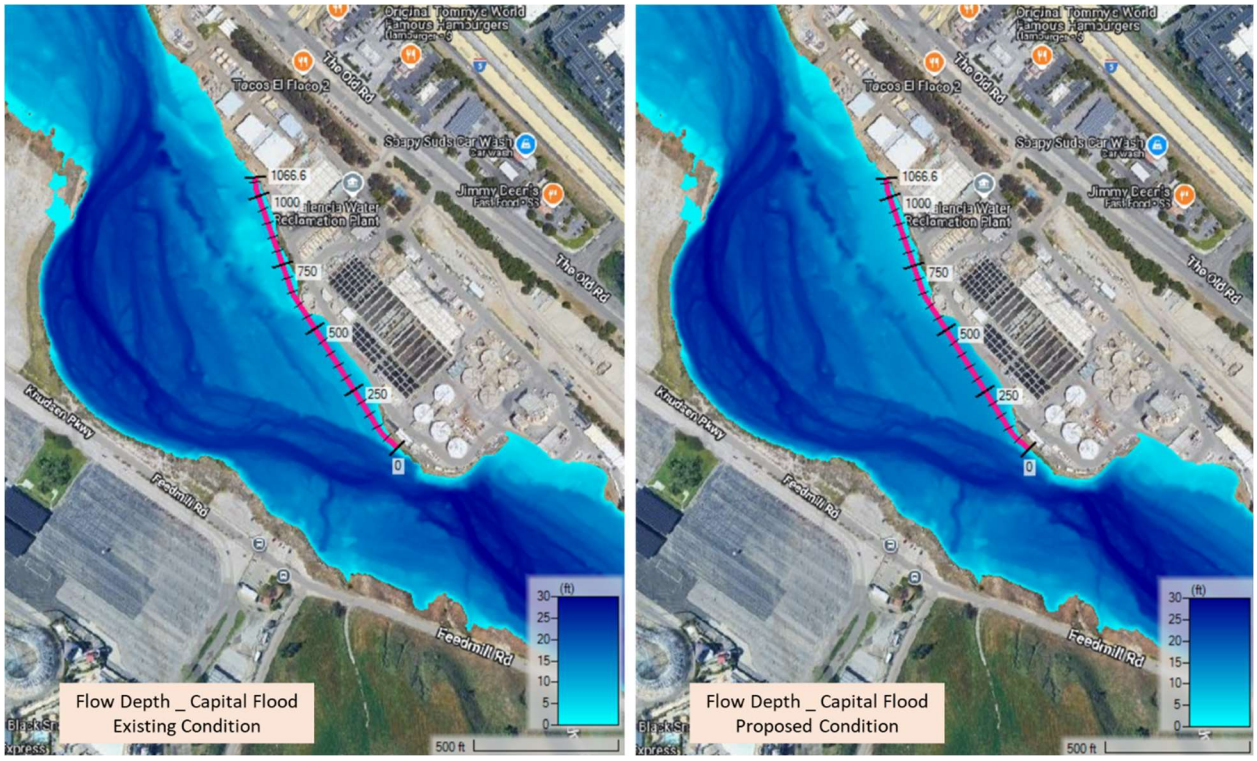


Figure 10. Flow Depth comparison, Existing condition vs Proposed condition (plan view) Capital Flood.

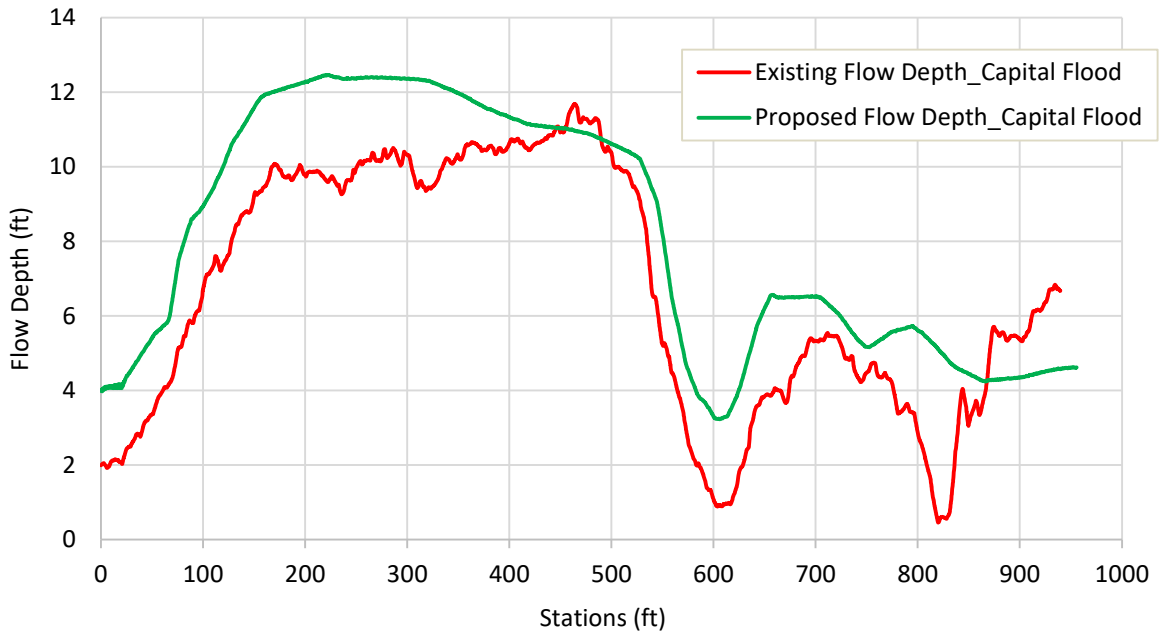


Figure 11. Flow depth along the proposed wall, Existing condition vs Proposed condition _ Capital Flood.

2.3.3 Comparison of Flow Velocity

Model results indicates that the analyzed reach of the river will be exposed to high flow velocities during the simulated scenarios. Flow velocities as high as 16 fps was found in the Existing and Proposed conditions during the 1% AEP storm simulations as shown in Figure 12. However, maximum velocity was less than 7 fps near the proposed wall in both conditions (Figure 13). Velocities in the Proposed condition were slightly higher (about 1 fps) compared to the velocities in the Existing condition.

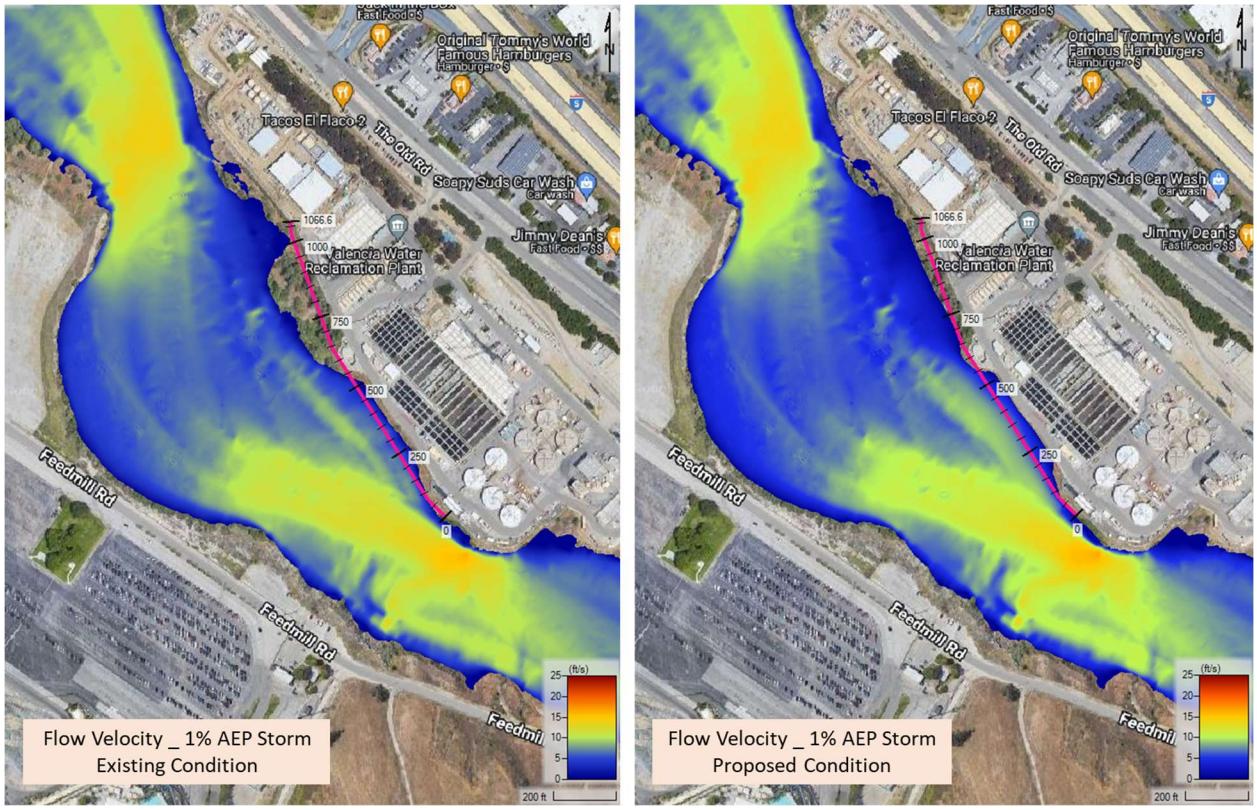


Figure 12. Flow Velocity comparison, Existing condition vs Proposed condition (plan view) _1% AEP storm.

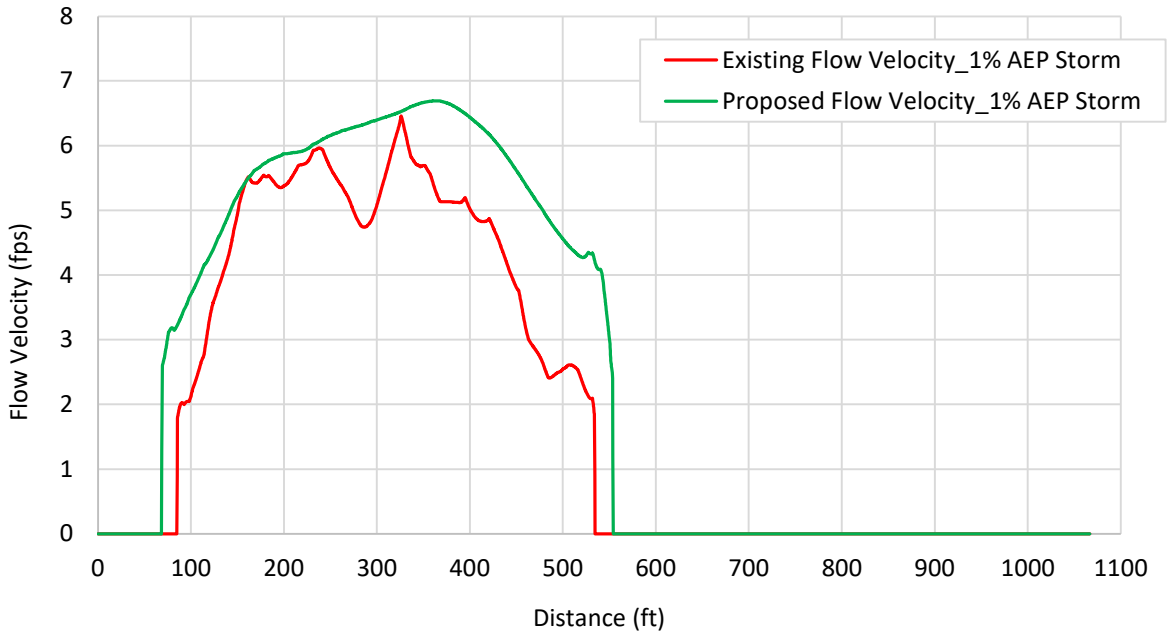


Figure 13. Flow Velocity along the proposed wall, Existing condition vs Proposed condition _ 1% AEP storm.

Model results indicate that during the Capital Flood model simulation, flow velocity as high as 22 fps was found upstream of the proposed wall in both existing and proposed conditions as shown in Figure 14. However, near the proposed wall, the assumed scour of the vegetated soil layer resulted in lowering of the ground elevation by few feet. This change in ground elevation resulted in directing more flows towards this area and caused a significant localized change in flow velocity. Change in the velocity, up to approximately 4 fps, was found when results from Capital Flood simulations of the Proposed and Existing condition scenarios were compared (Figure 15). Along the proposed wall, maximum flow velocity during the Capital Flood simulations was approximately 8 fps in the Existing and the Proposed condition scenarios (Figure 16).

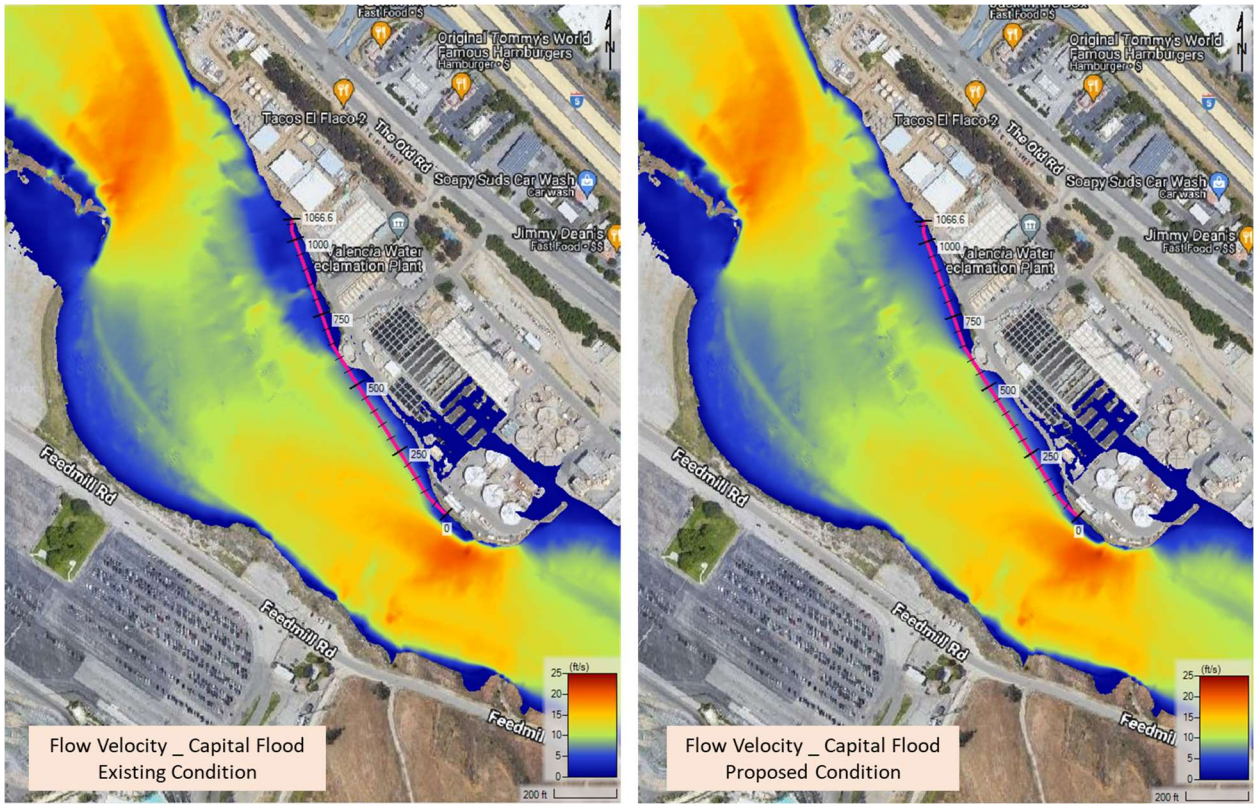


Figure 14. Flow Velocity comparison, Existing condition vs Proposed condition (plan view) _Capital Flood.



