

**CALIFORNIA ENVIRONMENTAL QUALITY ACT
FINDINGS OF FACT
(PUBLIC RESOURCES CODE §21081, CEQA GUIDELINES §15091)
REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE SANTA CLARA RIVER LEVEE IMPROVEMENT DOWNSTREAM OF
UNION PACIFIC RAILROAD (SCR-3) PROJECT
State Clearinghouse Number 2015021079**

INTRODUCTION

The Final Environmental Impact Report (FEIR) prepared for the Santa Clara River Levee Improvements Downstream of Union Pacific Railroad (SCR-3) Project (“Project”) analyzes the potential environmental effects associated with implementation of structural improvements to the existing SCR-3 levee system to enable it to withstand a one percent annual chance flood event (a.k.a. 100-year flood event) and thereby achieve compliance with Federal Emergency Management Agency (FEMA) levee certification requirements, as identified in 44 Code of Federal Regulations (CFR) Section 65.10.

These findings have been prepared to comply with requirements of the California Environmental Quality Act (“CEQA,” Public Resources Code Section 21000 et seq.) and the *CEQA Guidelines* (Cal. Code Regs., Title 14, §15000 et seq.). Pursuant to CEQA Section 21081 and *CEQA Guidelines* Section 15091 (Findings), no public agency shall approve or carry out a Project where an EIR has been certified, which identifies one or more significant impacts on the environment that would occur if the Project is approved or carried out, unless the public agency makes one or more findings for each of those significant impacts, accompanied by a brief explanation of the rationale of each finding. The possible findings, which must be supported by substantial evidence in the record, are:

1. Changes or alterations have been required in, or incorporated into, the Project that mitigate or avoid the significant impact on the environment.
2. Changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
3. Specific economic, legal, social, technological or other considerations make infeasible the mitigation measures or Project alternatives identified in the EIR.

PROJECT DESCRIPTION

Project Location

The Project is located in unincorporated Ventura County with components also located within the City of Oxnard, Ventura County, California (EIR Figure 2-1). The proposed levee alignment generally extends along the existing SCR-3 levee system located on the southern bank of the Santa Clara River, generally north of and parallel to the Bailard Landfill, Coastal Landfill, Ventura Regional Sanitation District (VRSD) Flare, the City of Oxnard River Ridge Golf Course and golf course maintenance yard, and Santa Clara Landfill, then continuing northeast parallel to N. Ventura Road to 40 feet northeast of the Union Pacific Railroad (UPRR) crossing/bridge. Flood protection from this point to the Highway 101 crossing/bridge would be addressed by The Village Specific Plan development (Tentative Tract No. 5745 development project on the existing Wagon Wheel site – The Village development).

Project Characteristics

The Project is divided into four reaches (EIR Figure 2-1). Reach 1 extends from the northeast corner of the Bailard Landfill upstream to the Coastal Landfill (just east of Victoria Avenue) (Station 128+75 to 150+00). Reach 2 extends along the Coastal Landfill to a point just west of N. Ventura Road, at the east edge of the Santa Clara Landfill (Station 150+00 to 202+00). Reach 3 extends from Reach 2 to the point

where N. Ventura Road turns easterly and parallel to the Santa Clara River, approximately 2,600 feet west of Highway 101 (Station 202+00 to 217+50). Reach 4 extends to approximately 40 feet northeast of the UPRR embankment, which corresponds to the southern limit of The Village development (Station 217+50 to 236+86).

Between the Bailard Landfill and N. Ventura Road (Reaches 1-3), two options are considered. Option 1A (Full Levee System), which is the preferred option, adds fill material and riprap along approximately 8,875 feet to raise the existing levee, with no landfill tie-ins (EIR Figure 2-3). Option 1B (Minimum Levee System) adds fill material along approximately 3,575 feet of the existing levee, with tie-ins to the Coastal and Santa Clara Landfills (EIR Figure 2-4). The existing River Ridge Golf Course swale would be filled in under Option 1B.