Figure 15. Change in Flow velocity (plan view) _Capital Flood (Change = Proposed velocity-Existing Velocity, i.e., positive values (red color) mean velocity increase in the proposed condition, while negative values (blue color) mean velocity decrease in the proposed condition).

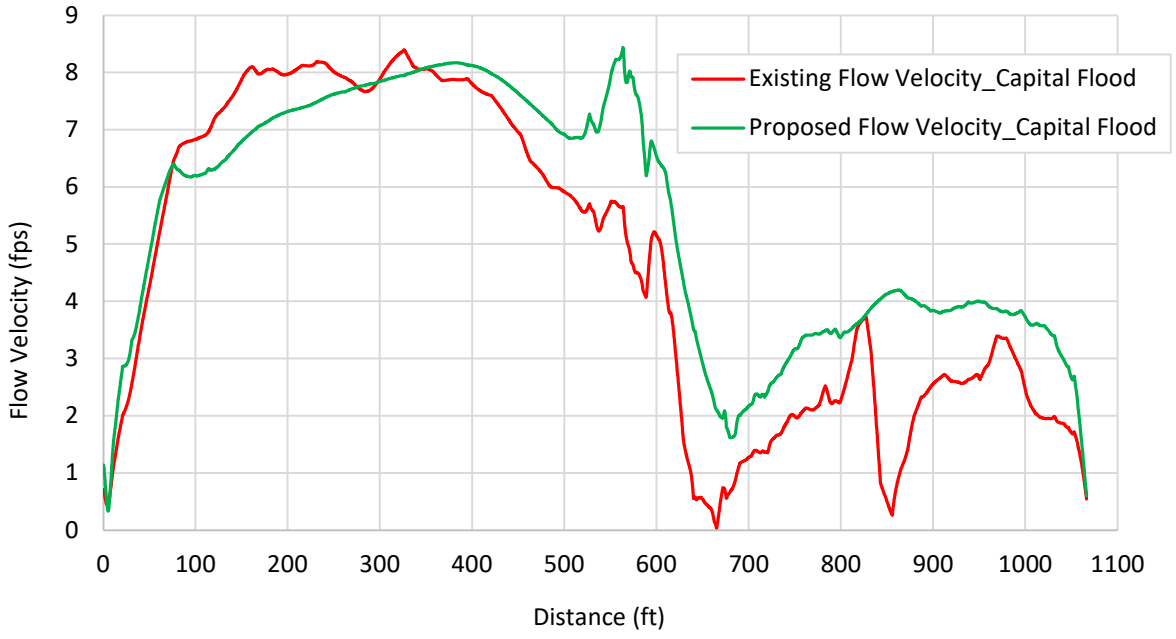


Figure 16. Flow Velocity along the proposed wall, Existing condition vs Proposed condition _ Capital Flood.

3. RIPRAP/LAUNCHABLE ROCK CALCULATION

To protect the existing MSE wall at the transition area, i.e., near the upstream end of the proposed wall to the existing rocks, it is recommended to install a layer of launchable stone under the existing grade. Mitigating riverbed erosion near structures often involves deploying launchable stone. This approach is to place an excess amount of riprap rocks where scour is expected. As scour occurs beneath the riprap section, the rocks gradually shift or launch downslope, providing protection against undermining. Figure 17 shows a typical section of launchable stone proposed at the upstream end of the proposed wall.

For the areas between the proposed wall and the existing MSE wall (Figure 1), installing a layer of riprap is recommended. Using the results obtained from the hydraulic model, Geosyntec conducted an analysis to determine the appropriate stone size and layer thickness of the rocks needed to withstand the flow forces and mitigate bed scour during heavy storms. A typical section of riprap proposed in between the two walls is shown in Figure 18. The design procedure and the results are detailed in the following sections.

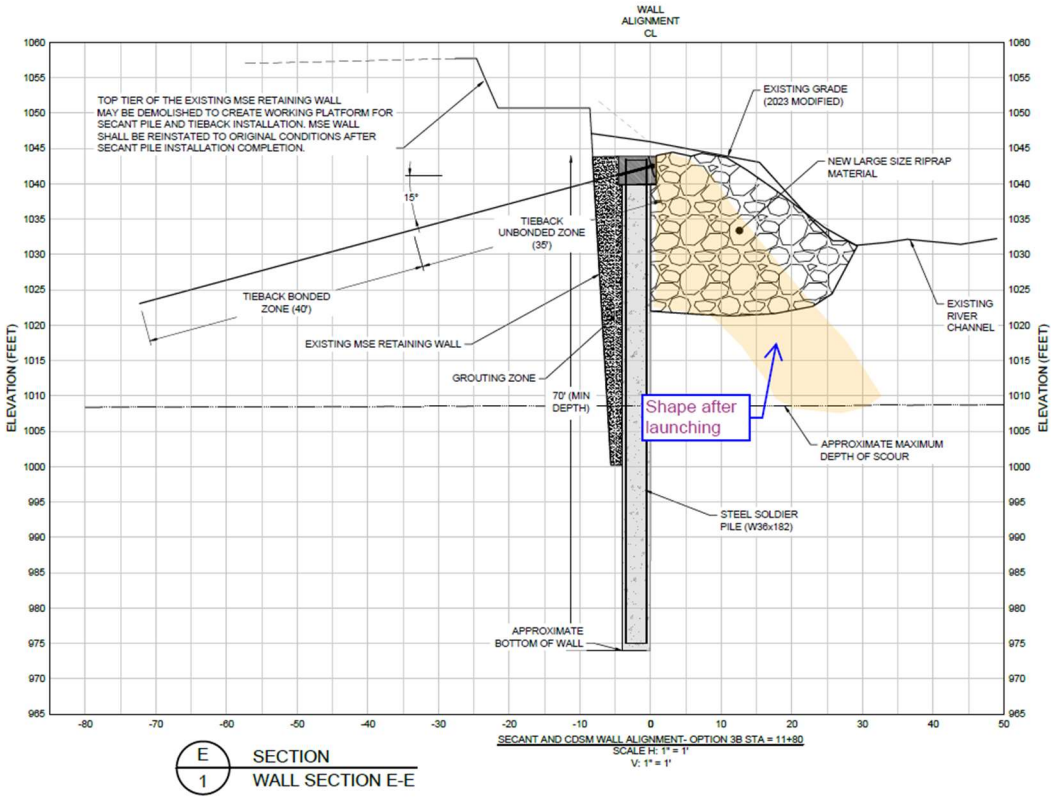


Figure 17. Typical section of riprap protection on the upstream end of the wall.

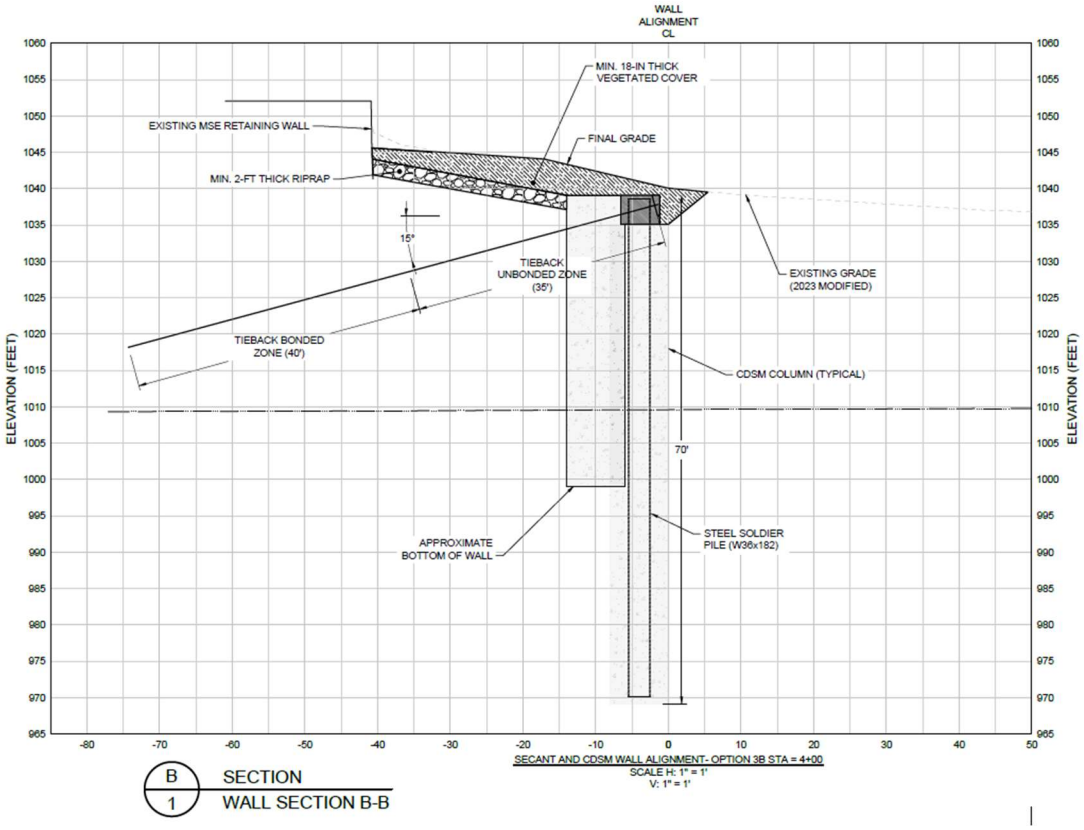


Figure 18. Typical section of riprap zone between the proposed wall and the existing MSE wall.

3.1 Design Approach

Launchable and Riprap rock size and layer thickness were determined using the "Riprap and Scour Calculator" tool in HEC-RAS (USACE, 2023). Typically, the user selects a design cross section at the area of interest and a reference cross section upstream of the area of interest (within a straight region upstream in the case of curved reaches) and the tool retrieves cross-sectional averaged flow parameters (such as flow depth and flow velocity) at these cross sections directly from the hydraulic model. However, the developed hydraulic model for this analysis is a two-dimensional model, i.e., there are no cross sections in the model. Therefore, cross-sectional averaged flow parameters at the interested areas were calculated and manually entered into the tool.

To perform the analysis, two sets of cross-sectional averaged flow parameters were calculated. The first set of the cross sections was selected near the transition area to be used for launchable stone calculation and the second set of the cross sections was selected further downstream to be used for the riprap calculation. Rock size and layer thickness were estimated using calculated flow parameters for each area separately. Volume of the launchable stone and dimension of their installation were then calculated using the estimated riprap layer thickness at the transition area.

3.2 Input Data

For the purpose of the analysis, four cross sections were drawn across the main channel as shown in Figure 19 to represent the two sets of the design and reference cross sections required for the calculations. Figures 20 through 23 show WSEs and Figures 24 through 27 show flow velocities along these cross sections. Flow parameters along the reference and design cross sections from the results of the Proposed-Capital Flood model simulation were used in the riprap calculation tool since this model simulation represents the future condition of the site, and it was resulted in higher cross-sectional averaged flow velocities than the 1% AEP simulations.

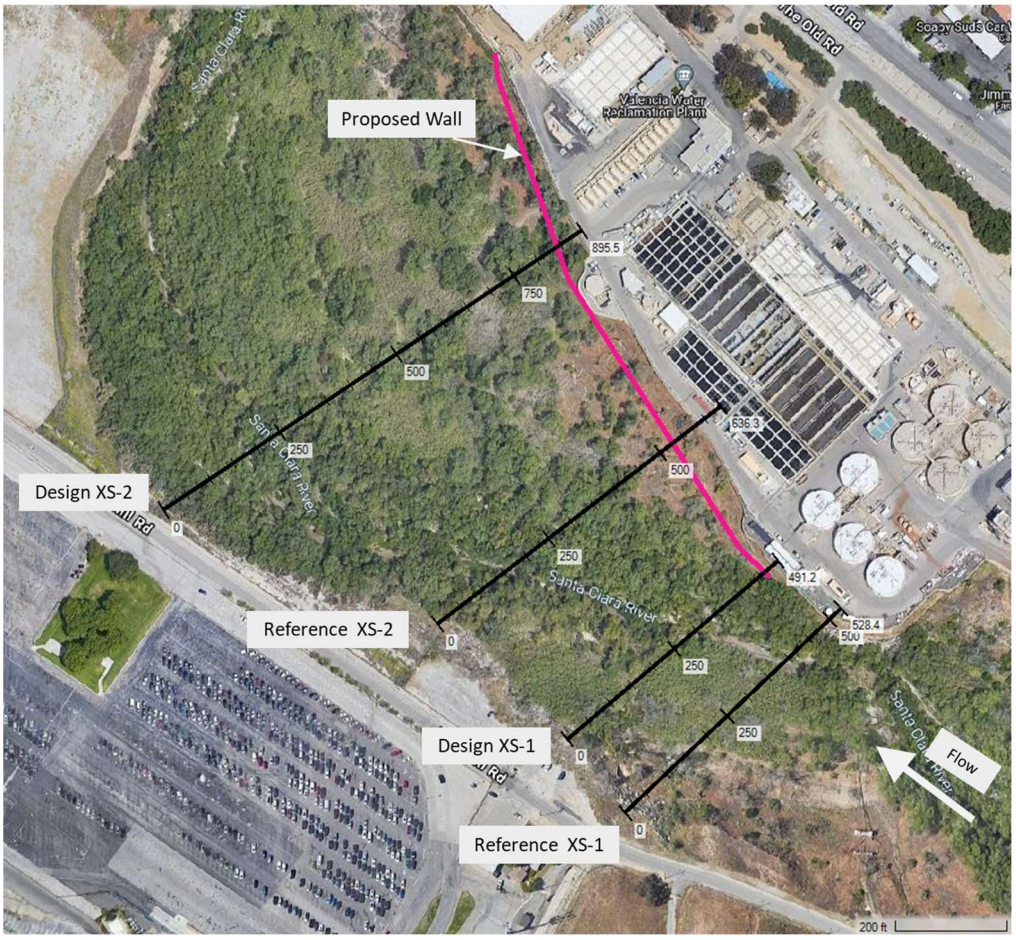


Figure 19. Profile lines across the channel.

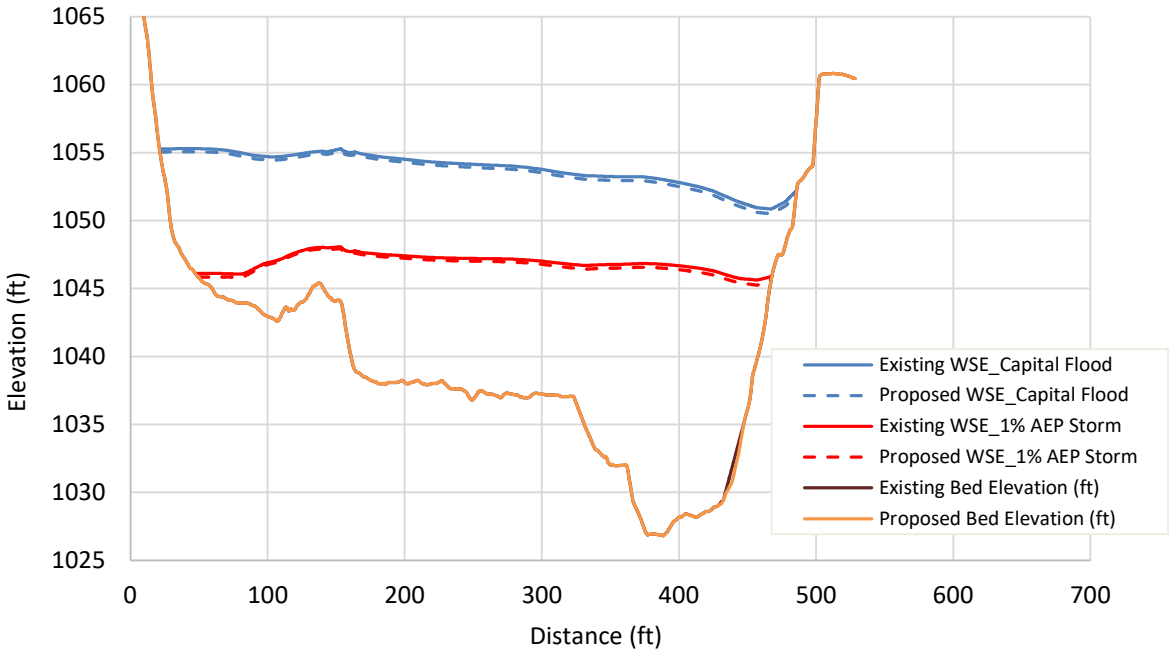


Figure 20. WSEs along Reference XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm.

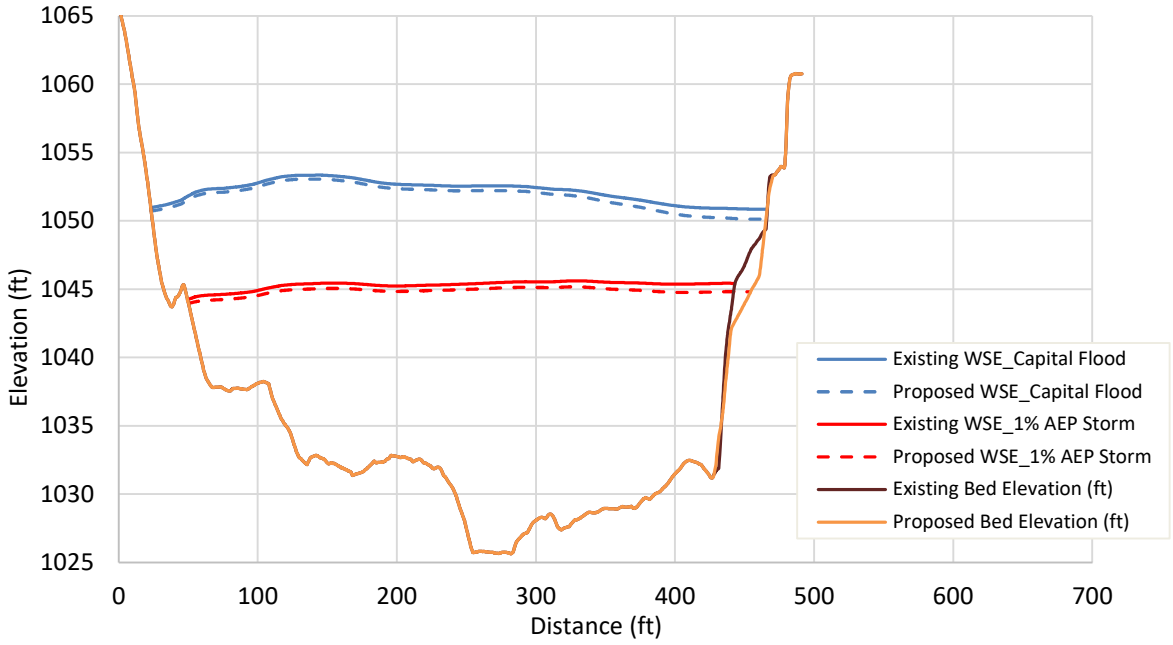


Figure 21. WSEs along Design XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm.

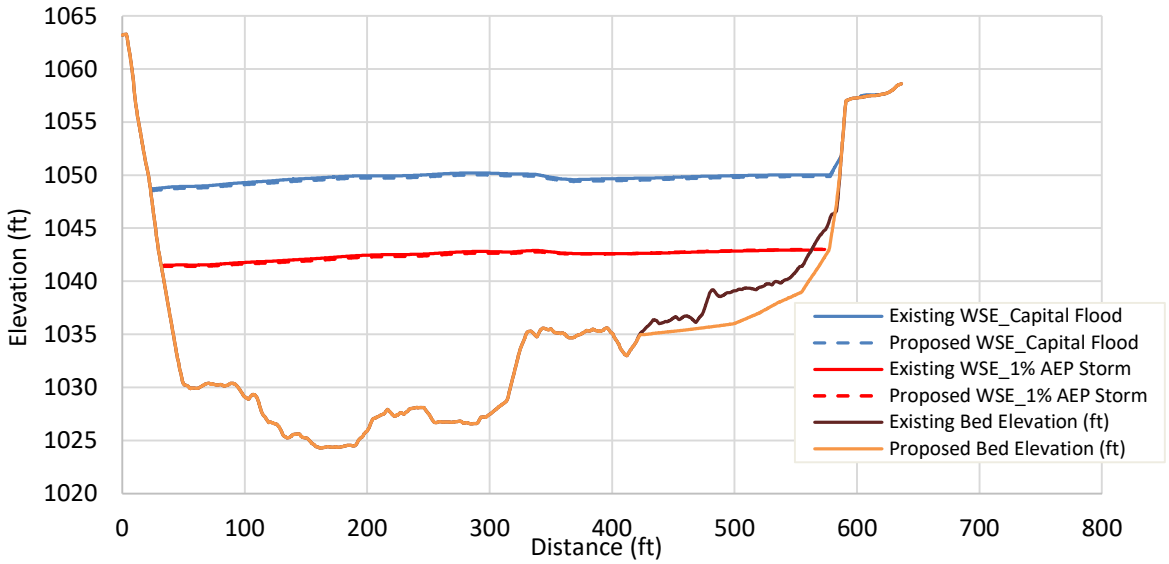


Figure 22. WSEs along Reference XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm.

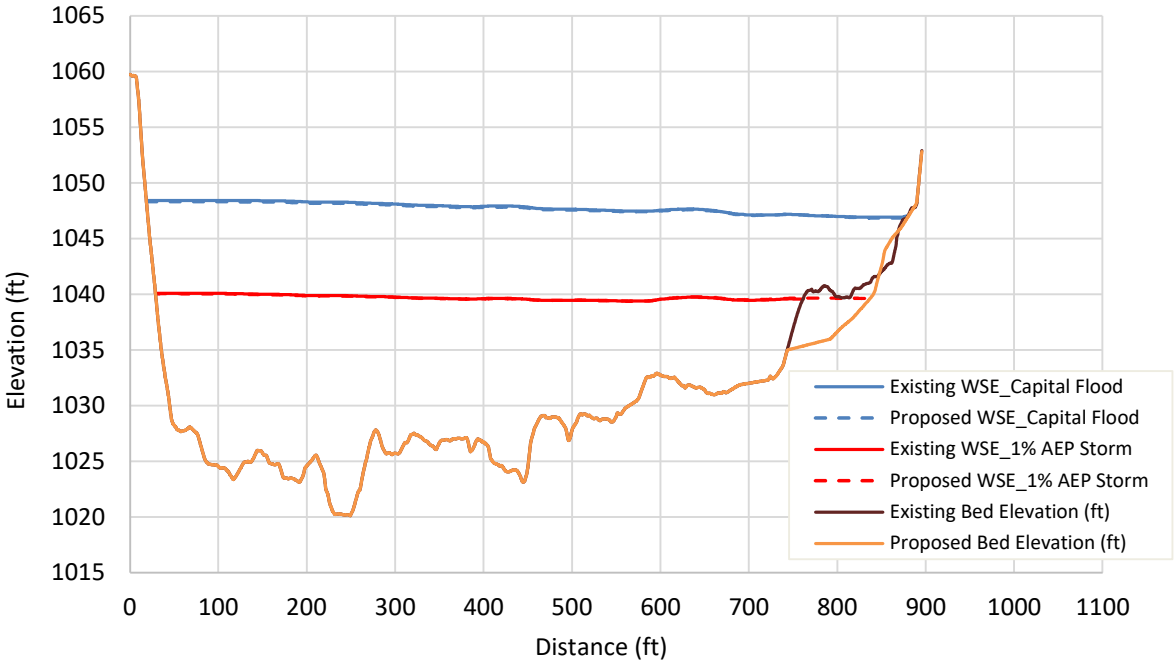


Figure 23. WSEs along Design XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm.

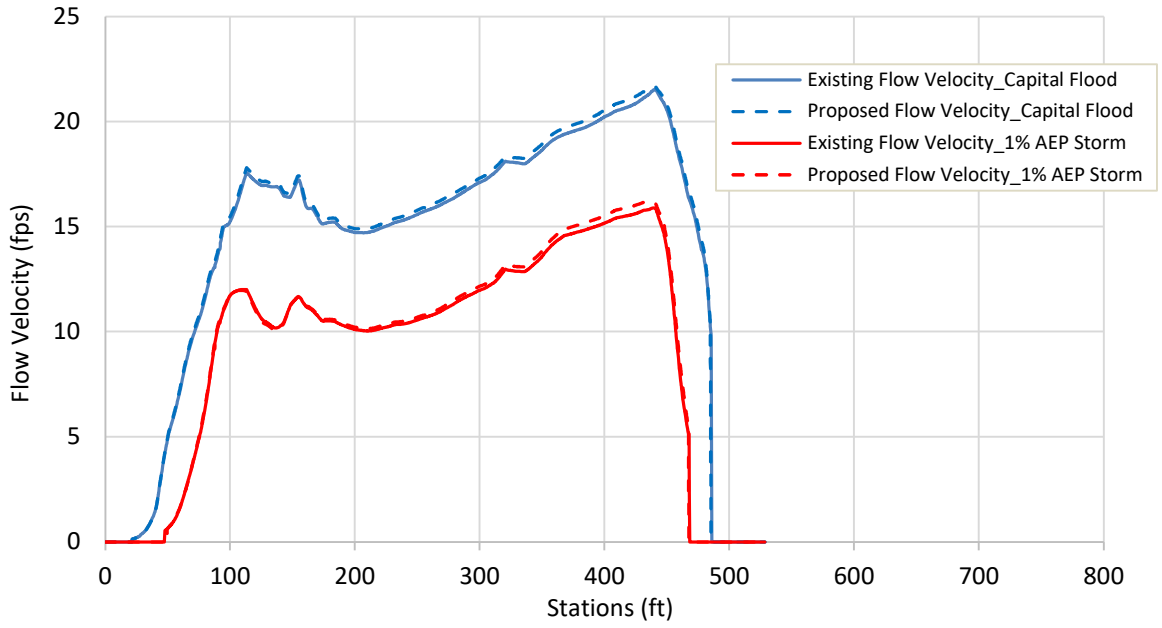


Figure 24. Flow Velocity along Reference XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP storm.

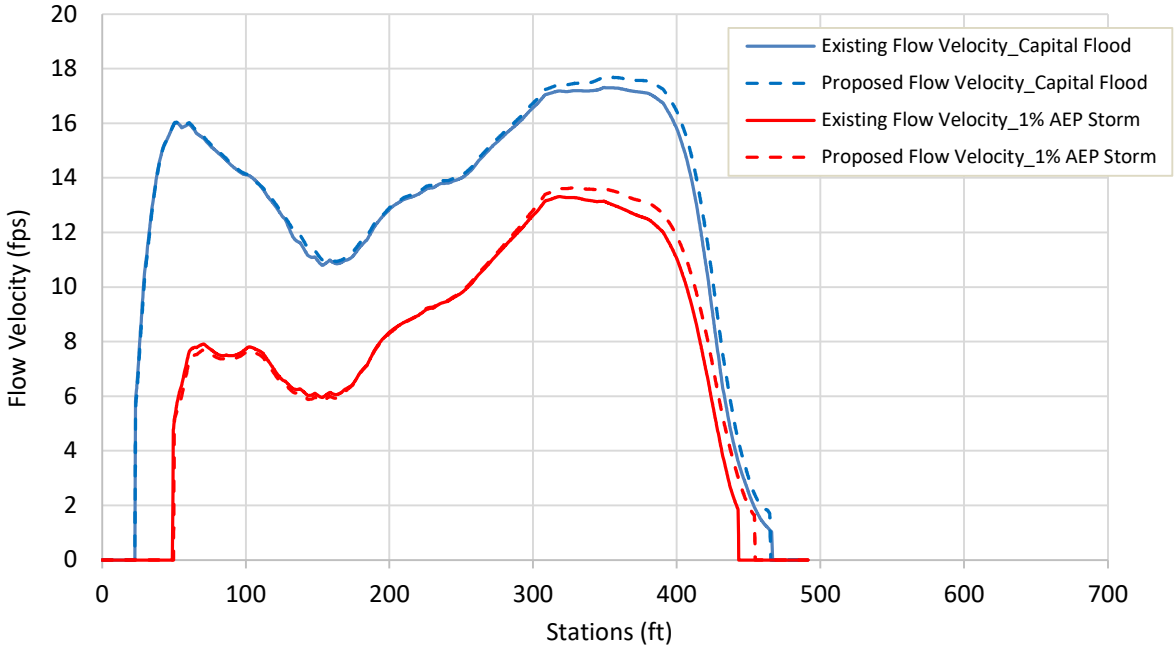


Figure 25. Flow Velocity along Design XS-1, Existing condition vs Proposed condition _ Capital Flood and 1% AEP.