In Reach 4 (EIR Figure 2-5), a 968-foot long floodwall would be constructed on the river side of N. Ventura Road with a visible height of six feet. A flood gate would be installed across N. Ventura Road at the high-point in the road. A four- to six-foot high floodwall would also be constructed on the south side of N. Ventura Road for approximately 888 feet, then transition to a 40-foot-long earthen embankment abutting and perpendicular to the existing UPRR embankment. A similar 40-foot-long earthen embankment would be constructed on UPRR land northeast of the railroad embankment to tie into the flood protection structure to be constructed by The Village development.

PROJECT OBJECTIVES

The Ventura County Watershed Protection District’s (District) primary objectives for the Project include:

- Construct new, upgrade existing, and maintain the SCR-3 structures to provide continuous flood protection to properties in the City of Oxnard that would otherwise require flood insurance under the National Flood Insurance Program (NFIP) and do so in a cost-effective manner prior to FEMA revision of adjacent Flood Insurance Rate Maps (FIRMs).
- Achieve compliance with FEMA levee certification requirements as identified in 44 CFR Section 65.10 through implementation of structural improvements to the SCR-3 levee system capable of withstanding a one percent annual chance flood event.
- Design flood protection structures that accommodate a future bikeway along N. Ventura Road in support of the City of Oxnard Santa Clara River Trail Master Plan.

PERMITS AND APPROVALS

Agency	Permit/Approval	Description
United States Army Corps of Engineers (USACE)	Section 404 Clean Water Act (CWA) Individual Permit and/or qualification under Nationwide Permit	Projects that include potential discharge of dredge or fill impacts to the “waters of the U.S.” (including wetlands) are subject to Section 404 of the CWA, requiring a permit.
United States Fish & Wildlife Service (USFWS)	Section 7 Consultation	Required for any activity that may affect federally listed species. Section 7 consultation will address incidental take as part of the Project.

Agency	Permit/Approval	Description
California Department of Fish and Wildlife (CDFW)	Section 1600-Series Streambed Alteration Agreement (SAA)	Required for any activity that will: <ul style="list-style-type: none"> • Substantially divert or obstruct the natural flow of any river, stream, or lake; • Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or • Deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake.
	Section 2081 Take Permit	CDFW may issue a Section 2081 permit for the incidental take of State listed threatened and endangered species if specific criteria are met. These criteria are reiterated in Title 14 CCR, Sections 783.4(a) and (b).
Los Angeles Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Required for projects discharging fill and dredged materials to wetlands, riparian areas, and headwaters.
Ventura County Environmental Health Division	Permits associated with landfill tie-ins (Option 1B) and appurtenant facilities (gas collection pipelines, gas and groundwater monitoring wells)	Responsible for ensuring conformance with State laws and County ordinances pertaining to the protection of public health, including programs related to hazardous materials and hazardous waste.
City of Oxnard	Road Encroachment Permit	Required for work within the City's right-of-way.
Union Pacific Railroad (UPRR)	Encroachment Permit	May be required due to placement of fill material northeast and southwest of the UPRR embankment.
Ventura Regional Sanitation District (VRSD) and City of Oxnard	Landfill Post-Closure Plan Amendment (Option 1B)	Levee tie-ins to the Coastal and Santa Clara Landfill may trigger the need for an amendment, if Option 1B is approved.
Ventura County Air Pollution Control District (APCD)	Permit to Operate for the landfills	Permit to Operate may need to be modified to implement Option 1B, if approved. The landfills would submit the application to modify.

RECORD OF PROCEEDINGS

For purposes of CEQA and these Findings, the record of the administrative proceedings for the Project includes, but is not limited to, the following documents:

- All comments submitted by agencies and members of the public following the Pre-Scoping Meeting held June 4, 2014;
- The February 26, 2015, Notice of Preparation (NOP) and Initial Study issued by the District;
- All comments submitted by agencies and members of the 30-day public review period for the Initial Study (February 26 – March 27, 2015);
- The December 2015 Draft EIR, including appendices and technical studies included or referenced in the Draft EIR (SCH No. 2015021079);

- All comments submitted by agencies or members of the public during the minimum 45-day public comment period on the Draft EIR (December 7, 2015 – January 22, 2016), and the District’s responses to the comments;
- The June 2016 FEIR;
- All other comments and correspondence submitted to the District with respect to the Project;
- The Mitigation Monitoring and Reporting Program (“MMRP”) for the Project;
- All findings and resolutions adopted by the District in connection with the Project, and all documents cited or referred to therein;
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project and/or cited in the EIR;
- All documents and information submitted to the District by responsible, trustee, or other public agencies, or by individuals or organizations, in connection with the Project, up through the date the Board of Supervisors approves the Project;
- Matters of common knowledge to the District, including, but not limited to federal, State, and local laws and regulations;
- Any documents expressly cited in these findings; and
- Any other materials required to be in the record of administrative proceedings pursuant to Public Resources Code Section 21167.6, subdivision (e).