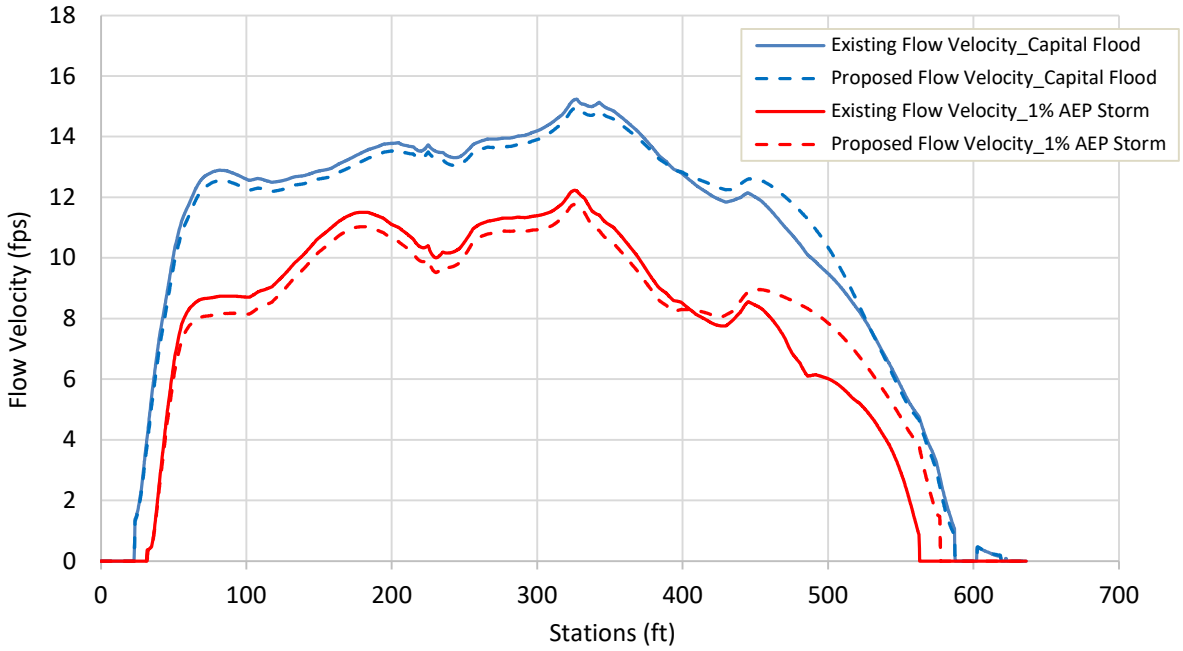


Figure 26. Flow Velocity along Reference XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP.

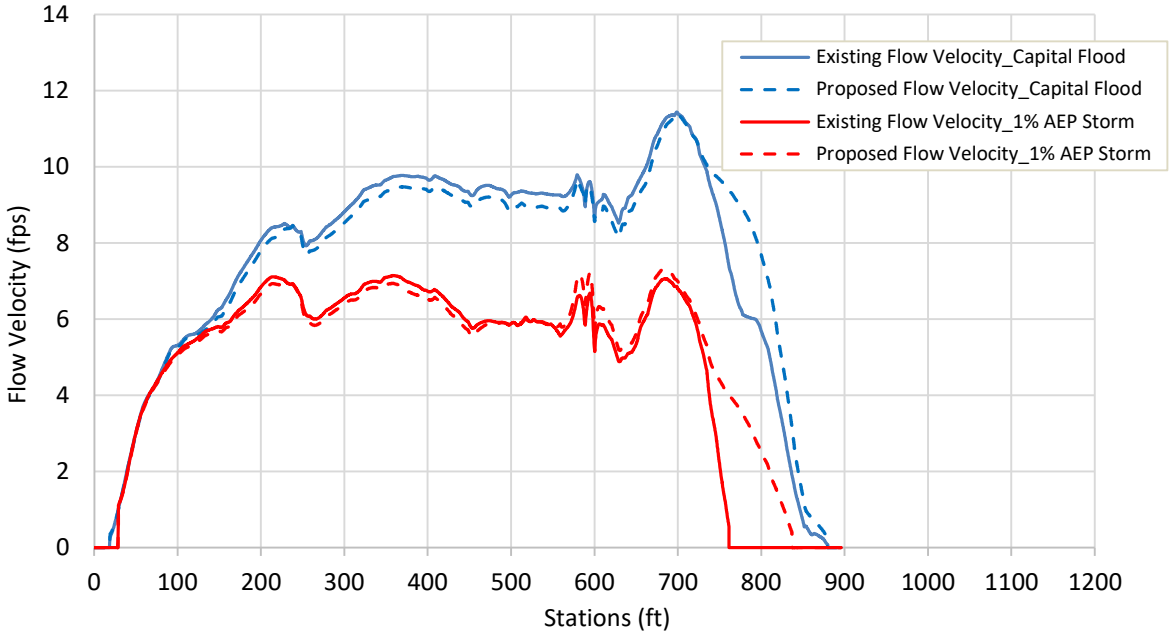


Figure 27. Flow Velocity along Design XS-2, Existing condition vs Proposed condition _ Capital Flood and 1% AEP.

For the launchable stone calculations, at the transition area near the upstream end of the proposed wall, average flow velocities along the reference and design cross sections were 15.9 fps and 13.7 fps, respectively and average flow depths along the reference and design cross sections were 15.3 fps and 18.5 fps, respectively. For the riprap calculation, for the areas between the walls, average flow velocities along the reference and design cross sections were 11.8 fps and 7.7 fps, respectively and average flow depths along the reference and design cross sections were 17.7 fps and 18.1 fps, respectively.

Other required inputs to the riprap calculation tool are the reach's radius of curvature, the stones unit weight and angle of repose, and safety factor. Radius of curvature for the analyzed reach was estimated from Google Earth to be approximately 5000 ft. Rock unit weight of 150 lb/cu.ft and angle of repose of 40 degrees were assumed and used in the calculations. Sensitivity analysis conducted using different unit weights and different angles of repose showed that their impacts on the overall design procedure were minimal. As the design approach is based on an empirical equation that was developed based on experimental data, it is recommended to apply a minimum safety factor of 10% per Engineering Manual (EM)-1110-02-1601 (USACE, 1994) to account for the uncertainty associated with the approach. However, in this project, to account for the uncertainty associated with the input data as well, a higher safety factor of 20% was applied. The input data to the riprap calculation tool is summarized in Table 2.

Table 2. Summary of input data to the Riprap calculation tool

Input Variables	**Values**			
Radius of curvature (ft)	5000			
Rock unit weight (lb/cu.ft)	150			
Angle of repose (degree)	40			
Safety Factor	1.2			
	Reference XS-1	Design XS-1	Reference XS-2	Design XS-2
Cross-sectional averaged flow velocity (fps)	15.9	13.7	11.8	7.7
Cross-sectional averaged flow depth (ft)	15.3	18.5	17.7	18.1

3.3 Results

For the transition area near the upstream end of the proposed wall, the results of the analysis (Figure 28) show that the gradation of the rocks needs at the minimum to follow the gradation described in EM1601-12 (Table 3). The equivalent Federal Highway Agency (FHWA) riprap class to the EM1601-12, based on the D_{50} rock size, is the FHWA Class 8 riprap shown in Table 4.

For the area between the two walls, the results of the analysis (Figure 29) show that the gradation of the riprap rocks needs to follow the gradation described in EM1601-06 riprap type (Table 5). The equivalent FHWA riprap class to the EM1601-06, based on the D_{50} rock size, is the FHWA Class 4 gradation shown in Table 6. For the comparable D50 rock size, FHWA classes require thicker layers compared to the EM1601 gradations. In this analysis, it is recommended to follow the FHWA riprap class gradations. A summary of the design and recommended riprap types are shown in Table 7.

Table 3. Proposed riprap rock gradation for the transition area

EM1601-12 Gradation				
d	Size (min) (in)	Size (max) (in)	Weight Min (lb)	Weight Max (lb)
15	19.1	25.4	315	744
30	23.4		582	
50	28.1	32.0	1005	1490
90	33.8		1761	
100	35.4	48.0	2010	5027

Table 4. Equivalent FHWA riprap rock gradation for the transition area

FHWA Riprap Class 8				
D_x	Size (min) (in)	Size (max) (in)	Weight Min (lb)	Weight Max (lb)
15	19	25	560	1250
50	28	35	1800	3500
85	38	47	4450	8450
100	54	66	12800	23400

Table 5. Proposed riprap rock gradation for the area between the two walls

EM1601-06 Gradation				
d	Size (min) (in)	Size (max) (in)	Weight Min (lb)	Weight Max (lb)
15	9.6	12.7	40	93
30	11.6		72	
50	14.0	16.0	126	186
90	16.8		216	
100	17.7	24.0	252	628

Table 6. Equivalent FHWA rock gradation for the area between the two walls

FHWA Riprap Class 4				
D_x	Size (min) (in)	Size (max) (in)	Weight Min (lb)	Weight Max (lb)
15	9	12	59	140
50	14	17	220	400
85	19	23	560	990
100	27	33	1600	2900

Table 7. Summary of the design and recommended riprap rock gradations and layer thickness

Riprap Gradation		Segment 1 (Transition Area)	Segment 2 (Area Between the Walls)
USACE EM Gradation	Design Rock Gradations (Per USACE EM-1110-2-1601)	EM1601-12	EM1601-06
	Rock size (D_{50}) (in)	28 - 32	14 - 16
	Design layer thickness (D_{100}) (in)	36 - 48	18 - 24
Recommended FHWA Gradation	Rock Classes (Per FHWA Standard Specifications)	8	4
	Rock size (D_{50})	28 - 35	14 - 17
	Layer thickness (D_{100}) (in)	54 - 66	27 - 33

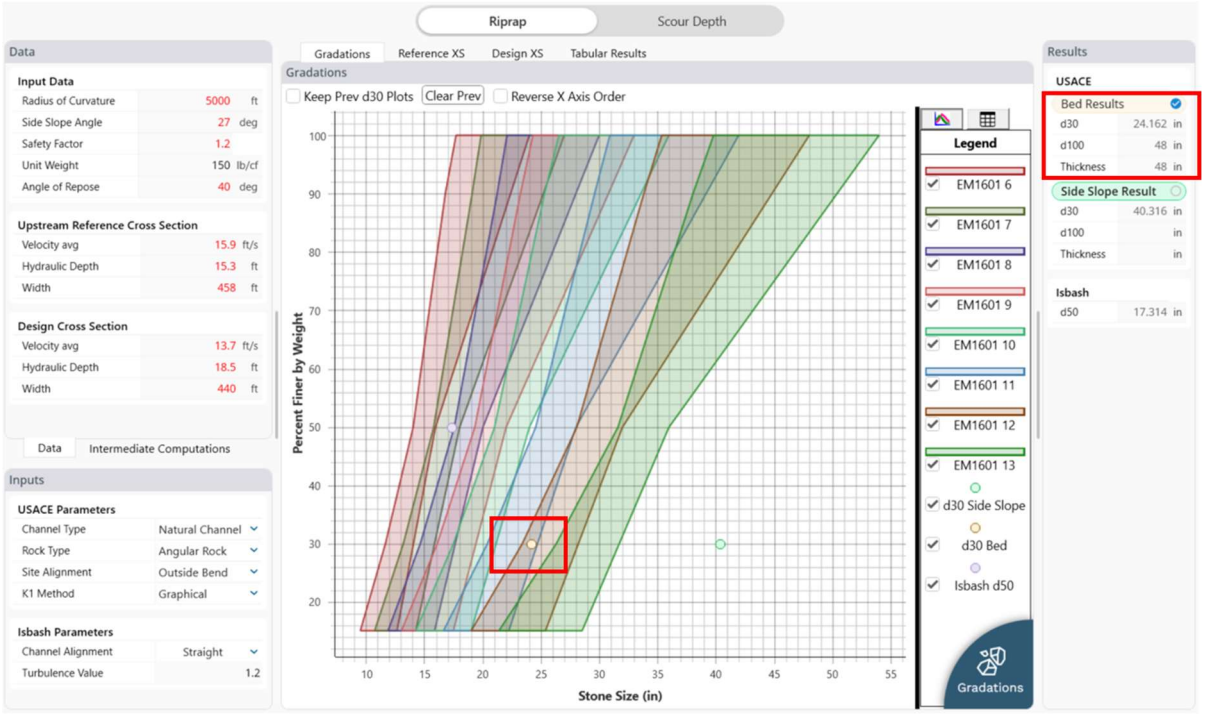


Figure 28. Results of the riprap calculation for the transition area.

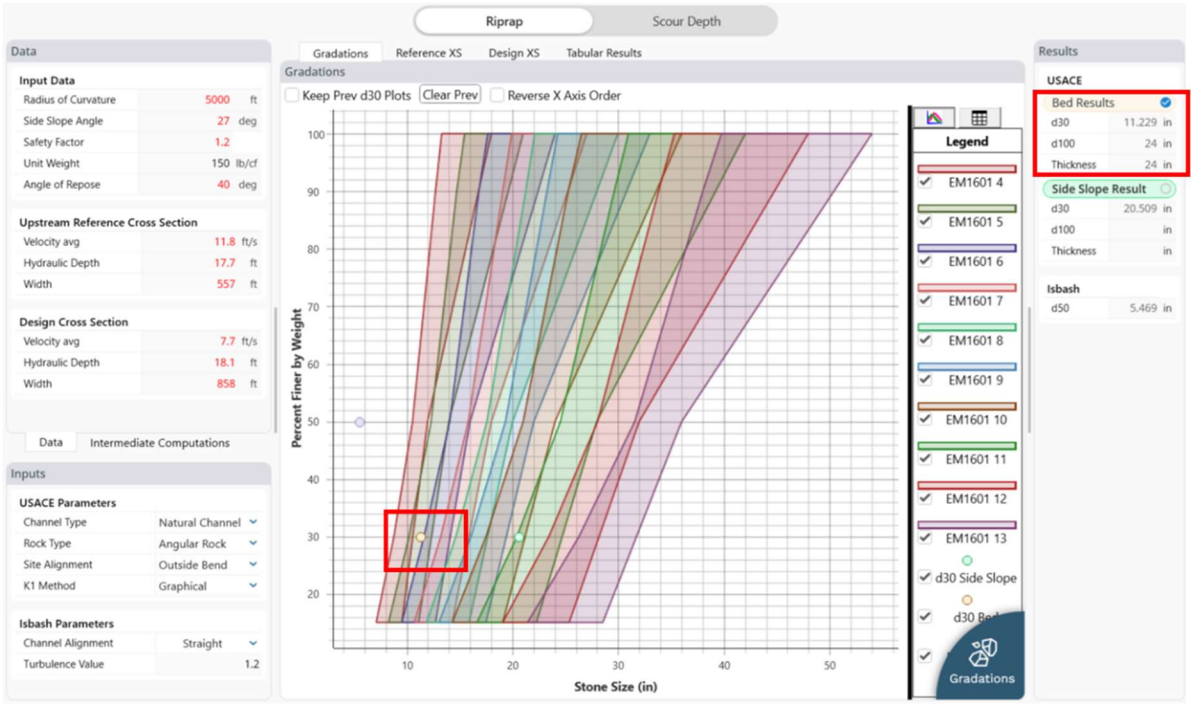


Figure 29. Results of the riprap calculation for the area between the walls.