The custodian of the documents comprising the record of administrative proceedings is the District, whose office is located at 800 South Victoria Avenue, Ventura, California 93009-1610. The District has considered and relied on all of the documents listed above in reaching its decision on the Project.

FINDINGS REQUIRED UNDER CEQA

CEQA Section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” The same statute states that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.” Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects.”

To the extent that these Findings of Fact conclude that various proposed mitigation measures outlined in the FEIR are feasible and have not been modified, superseded, or withdrawn, the District hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that have come into effect with the Board of Supervisors formal approval of the Project.

The mitigation measures and/or the design features and construction measures are referenced in the MMRP adopted concurrently with these findings, and will be implemented through the final design, pre-construction, construction, and post-construction periods.

MITIGATION MONITORING AND REPORTING PROGRAM

An MMRP has been prepared for the Project and has been adopted concurrently with these Findings as required by CEQA Section 21081.6(a)(1). The District will use the MMRP to ensure compliance with Project mitigation measures.

SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The *CEQA Guidelines* (Section 15382) define a significant impact on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” The FEIR identified several significant environmental effects resulting from implementation of the Project. Most of these significant effects can be fully mitigated through the adoption of feasible mitigation measures. However, the FEIR determined that the Project would result in four unavoidable significant impacts. The environmental effects of the Project are described below along with the District’s findings with respect to each of the significant environmental effects of the Project.

The FEIR analyzes both Option 1A (Full Levee System) and Option 1B (Minimum Levee System). While Option 1A is the District’s preferred option, it is anticipated to potentially be more costly; therefore Option 1B has been retained. Findings herein address both options.

The FEIR classified significance according to the following definitions:

- Class I – Significant, adverse effect that cannot be mitigated below a level of significance through the application of feasible mitigation measures. Class I impacts are significant and unavoidable.
- Class II – Significant, adverse effect that can be reduced to a less-than-significant level through the application of feasible mitigation measures.
- Class III – Impact is a minor change or effect on the environment that does not meet or exceed the criteria established to gauge significance.
- Class IV – Impact represents a beneficial effect that would result from Project implementation.

As Class III and Class IV impacts are not significant, they require neither mitigation nor findings and are, therefore, not discussed herein.

SECTION I: SIGNIFICANT ENVIRONMENTAL EFFECTS

The FEIR has identified the following four significant impacts (Class I) that cannot be reduced to a less-than-significant level with feasible mitigation measures. As discussed below, appropriate mitigation for each issue have been incorporated into the Approved Project to reduce impacts to the extent feasible.

A. SCENIC RESOURCES

Alteration of Scenic Resources (Impact SR-2)

1. **Operations Impact:** Reach 4 of the Project includes construction of a 968-foot-long floodwall along the northwest (river) side of N. Ventura Road, which will obstruct views of the Santa Clara River to drivers along N. Ventura Road as well as recreationists that may use the future bike path planned along the SCR-3 levee system as part of the City of Oxnard’s Santa Clara River Trail Master Plan. Installation of a 888-foot floodwall along the southeast (land) side of N. Ventura Road at the east end of Reach 4 will also alter scenic resources for local residents and motorists due to the visual changes associated with the removal of the landscaped shrubs and the presence of a four- to six-foot tall land side floodwall. The landside floodwall will also partially enclose the existing pedestrian pathway, obstructing the view shed of the river for users of this pathway. Pedestrians using the sidewalk at the base of the existing concrete rock riprap slope will be able to view the river in the northwest direction, but views toward the southwest will be obstructed by the river side floodwall. There are no feasible mitigation measures that can lessen this impact. (EIR pages 3.3-7 through 3.3-11)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(3), specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or the Project alternatives identified in the Final EIR. The benefits of the Project override the

significant adverse impact of the Project related to the alteration of scenic resources, as more fully stated in the Statement of Overriding Considerations.