Using the recommended FHWA Class riprap layer thickness, volume of the launchable rocks for the transition area and the appropriate dimensions of their installation were calculated per the USACE Technical Report (HL-95-11) (USACE, 1995) as shown in the Table 8. A schematic of launchable stone installation is shown in Figure 30.

Table 8. Dimension and volume of launchable rocks

Potential Max. Scour Depth (ft)*	Riprap Layer Thickness (ft)	Volume of launching stone per linear foot of the wall (ft^3)	Dimensions of stone section before launching		Volume of launching stone per linear foot of the wall ($yard^3/ft$)
			Height (ft)	Width (ft)	
18.0	5.5	332.1	14	24	12.5

* Potential max scour depth obtained from PACE report (PACE, 2016)

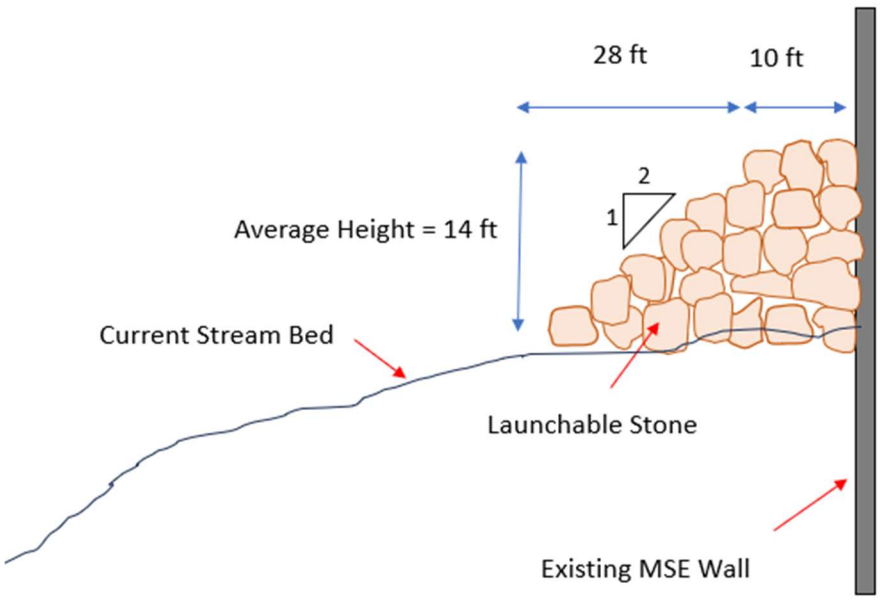


Figure 30. Schematic showing the installation of the launchable stone at the transition area in front of the existing MSE wall (Average width is 24 ft, a 2:1 slope is assumed for the stone pile) (not to scale).

3.4 Impacts of launchable Stone Installation

To assess the impacts of the recommended large riprap protection (also referred to as launchable stone) on the channel hydraulics at the launchable stone installation area and downstream of it, a comparison between Existing and Final conditions was performed. Final condition surface was prepared by modifying the DEM of the existing condition described in Section 2 to represent the installation of launchable stone as recommended. Figure 31 shows the modified terrain with the launchable stone installed. This will be only area of the project that will have significant topographic change between the existing and final post construction conditions. Figure 32 shows a cross-section profile of the stream bed comparing before and after installation of the launchable stone.

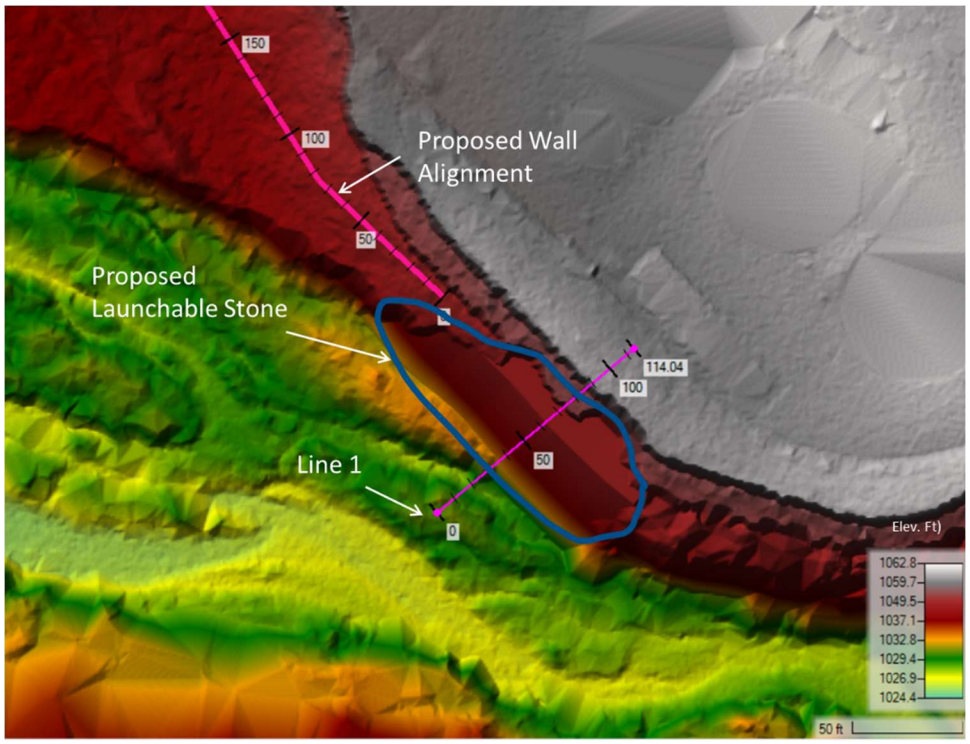


Figure 31. Modified terrain represents the installation of the launchable stone

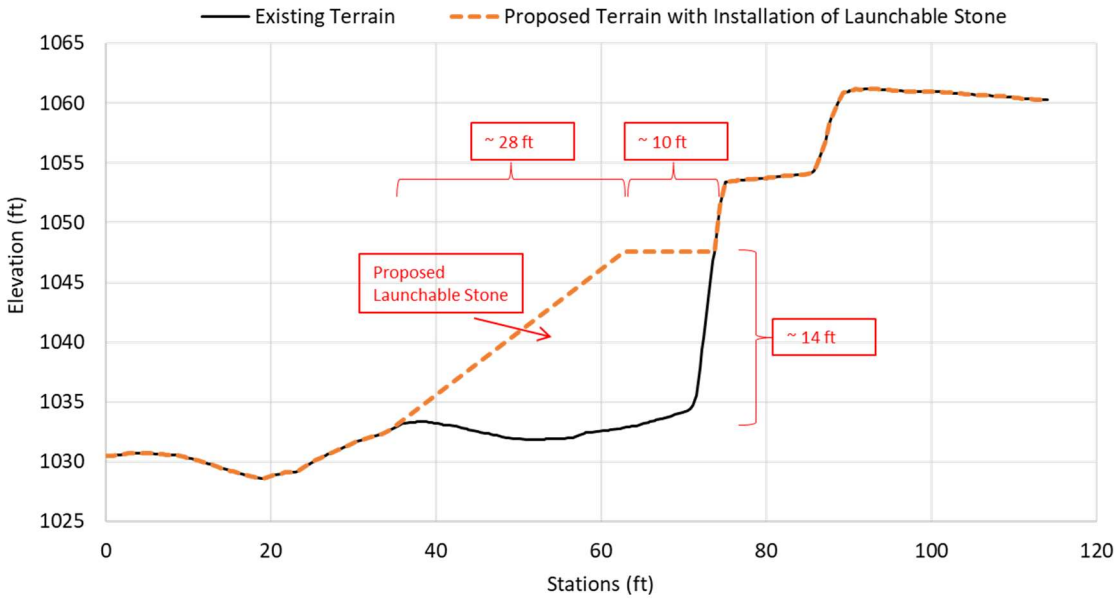


Figure 32. Comparison of stream bed elevation along Line 1 in Figure 30 _ Existing condition Vs. proposed condition after installation of the launchable stone.

A new model geometry was created using the new surface and the hydraulic model was re-run using the capital flood and the 1% AEP (100-year) flood hydrographs. To assess the impacts of the recommended launchable stones, two lines were drawn as shown in Figure 33, and results from the new model runs were compared to the ones from the existing condition model runs along these two lines. Line 2 was drawn near the area where the launchable stone will be installed and Line 3 was drawn about 170 ft downstream of the launchable stone area (near station 100 of the proposed wall).

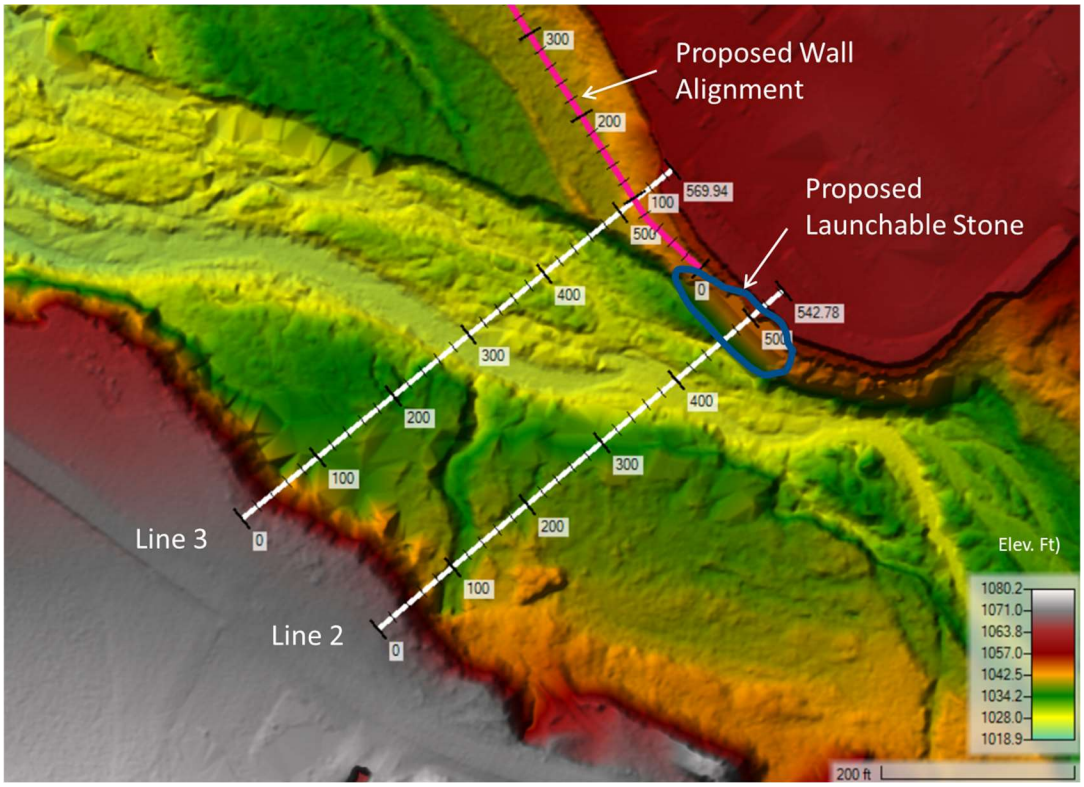


Figure 33. Drawn Lines for comparison purposes; Line 2 at the area of recommended launchable stone, Line 3 about 170 ft downstream of Line 2.

Figures 34 and 35 show a comparison between flow velocity during capital flood and 1% AEP flood hydrographs along Line 2 and Line 3, respectively. Figures 36 and 37 show a comparison between water surface elevations during capital flood and 1% AEP flood hydrographs along Line 2 and Line 3, respectively.

The results show that there is some local impact due to the installation of the launchable stone near that area (right end of data on Figure 34), but overall, the impact is negligible. The results also show that the impacts of the recommended launchable stone on the channel hydraulics downstream of where the launchable stone is recommended (Figure 35) is insignificant.

Comparison of water elevation along the two lines presented in Figures 36 and 37 show that the proposed addition of rock riprap does not result in measurable change in the water surface elevation either at the location of the rock installation or downstream.

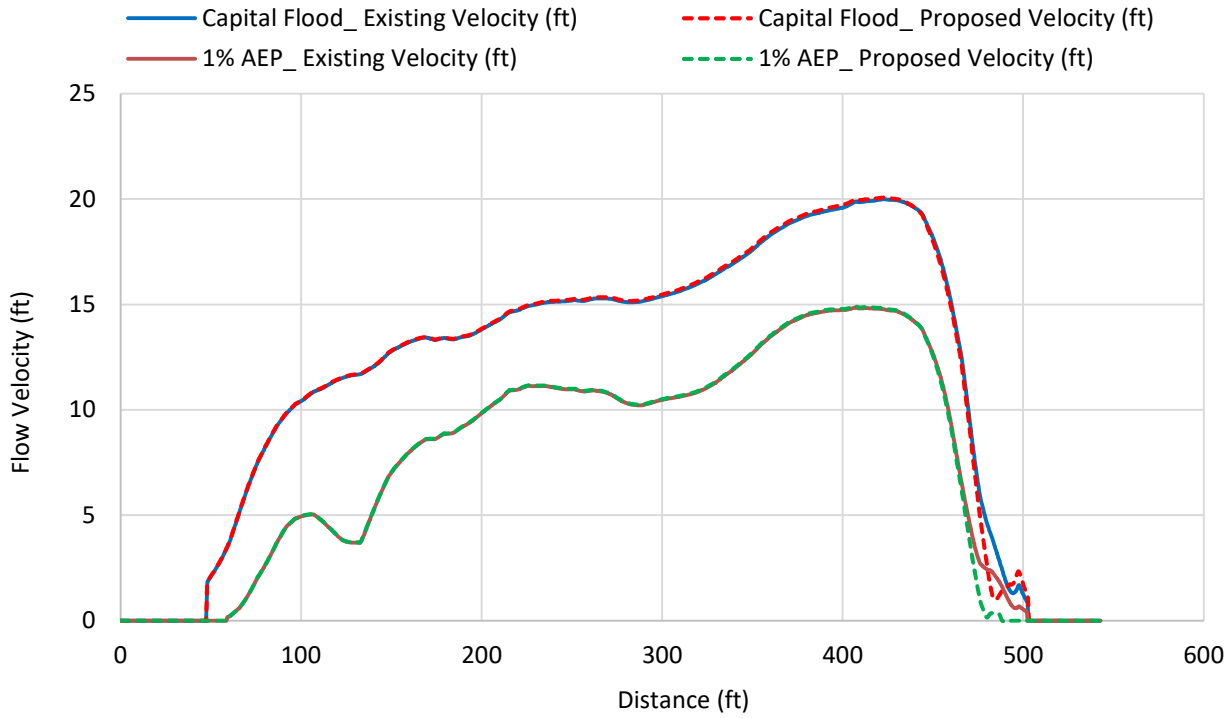


Figure 34. Flow velocity comparison along Line2

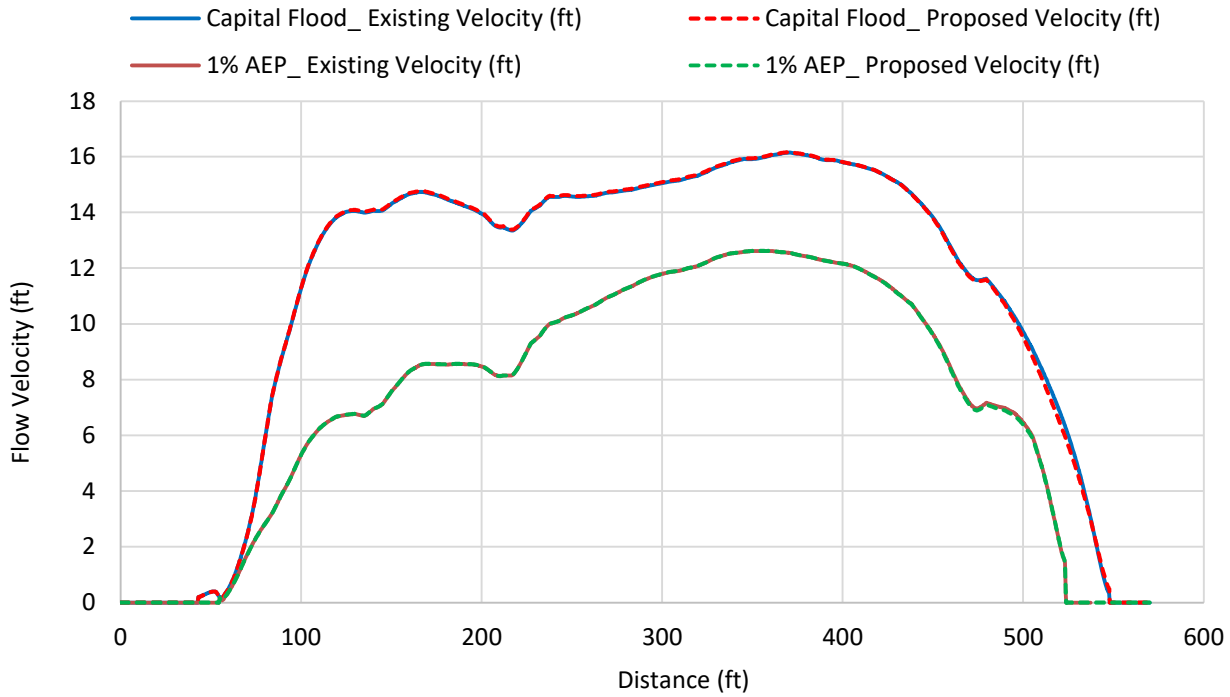


Figure 35. Flow velocity comparison along Line 3

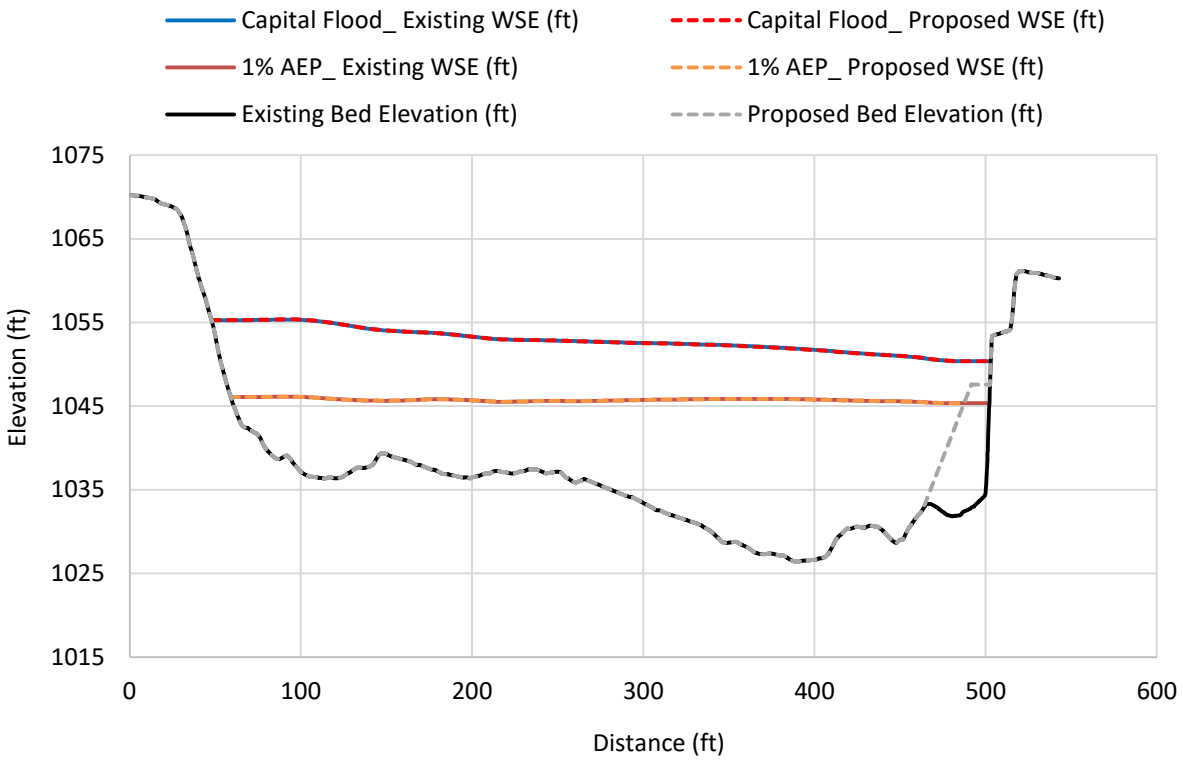


Figure 36. Water surface elevation comparison along Line 2

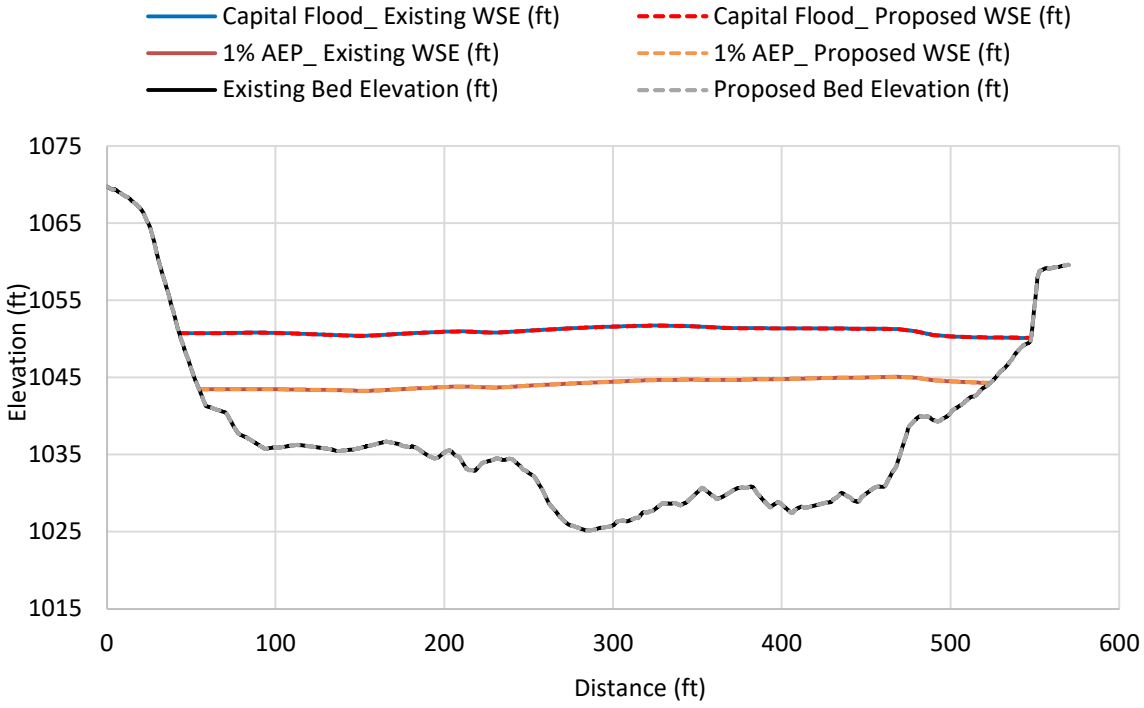


Figure 37. Water surface elevation comparison along Line 3

4. CONCLUSIONS

Based on the hydraulic model results, velocity as high as 22 fps was observed in the model upstream of the transition area between proposed wall and the existing scour protection rocks. The cross-sectional averaged velocity at the transition area was about 16 fps. Therefore, a layer of launchable stone is recommended to protect the MSE wall at that area. The analysis showed that installing 12 cubic yards of rocks per linear feet of the wall with D_{100} of approximately 5ft and D_{50} of approximately 2.5 ft will protect the wall during the capital floods.

Results from the hydraulics modeling effort comparing Existing and Final conditions reveal that while the installation of large rock riprap for launchable stone might have some minor impacts to flow velocity at the rock riprap location, there is no real measurable impact to modeled flood levels at the rock location and downstream, i.e., the project will not impact nearby hydraulic conditions of the local river.

Additional modeling was performed to account for impact of future major floods and limited scour between the proposed wall and existing MSE wall to protect against the MSE wall undermining. Proposed conditions scenarios during Capital Flood simulations at the area includes scour of the vegetated soil layer and exposure of smaller rock riprap between the new wall and existing MSE wall. The analysis indicates that to protect the area between the proposed wall and the MSE wall against scour, a layer of riprap with D_{100} of approximately 2 ft and D_{50} of approximately 1 ft is required.

The proposed launchable stone and riprap layer need to be monitored and maintained in the long-term, specifically after heavy storms where rocks might move, to replace or add additional rocks if needed.

5. REFERENCES

PACE Advanced Water Engineering. (2016). Valencia WRP Overall Floodplain Hydraulics and Streambed Stability Assessment # A862E. Technical Memorandum.

U.S. Army Corps of Engineers (USACE). 1994. Engineering Manual 1110-2-1601. Hydraulic Design of Flood Control Channels.

U.S. Army Corps of Engineers (USACE). 1995. Technical Report HL-95-11. Toe Scour and Bank Protection Using Launchable Stone.

U.S. Army Corps of Engineers (USACE). 2023. Hydrologic Engineering Center River Analysis System, Version 6.4.1.

U.S. Geological Survey (USGS). 2023. National Land Cover Database (NLCD) 2019 Products

Appendix C
AQ Emissions and Calculations

C-1 Assumptions

Valencia Wall - CalEEMod Assumptions

defaults are in blue

PROJECT CHARACTERISTICS

Location	LA County
Climate Zone	
Land Use Setting	Urban
Start of Construction	2/1/2026
Operational Year	2027
Utility Company	SCE
CO2 intensity	*default*

LAND USE

Land Use	Land Use Subtype	Unit Amt	Size Metric	Lot Ac	SF	Population
Parking	Other Non-Asphalt Surfaces	40.89	1000 sf	3.21	40,892	0

CONSTRUCTION

Construction Phasing

Construction Phase	Start Date	End Date	Days/wk	Total Days
Demolition	2/1/2026	3/30/2026	6	*49*
Grading/Excavation	4/1/2026	8/31/2026	6	*131*
CDSM/Outfall	9/1/2026	10/1/2027	6	*340*
				520

Offroad Equipment

Phase	Equipment Type	Unit Amt	Hours/Day	HP	LF
Demolition	*Rubber Tired Dozers*	*2*	*8*	*defaults*	*defaults*
Demolition	*Concrete/Industrial Saws*	*2*	*8*	*defaults*	*defaults*
Demolition	*Excavators*	*2*	*8*	*defaults*	*defaults*
Demolition	*Backhoe*	*1*	*8*	*defaults*	*defaults*
Demolition	*Generator Set*	*1*	*8*	*defaults*	*defaults*
Grading/Excavation	Excavator	3	8	*defaults*	*defaults*
Grading/Excavation	Grader	1	8	*defaults*	*defaults*
Grading/Excavation	Off-Highway Truck	2	8	*defaults*	*defaults*
Grading/Excavation	Tractor/Loader/Backhoe	1	8	*defaults*	*defaults*
Grading/Excavation	Crane	1	8	*defaults*	*defaults*
CDSM/Outfall	Bore/Drill Rig	2	8	*defaults*	*defaults*
CDSM/Outfall	Cement Batch Plant	1		*defaults*	*defaults*
CDSM/Outfall	Crane	1	*8*	*defaults*	*defaults*
CDSM/Outfall	Excavator	1	*8*	*defaults*	*defaults*
CDSM/Outfall	Grader	1	*8*	*defaults*	*defaults*
CDSM/Outfall	Off-Highway Truck	1	*8*	*defaults*	*defaults*
CDSM/Outfall	Tractor/Loader/Backhoe	2	*8*	*defaults*	*defaults*
Total		25			

Dust from Material Movement

Phase	Material Import (cy)	Material Export (cy)	Size Metric	Acres Graded
Grading/Excavation	6000	0 cy		default | 65.6
CDSM/Outfall	113	19000 cy		default | 170

				Additonal Vendor Trips
Cement	5,000 tons	2500 cy		1
concrete	4,500 cy			3
			Total	4

Demo

Size Metric	Unit Amt	
cy	41	
tons of debris	38.048	*assumed concrete debris: https://cityofwoodland.org/DocumentCenter/View/1054*
truck hauling capacity - Demo	10 cy	
truck hauling capacity - Grading	14 cy	

Trips & VMT

Phase Name	# of worker trips/day	# vendor trips/day	# haul trips (total per phase)	# One way truck trips per phase	Trip length worker (mi)	trip length vendor (mi)	Trip length haul (mi)	Vehicle Class Worker	Vehicle Class Vendor	Vehicle Class Hauling
Demolition	*20*	*0*	58	2	*default*	*default*	*20*	LDA,LDT1,LDT2	HHDT,MHD	HHDT
Grading/Excavation	*20*	*0*	857	8	*default*	*default*	*20*	LDA,LDT1,LDT2	HHDT,MHD	HHDT
CDSM/Outfall	20	8	2730	10	*default*	*default*	*20*			

^Assume two one-way trips for drop off/demo of each heavy piece of equipment,

Architectural Coating

Phase	VOC for Parking Lot Paint	Parking Area
Arch Coating	*default*	*default*

OPERATIONAL - N/A

MOBILE

Vehicle Trips

LU	Wkday Trip Rate	Sat Trip Rate	Sun Trip Rate	Trip Length
default	*default*	*default*	*default*	*default*