Obstruction or Degradation of Scenic Vistas (Impact SR-4)

- 1. Operations Impact:** The Project's floodwall will obstruct and alter views of the Santa Clara River along Reach 4 and result in the removal of existing vegetation along the river and along the existing pedestrian path on the southeast (land) side of N. Ventura Road. These changes will result in significant and unavoidable visual impacts to motorists, pedestrians, and residents along the Reach 4 segment. There are no mitigation measures that can lessen this impact. (EIR page 3.3-12)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(3), specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or the Project alternatives identified in the Final EIR. The benefits of the Project override the significant adverse impact of the Project related to the alteration of scenic vistas, as more fully stated in the Statement of Overriding Considerations.

B. NOISE AND VIBRATION

Construction Noise (Impact NV-1)

- 1. Construction Impact:** Project construction within Reach 4 (only) will result in noise levels that exceed 70 dB in the backyards of residences adjacent to the construction area, where existing ambient noise levels are in the range of 61 dBA. As such, construction noise levels would exceed the significance criterion (ambient plus 3 dBA) for the nearest seven residences located along the construction activities. Mitigation Measures (MMs) NV-1a (Moveable Construction Noise Barriers) and NV-1b (Monitor Noise Levels) will be implemented to reduce noise levels in the residential backyards along N. Ventura Road. However, MM NV-1a may not be feasible or effective to the degree necessary and MM NV-1b will only help to check if noise levels are below the significance threshold, but will not guarantee that the threshold (ambient plus 3 dBA) will be met. Therefore, construction noise impacts will be significant. (EIR pages 3.5-14 through 3.5-19)

Finding: MM NV-1a includes use of an estimated 10-foot-high moveable barrier extending along the sidewalk approximately 30 feet in both directions from the construction activity to reduce noise levels to below the significance criteria; however, placement of such a structure within the confined space between the construction area and the existing property walls may not be practical or possible, or the barrier may not reduce noise below the significance criterion. MM NV-1b includes monitoring, which will help to check if noise levels are below the significance threshold, but will not guarantee that the threshold (ambient plus 3 dBA) will be met.

Pursuant to *CEQA Guidelines* §15091(a)(3), specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or the Project alternatives identified in the Final EIR. The benefits of the Project override the significant adverse impact of the Project related to construction noise, as more fully stated in the Statement of Overriding Considerations.

Mitigation Measures

- NV-1a Moveable Construction Noise Barriers.** During construction, install an approximately 10-foot-high moveable barrier along the sidewalk between the construction activity and the residential property wall, extending approximately 30 feet in both directions from the construction activity. If determined to be infeasible due to space constraints, install alternative moveable noise barriers with sound-absorptive surfaces facing the noise source between construction equipment and sensitive receptors (i.e. residences) in Reach 4. As feasible, moveable noise barriers

should also be used to shield habitat areas in the Santa Clara River from construction noise.

- NV-1b Monitor Noise Levels.** Periodically monitor noise levels during floodwall construction near noise-sensitive receptors in Reach 4 to determine whether construction noise levels exceed predicted levels. If construction noise is substantially greater than predicted, investigate whether it is feasible to install additional noise barriers or reposition construction equipment to reduce noise levels at sensitive receptors.

Construction Vibration (Impact NV-4)

- 1. Construction Impact:** Sheet piles will be installed along the northwest (river) side of N. Ventura Road (Reach 4), approximately 150 feet from the nearest residential structure. Vibratory pile driving occurring within 500 feet of residential structures will exceed the daytime vibration annoyance criterion of 75 VdB (0.0225 inches/sec) threshold, which includes the first three rows of houses along N. Ventura Road. Similarly, the daytime vibration annoyance criterion will be exceeded within approximately 190 feet from the vibratory roller, which includes the first row of houses along N. Ventura Road, and residences within approximately 100 feet of most other construction equipment. Mitigation Measure NV-4 (Community Notification) will reduce annoyance impacts; however, notification alone will not reduce the vibration levels. Vibration annoyance impacts remain significant and unavoidable. (EIR pages 3.5-23 through 3.5-24)
- 2. Finding:** MM NV-4 provides for notification of residences in proximity to vibratory pile driving and vibratory roller activities in Reach 4; however, notification alone will not reduce vibration levels or the potential to annoy nearby residents.