Fleet Mix

LU
default

AREA

Hearths

Assume none

Consumer Prods

defaults

Arch Coatings

defaults

Landscape Equip

defaults

ENERGY USE

defaults

WATER AND WASTEWATER

defaults

SOLID WASTE

defaults

OFFROAD EQUIP

none

STATIONARY SOURCES

Emergency Generators / Fire Pumps

Equip Type	# Equipment	Fuel Type	HP	LF	Hours/Day	Hours/Year
None						

Boilers

Equip Type	# Equipment	Fuel Type	Boiler Rating (MMBtu/hr	Heat Input (MMBtu l Heat Input (MMBtu/yr)
None				

MITIGATION MEASURES

Water Exposed Area

3x Per Day

C-2 Air Quality Calculations

Valencia Wall Project
Air Quality Assessment

Batch Concrete Plant Emissions

Emissions calculated for max daily requirement and a maximum year (first year of construction)
for concrete requirements. Concrete would need to be trucked in for the 6 major foundation/footing pours

	max hourly	max daily	annual
Cubic Yards of Concrete	11	89	30,355

The table calculate PM10 emissions based on throughput in cubic yards assuming the following composition of one cubic yard of concrete:

Material Requirements:		
Course Aggegrate:	1,865	lb/CY
Sand:	1,428	lb/CY
Cement:	491	lb/CY
Cement Supplement:	73	lb/CY
Water:	167	lb/CY

Material Requirements	ton/hr	ton/day	ton/yr
Aggregate	10	83	28,306
Sand	8	64	21,673
Cement	3	22	7,452
Cement Supplement	0	3	1,108
water:	1	7	2,532
total	22	180	61,071

Area for storage:	0.03	acre
Control Efficiency for Storage pile:	90%	

Process Name/Description	Process Material	PM10 Emission Factor (lb/ton)	PM2.5 Emission Factor (lb/ton)	Material (ton/day)	Material (tons/yr)	PM10 (lb/day)	PM10 (tons/yr)	PM2.5 (lb/day)	PM2.5 (tons/yr)
Aggregate transfer[1]	aggregate	0.0033	0.0005	83	28,306	0.27	0.05	0.04	0.01
Sand transfer[1]	sand	0.00099	0.00015	64	21,673	0.06	0.01	0.01	0.00
Cement unloading	cement	0.00340	0.0005	22	7,452	0.07	0.01	0.01	0.00
Cement supplement unloading	cement supplement	0.0049	0.0007	3	1,108	0.02	0.00	0.00	0.00
Weigh hopper loading[1]	sand + aggregate	0.0028	0.0004	147	49,980	0.41	0.07	0.06	0.01
Mixer loading (central mix)[1]	cement + supplement	0.0055	0.0008	25	8,560	0.14	0.02	0.02	0.00
Wind erosion from sand and aggregate storage piles[2]	acres used for storage	630				0.02	0.003	0.003	0.001
						1.00	0.17	0.15	0.02

[1] Reference: U.S. EPA AP-42, "Compilation of Air Pollutant Emission Factors: Volume I: Stationary Point and Area Sources," fifth ed. Tables 11.12-2(6/06).

[2] The stockpile emission factor above is uncontrolled. Dust control efforts on stockpiles is claimed for additional control measures using water or other dust suppressants. 90 % control efficiency is for regular watering or use of a chemical palliatives (dust suppressants).

Cement is mixed at batch plant rather than in trucks during transport. Therefore, loaded concrete is already mixed and emissions from cement truck loading would be negligible.

Valencia WRP

Air Quality Construction Analysis

Regional Emissions - UNMITIGATED	Criteria Pollutant Emissions									
	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Source	lb/day									
3.1 Demolition - 2026	2.64	23.46	23.47	0.04	0.92	0.30	1.22	0.85	0.07	0.92
3.3 Grading/Excavation 2026	2.06	15.43	19.15	0.05	0.59	0.55	1.14	0.54	0.11	0.65
3.5 Retaining Wall/Outfall 2026	1.72	15.23	21.04	0.04	0.54	0.66	2.19	0.50	0.15	0.80
3.7 Retaining Wall/Outfall 2027	1.69	14.48	20.94	0.04	0.50	0.66	2.15	0.46	0.15	0.76
SCAQMD Thresholds	75	100	550	150			150			55
Project Daily Maximum Emissions	2.64	23.46	23.47	0.05	0.92	0.66	2.19	0.85	0.15	0.92

Localized Maximum - UNMITIGATED	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM10	Fugitive PM10	Total PM2.5
Source	lb/day									
3.1 Demolition - 2026	2.57	23.20	22.30	0.04	0.92	0.00	0.92	0.85	0.00	0.85
3.3 Grading/Excavation 2026	1.98	14.70	17.60	0.05	0.58	0.14	0.72	0.53	0.01	0.54
3.5 Retaining Wall/Outfall 2026	1.63	14.00	19.30	0.04	0.53	0.14	1.67	0.49	0.02	0.66
3.7 Retaining Wall/Outfall 2027	1.60	13.30	19.30	0.04	0.49	0.14	1.63	0.45	0.02	0.62
Project Daily Maximum Emissions	2.57	23.20	22.30	0.05	0.92	0.14	1.67	0.85	0.02	0.85
Threshold		273.0	8174.0				131.0			74.0
Significant Impact?		No	No				No			No

C-3 Greenhouse Gas Calculations and Modeling and Modeling

Valencia WRP - Unmitigated Construction GHG Emission Calcs

	Annual MT CO2e
3.1 Demolition - 2026	
Off-road Equipment	87.5
Worker	5.87
Vendor	0
Hauling	3.18
Phase Total	96.55
3.3 Grading/Excavation 2026	
Off-road Equipment	295
Worker	15.7
Vendor	0
Hauling	34
Phase Total	344.7
3.5 Retaining Wall/Outfall 2026	
Off-road Equipment	209
Worker	12.5
Vendor	12.4
Hauling	33.9
Phase Total	267.8
3.7 Retaining Wall/Outfall 2027	
Off-road Equipment	468
Worker	27.6
Vendor	27.2
Hauling	74.6
Phase Total	597.4

Yearly Emissions	**MT CO2e**
2026	**709**
2027	**597**
Total	**1306**
Amortized 30 years	44

C-4 CalEEMod Output

Valencia WRP v3 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.3. Grading/Excavation (2026) - Unmitigated

3.5. Retaining Wall/Outfall (2026) - Unmitigated

3.7. Retaining Wall/Outfall (2027) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Valencia WRP v3
Construction Start Date	2/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	16.0
Location	28185 The Old Rd, Valencia, CA 91355, USA
County	Los Angeles-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3615
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	40.9	1000sqft	3.21	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.48	2.06	15.5	21.0	0.05	0.58	0.65	1.20	0.54	0.15	0.65	—	5,756	5,756	0.24	0.19	3.12	5,804
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.16	2.64	23.4	23.4	0.05	0.92	0.65	1.24	0.85	0.15	0.92	—	5,570	5,570	0.24	0.19	0.08	5,632
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.91	1.59	13.1	16.0	0.04	0.49	0.42	0.91	0.45	0.09	0.54	—	4,239	4,239	0.18	0.12	0.80	4,277
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.29	2.39	2.91	0.01	0.09	0.08	0.17	0.08	0.02	0.10	—	702	702	0.03	0.02	0.13	708

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.48	2.06	15.5	21.0	0.05	0.58	0.65	1.20	0.54	0.15	0.65	—	5,756	5,756	0.24	0.19	3.12	5,804

2027	2.05	1.69	14.4	20.9	0.05	0.50	0.65	1.15	0.46	0.15	0.61	—	5,558	5,558	0.23	0.19	2.88	5,623
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.16	2.64	23.4	23.4	0.05	0.92	0.65	1.24	0.85	0.15	0.92	—	5,570	5,570	0.24	0.19	0.08	5,632
2027	2.05	1.69	14.5	20.8	0.05	0.50	0.65	1.15	0.46	0.15	0.61	—	5,545	5,545	0.22	0.19	0.07	5,606
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.91	1.59	13.1	16.0	0.04	0.49	0.42	0.91	0.45	0.09	0.54	—	4,239	4,239	0.18	0.11	0.79	4,277
2027	1.32	1.09	9.31	13.4	0.03	0.32	0.42	0.74	0.30	0.09	0.39	—	3,570	3,570	0.14	0.12	0.80	3,610
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.35	0.29	2.39	2.91	0.01	0.09	0.08	0.17	0.08	0.02	0.10	—	702	702	0.03	0.02	0.13	708
2027	0.24	0.20	1.70	2.44	0.01	0.06	0.08	0.13	0.05	0.02	0.07	—	591	591	0.02	0.02	0.13	598

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.02	0.02	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.02	0.02	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.06	2.57	23.2	22.3	0.04	0.92	—	0.92	0.85	—	0.85	—	3,923	3,923	0.16	0.03	—	3,937
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.11	2.99	0.01	0.12	—	0.12	0.11	—	0.11	—	527	527	0.02	< 0.005	—	528

Demoliti	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.57	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	87.2	87.2	< 0.005	< 0.005	—	87.5
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	0.01	0.01	0.02	260
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.17	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	136	136	0.01	0.02	0.01	143
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.0	35.0	< 0.005	< 0.005	0.05	35.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.02	19.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.02	3.02	< 0.005	< 0.005	< 0.005	3.18

3.3. Grading/Excavation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.35	1.98	14.7	17.6	0.05	0.58	—	0.58	0.53	—	0.53	—	4,940	4,940	0.20	0.04	—	4,957
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.71	5.29	6.32	0.02	0.21	—	0.21	0.19	—	0.19	—	1,773	1,773	0.07	0.01	—	1,779
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.13	0.97	1.15	< 0.005	0.04	—	0.04	0.03	—	0.03	—	294	294	0.01	< 0.005	—	295
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.29	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	271	271	0.01	0.01	0.92	275
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.01	0.65	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.03	0.09	1.22	572
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.6	93.6	< 0.005	< 0.005	0.14	94.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	195	195	0.01	0.03	0.19	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.3	32.3	< 0.005	0.01	0.03	34.0

3.5. Retaining Wall/Outfall (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.94	1.63	14.0	19.3	0.04	0.53	—	0.53	0.49	—	0.49	—	4,383	4,383	0.18	0.04	—	4,398
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.94	1.63	14.0	19.3	0.04	0.53	—	0.53	0.49	—	0.49	—	4,383	4,383	0.18	0.04	—	4,398
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	4.01	5.52	0.01	0.15	—	0.15	0.14	—	0.14	—	1,256	1,256	0.05	0.01	—	1,260
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.73	1.01	< 0.005	0.03	—	0.03	0.03	—	0.03	—	208	208	0.01	< 0.005	—	209
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.29	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	271	271	0.01	0.01	0.92	275
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	249	249	0.01	0.04	0.67	261
Hauling	0.05	0.01	0.82	0.32	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	—	680	680	0.04	0.11	1.53	715
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	0.01	0.01	0.02	260
Vendor	0.02	0.01	0.29	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	250	250	0.01	0.04	0.02	260
Hauling	0.05	0.01	0.85	0.33	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	—	680	680	0.04	0.11	0.04	714
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.33	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.7	74.7	< 0.005	< 0.005	0.11	75.7
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.5	71.5	< 0.005	0.01	0.08	74.7
Hauling	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	195	195	0.01	0.03	0.19	205
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.4	12.4	< 0.005	< 0.005	0.02	12.5

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.3	32.3	< 0.005	0.01	0.03	33.9

3.7. Retaining Wall/Outfall (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	13.3	19.3	0.04	0.49	—	0.49	0.45	—	0.45	—	4,381	4,381	0.18	0.04	—	4,396
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	13.3	19.3	0.04	0.49	—	0.49	0.45	—	0.45	—	4,381	4,381	0.18	0.04	—	4,396
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.23	1.03	8.54	12.4	0.03	0.32	—	0.32	0.29	—	0.29	—	2,819	2,819	0.11	0.02	—	2,829
Dust From Material Movement	—	—	—	—	—	—	0.09	0.09	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.22	0.19	1.56	2.27	< 0.005	0.06	—	0.06	0.05	—	0.05	—	467	467	0.02	< 0.005	—	468
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.20	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	266	266	0.01	0.01	0.83	270
Vendor	0.02	0.01	0.26	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	245	245	0.01	0.03	0.64	256
Hauling	0.05	0.01	0.79	0.31	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	—	667	667	0.03	0.11	1.42	701
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.02	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	252	252	< 0.005	0.01	0.02	255
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	245	245	0.01	0.03	0.02	255
Hauling	0.05	0.01	0.82	0.32	< 0.005	0.01	0.19	0.19	0.01	0.05	0.06	—	667	667	0.03	0.11	0.04	700
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.69	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.23	167

Vendor	0.01	< 0.005	0.18	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.18	164
Hauling	0.03	0.01	0.54	0.20	< 0.005	0.01	0.12	0.12	0.01	0.03	0.04	—	429	429	0.02	0.07	0.39	451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.2	27.2	< 0.005	< 0.005	0.04	27.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.1	26.1	< 0.005	< 0.005	0.03	27.2
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.0	71.0	< 0.005	0.01	0.07	74.6

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.02	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landsca pe Equipm ent	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	2/1/2026	3/30/2026	6.00	49.0	—
Grading/Excavation	Grading	4/1/2026	8/31/2026	6.00	131	—
Retaining Wall/Outfall	Building Construction	9/1/2026	10/1/2027	6.00	340	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	2.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Demolition	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Grading/Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Grading/Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading/Excavation	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Grading/Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading/Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Retaining Wall/Outfall	Cranes	Diesel	Average	1.00	8.00	367	0.29
Retaining Wall/Outfall	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Retaining Wall/Outfall	Graders	Diesel	Average	1.00	8.00	148	0.41
Retaining Wall/Outfall	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Retaining Wall/Outfall	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Retaining Wall/Outfall	Bore/Drill Rigs	Diesel	Average	2.00	8.00	83.0	0.50

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Grading/Excavation	—	—	—	—
Grading/Excavation	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading/Excavation	Vendor	0.00	10.2	HHDT,MHDT
Grading/Excavation	Hauling	8.00	20.0	HHDT
Grading/Excavation	Onsite truck	0.00	—	HHDT
Retaining Wall/Outfall	—	—	—	—
Retaining Wall/Outfall	Worker	20.0	18.5	LDA,LDT1,LDT2
Retaining Wall/Outfall	Vendor	8.00	10.2	HHDT,MHDT
Retaining Wall/Outfall	Hauling	10.0	20.0	HHDT
Retaining Wall/Outfall	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	38.0	—
Grading/Excavation	6,000	0.00	65.5	0.00	—
Retaining Wall/Outfall	113	19,000	170	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	3.21	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	8,390

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Non-Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.9	annual days of extreme heat
Extreme Precipitation	5.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	13.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	84.6
AQ-PM	45.1
AQ-DPM	24.4
Drinking Water	70.8
Lead Risk Housing	0.10

Pesticides	31.3
Toxic Releases	34.9
Traffic	88.0
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	70.3
Haz Waste Facilities/Generators	88.9
Impaired Water Bodies	66.7
Solid Waste	97.3
Sensitive Population	—
Asthma	4.31
Cardio-vascular	10.1
Low Birth Weights	61.9
Socioeconomic Factor Indicators	—
Education	9.29
Housing	23.4
Linguistic	37.7
Poverty	5.09
Unemployment	21.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	93.67380983
Employed	76.78686
Median HI	92.96804825
Education	—

Bachelor's or higher	84.97369434
High school enrollment	21.05735917
Preschool enrollment	58.19325035
Transportation	—
Auto Access	98.98626973
Active commuting	34.73630181
Social	—
2-parent households	74.38727063
Voting	67.39381496
Neighborhood	—
Alcohol availability	92.46759913
Park access	36.76376235
Retail density	47.77364301
Supermarket access	23.22597203
Tree canopy	62.74862056
Housing	—
Homeownership	68.57436161
Housing habitability	81.30373412
Low-inc homeowner severe housing cost burden	60.46451944
Low-inc renter severe housing cost burden	67.75311177
Uncrowded housing	74.48992686
Health Outcomes	—
Insured adults	86.30822533
Arthritis	0.0
Asthma ER Admissions	98.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	71.8
Cognitively Disabled	87.2
Physically Disabled	81.6
Heart Attack ER Admissions	83.3
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	88.1
SLR Inundation Area	0.0
Children	92.2
Elderly	92.1
English Speaking	69.3
Foreign-born	49.0
Outdoor Workers	66.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.1
Traffic Density	75.3

Traffic Access	23.0
Other Indices	—
Hardship	14.5
Other Decision Support	—
2016 Voting	38.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	87.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project Specific Information
Construction: Construction Phases	Project Specific Construction Schedule
Construction: Off-Road Equipment	Project Specific Equipment with updates

Construction: Dust From Material Movement	Project Specific Information
Construction: Trips and VMT	Project Specific Information

Appendix D
Noise Data and Calculations

D-1 Ambient Noise Data

Summary

File Name on Meter	LxT_Data.021.s
File Name on PC	LxT_0007058-20240101 165312-LxT_Data.021.ldbin
Serial Number	0007058
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2024-01-01 16:53:12
Stop	2024-01-01 17:08:12
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2024-01-01 15:11:45
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1
Microphone Correction	Off
Integration Method	Exponential
Overload	143.6 dB

	A	C	Z
Under Range Peak	**99.6**	96.6	101.6 dB
Under Range Limit	**36.8**	36.4	43.5 dB
Noise Floor	27.7	27.3	34.3 dB

	First	Second	Third
Instrument Identification			

Results

LASeq	63.8	
LASE	93.3	
EAS	238.633 µPa²h	
EAS8	7.636 mPa²h	
EAS40	38.181 mPa²h	
LApeak (max)	2024-01-01 16:53:12	89.6 dB
LASmax	2024-01-01 16:53:12	68.5 dB
LASmin	2024-01-01 16:54:39	62.1 dB
SEA	-99.9 dB	

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LApeak > 135.0 dB	0	0.0 s
LApeak > 137.0 dB	0	0.0 s
LApeak > 140.0 dB	0	0.0 s

LCSeq	72.5 dB
LASeq	63.8 dB
LCSeq - LASeq	8.7 dB
LAIeq	64.5 dB
LAeq	63.8 dB
LAIeq - LAeq	0.7 dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	63.8					
LS(max)	68.5	2024/01/01 16:53:12				
LS(min)	62.1	2024/01/01 16:54:39				
LPeak(max)	89.6	2024/01/01 16:53:12				

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	48.7	48.7 dB

Statistics

LAS 5.00	64.6 dB
LAS 10.00	64.4 dB
LAS 33.30	64.0 dB
LAS 50.00	63.8 dB
LAS 66.60	63.5 dB
LAS 90.00	63.0 dB

Summary

File Name on Meter	LxT_Data.022.s
File Name on PC	LxT_0007058-20240101 171146-LxT_Data.022.ldbin
Serial Number	0007058
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2024-01-01 17:11:46
Stop	2024-01-01 17:27:20
Duration	00:15:10.0
Run Time	00:15:08.1
Pause	00:00:01.9
Pre-Calibration	2024-01-01 15:11:43
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1
Microphone Correction	Off
Integration Method	Exponential
Overload	143.6 dB

	A	**C**	**Z**
Under Range Peak	**99.6**	96.6	101.6 dB
Under Range Limit	**36.8**	36.4	43.5 dB
Noise Floor	27.7	27.3	34.3 dB

	First	**Second**	**Third**
Instrument Identification			

Results

LASeq	59.7	
LASE	89.3	
EAS	94.135 µPa²h	
EAS8	2.985 mPa²h	
EAS40	14.927 mPa²h	
LApeak (max)	2024-01-01 17:16:56	88.6 dB
LASmax	2024-01-01 17:16:56	74.5 dB
LASmin	2024-01-01 17:20:31	54.0 dB
SEA	-99.9 dB	

	Exceedance Counts	**Duration**
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
LApeak > 135.0 dB	0	0.0 s
LApeak > 137.0 dB	0	0.0 s
LApeak > 140.0 dB	0	0.0 s

LCSeq	67.0 dB
LASeq	59.7 dB
LCSeq - LASeq	7.3 dB
LAIeq	61.9 dB
LAeq	59.7 dB
LAIeq - LAeq	2.2 dB

	A		**C**		**Z**	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
Leq	59.7					
LS(max)	74.5	2024/01/01 17:16:56				
LS(min)	54.0	2024/01/01 17:20:31				
LPeak(max)	88.6	2024/01/01 17:16:56				

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	44.7	44.7 dB

Statistics

LAS 5.00	65.3 dB
LAS 10.00	58.0 dB
LAS 33.30	55.9 dB
LAS 50.00	55.5 dB
LAS 66.60	55.2 dB
LAS 90.00	54.7 dB

Summary

File Name on Meter	LxT_Data.023.s
File Name on PC	LxT_0007058-20240101 173134-LxT_Data.023.ldbin
Serial Number	0007058
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2024-01-01 17:31:34
Stop	2024-01-01 17:46:34
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre-Calibration	2024-01-01 15:11:43
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT1
Microphone Correction	Off
Integration Method	Exponential
Overload	143.6 dB

	A	C	Z
Under Range Peak	**99.6**	96.6	101.6 dB
Under Range Limit	**36.8**	36.4	43.5 dB
Noise Floor	27.7	27.3	34.3 dB

	First	Second	Third
Instrument Identification			

Results

L_{ASeq}	68.2	
LASE	97.8	
EAS	662.818 µPa²h	
EAS8	21.210 mPa²h	
EAS40	106.051 mPa²h	
$L_{Apeak\ (max)}$	2024-01-01 17:31:50	84.7 dB
L_{ASmax}	2024-01-01 17:43:00	70.9 dB
L_{ASmin}	2024-01-01 17:41:40	66.5 dB
SEA	-99.9 dB	

	Exceedance Counts	Duration
LAS > 85.0 dB	0	0.0 s
LAS > 115.0 dB	0	0.0 s
L_{Apeak} > 135.0 dB	0	0.0 s
L_{Apeak} > 137.0 dB	0	0.0 s
L_{Apeak} > 140.0 dB	0	0.0 s

L_{Ceq}	72.9 dB
L_{ASeq}	68.2 dB
L_{Ceq} - L_{ASeq}	4.7 dB
L_{Aleq}	68.6 dB
L_{Aeq}	68.2 dB
L_{Aleq} - L_{Aeq}	0.4 dB

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	68.2					
$L_{S(max)}$	70.9	2024/01/01 17:43:00				
$L_{S(min)}$	66.5	2024/01/01 17:41:40				
$L_{Peak(max)}$	84.7	2024/01/01 17:31:50				

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	53.2	53.2 dB

Statistics

LAS 5.00	69.4 dB
LAS 10.00	69.0 dB
LAS 33.30	68.4 dB
LAS 50.00	68.1 dB
LAS 66.60	67.8 dB
LAS 90.00	67.4 dB

D-2 Construction and Vibration Noise Calculations

Project: Valencia Water Plant

Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	8 Daytime hours (7 am to 7 pm) 0 Evening hours (7 pm to 10 pm) 0 Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3

				R4- Habitat along Project Site Boundary				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L11**	**Estimated Noise Shielding, dBA**
Demolition					***93***	***89***		
Dozer	1	80	40%	55	79	75	78	0
Dozer	1	80	40%	60	78	74	77	0
Tractor/Loader/Backhoe	1	80	40%	60	78	74	77	0
Generator	1	82	50%	60	80	77	80	0
Concrete Saw	1	85	20%	60	83	76	79	0
Concrete Saw	1	85	20%	60	83	76	79	0
Excavator	1	90	40%	60	88	84	87	0
Excavator	1	90	40%	60	88	84	87	0
Grading/Excavation					***92***	***87***		
Excavator	1	85	40%	55	84	80	83	0
Excavator	1	85	40%	55	84	80	83	0
Excavator	1	85	40%	55	84	80	83	0
Grader	1	85	40%	60	83	79	82	0
Crane	1	85	16%	55	84	76	79	0
Dump Truck	1	84	40%	60	82	78	81	0
Dump Truck	1	85	40%	60	83	79	82	0
Tractor/Loader/Backhoe	1	80	40%	60	78	74	77	0
Retaining Wall/Outfall					***91***	***86***		
Drill Rig Truck	1	84	20%	55	83	76	79	0
Drill Rig Truck	1	84	20%	55	83	76	79	0
Concrete Batch Plant	1	83	15%	60	81	73	76	0
Crane	1	85	16%	60	83	75	78	0
Excavator	1	85	40%	60	83	79	82	0
Grader	1	85	40%	60	83	79	82	0
Dump Truck	1	85	40%	60	83	79	82	0
Tractor/Loader/Backhoe	2	80	40%	60	81	77	80	0
Maximum Combined Noise Levels				**89.0**		**89.0**		**89.0**
Maxmimum Combined Noise Level w/o Mitigation				**89.0**		**89.0**		**89.0**
Ambient Noise Level				**63.8**		**59.7**		**68.2**
Threshold (Ambient +5 dBA)				**71.8**		**67.7**		**76.2**
Significant Impact?				**Yes**		**Yes**		**Yes**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

ESA

Project: Valencia Water Plant

Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	8	Daytime hours (7 am to 7 pm)
	0	Evening hours (7 pm to 10 pm)
	0	Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3	

				R4- Habitat along Project Site Boundary				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L11**	**Estimated Noise Shielding, dBA**
Demolition					***93***	***89***		
Dozer	1	80	40%	55	79	75	78	0
Dozer	1	80	40%	60	78	74	77	0
Tractor/Loader/Backhoe	1	80	40%	60	78	74	77	0
Generator	1	82	50%	60	80	77	80	0
Concrete Saw	1	85	20%	60	83	76	79	0
Concrete Saw	1	85	20%	60	83	76	79	0
Excavator	1	90	40%	60	88	84	87	0
Excavator	1	90	40%	60	88	84	87	0
Grading/Excavation					***92***	***87***		
Excavator	1	85	40%	55	84	80	83	0
Excavator	1	85	40%	55	84	80	83	0
Excavator	1	85	40%	55	84	80	83	0
Grader	1	85	40%	60	83	79	82	0
Crane	1	85	16%	55	84	76	79	0
Dump Truck	1	84	40%	60	82	78	81	0
Dump Truck	1	85	40%	60	83	79	82	0
Tractor/Loader/Backhoe	1	80	40%	60	78	74	77	0
Retaining Wall/Outfall					***91***	***86***		
Drill Rig Truck	1	84	20%	55	83	76	79	0
Drill Rig Truck	1	84	20%	55	83	76	79	0
Concrete Batch Plant	1	83	15%	60	81	73	76	0
Crane	1	85	16%	60	83	75	78	0
Excavator	1	85	40%	60	83	79	82	0
Grader	1	85	40%	60	83	79	82	0
Dump Truck	1	85	40%	60	83	79	82	0
Tractor/Loader/Backhoe	2	80	40%	60	81	77	80	0
Maximum Combined Noise Levels				**89.0**		**89.0**		**89.0**
Maxmimum Combined Noise Level w/ Mitigation				**67.0**		**67.0**		**67.0**
Ambient Noise Level				**63.8**		**59.7**		**68.2**
Threshold (Ambient +5 dBA)				**71.8**		**67.7**		**76.2**
Significant Impact?				**No**		**No**		**No**

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005

ESA

127/141 Madison Ave

Table I. Off-Site Structural Vibration Impacts

Receptor	Type of Building	Equipment	Reference Distance	Reference Level[a] PPV (in/sec)	Distance to Receptor (ft)[b]	Impact Level PPV (in/sec)	Threshold PPV (in/sec)	Exceeds Threshold?
Historic Buildings to the west	Category IV	Bulldozer or Bore/D	25	0.089	800	0.00	0.12	**No**
		Loaded Trucks	25	0.076	800	0.00	0.12	**No**
		Jackhammer	25	0.035	800	0.00	0.12	**No**
		Small Bulldozer	25	0.003	800	0.00	0.12	**No**
Non-historic building to the north	Category I	Bulldozer or Bore/D	25	0.089	80	0.016	0.5	**No**
		Loaded Trucks	25	0.076	72	0.016	0.5	**No**
		Jackhammer	25	0.035	43	0.016	0.5	**No**
		Small Bulldozer	25	0.003	9	0.014	0.5	**No**

Notes:

a. Vibration reference levels and impact criteria taken from FTA Noise and Vibration Impact Assessment (2006), Tables 8-1, 12-2, and 12-3

b. Distances represent the closest measurement from project building footprint to closest building footprint in each direction

VWD WRP4 Project

Vibration Level Calculations

Based on Federal Transit Administration, Office of Planning and Environment

N =	1.5

Construction Equipment	Project Equipment	Equipment Peak Particle Velocity @ 25 Feet* (inches/second)	Distance to Receptor for < 0.5 PPV (Feet)	Estimated Velocity Decibels @ Distance** (VdB)	Estimated Peak Particle Velocity @ Distance*** (inches/second)
Unmitigated Vibration Levels					
R1					
Large Bulldozer or Bore/Drill Rig	Yes	0.089	800	41.8	0.000
Loaded Trucks	Yes	0.076	800	40.4	0.000
Jackhammer	Yes	0.035	800	33.7	0.000
Small Bulldozer	Yes	0.003	800	12.3	0.0000

Source:

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual,* 2018.

Notes:

* Values taken from Table 7-4.

** Based on the formula VdB = 20 x LOG10 (v/v_{ref}), where v_{ref} is equal to 1×10^{-6} in/sec (see page 111).

The approximate rms vibration velocity level (v) is calculated from PPV using a crest factor of 4 (see page 184).

*** Based on the formula PPV(D) = PPV(25 ft) x $(25/D)^{N}$, where D is equal to the distance (see page 185).

N = soil type classification factor (typically ranges from 1 to 1.5)