Pursuant to *CEQA Guidelines* §15091(a)(3), specific economic, legal, social, technological, or other considerations make infeasible any additional mitigation measures or the Project alternatives identified in the Final EIR. The benefits of the Project override the significant adverse impact of the Project related to construction noise, as more fully stated in the Statement of Overriding Considerations.

Mitigation Measure

- NV-4 Community Notification.** At least two weeks prior to construction, residences located within 500 feet of vibratory pile driving activities along Reach 4 (i.e., first three rows of houses along the south side of N. Ventura Road), and/or within 190 feet of vibratory roller activities in Reach 4 (i.e., first row of houses along the south side of N. Ventura Road) shall be notified. Multiple notifications may be needed if activities along the river side occur at a substantially different time from those on the land side of N. Ventura Road. The notification should provide residences the hours of construction, recommendations on ways to reduce noise levels (e.g., close windows), and contact information for vibration and noise complaints.

SECTION II: SIGNIFICANT IMPACTS AVOIDED OR MITIGATED TO LESS-THAN-SIGNIFICANT LEVELS THROUGH INCORPORATION OF MITIGATION MEASURES

A. AIR QUALITY

Violation of Air Quality Standards (Impact AQ-1)

- 1. Construction Impact:** The Project will create air pollutant emissions during the estimated 77-week construction timeframe (Tables 3.1-6/3.1-10, Option 1B/1A Maximum Daily Uncontrolled Construction Emissions; Tables 3.1-7/3.1-11, Option 1B/1A Uncontrolled Total Construction Emissions; Tables 3.1-8/3.1-12, Option 1B/1A Maximum Daily Controlled Construction

Emissions; Tables 3.1-9/3.1-13 Option 1B/1A Controlled Total Construction Emissions). These construction emissions could cause new ambient air quality violations or substantially contribute to existing violations, which would be a significant impact requiring mitigation. (EIR page 3.1-12)

2. **Finding:** Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Air Quality identified in the EIR.

Mitigation Measures

AQ-3a Fugitive Dust Control. All construction and site preparation operations shall be conducted in compliance with all applicable Ventura County Air Pollution Control District (VCAPCD) Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rules 55 (Fugitive Dust) and 55.1 (Paved Roads and Public Unpaved Roads), as well as Rule 10 (Permits Required). The following specific dust control measures, unless more strict measures are implemented for VCAPCD rule compliance, shall be implemented:

1. Apply environmentally safe chemical stabilization, which can be water or other non-toxic soil binder(s), at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with public paved surface to the working areas of the Project site, with an acceptable width to accommodate traffic ingress and egress from the site.
2. Minimize areas of grading, excavation, earth moving, and surface disturbance to the extent feasible.
3. Pre-water areas to be graded or excavated, and water during grading/excavation activities so that soils being handled are moist (12 percent moisture or greater).
4. Maintain stabilized surfaces on inactive graded/excavated areas by using water, rolling, or other non-toxic soil binders; and re-vegetate or perform other long-term surface stabilization within a week after active construction activities are completed.
5. Install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.
6. Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road.
7. Use properly secured tarps or covering that covers the entire surface area of the earthen fill, or other fine bulk material, loads.
8. Water or use environmentally safe chemical stabilization to treat earthen fill storage piles to minimize wind erosion emissions.
9. Limit vehicle speeds, including off-road scrapers, on unpaved roads and work areas to 15 mph. Speed limit signs shall be posted onsite at locations of the point of initial egress to the unpaved areas and within unpaved work areas.
10. Discontinue work activities, including all grading activities, with the exception of fugitive dust control activities, as necessary to prevent nuisance dust conditions during high wind events (25 mph for more than 5 minutes in any hour).

AQ 3b Off-road Equipment Emissions Control. Off-road equipment with engines larger than 50 horsepower shall have engines that meet or exceed USEPA/CARB Tier 3

Emissions Standards. Exceptions will be allowed only on a case by case basis for three specific situations: (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that will be used for a total of no more than 5 days; and/or (3) the off-road equipment is registered under CARB's Statewide Portable Equipment Registration Program. Additionally, all off-road equipment engines shall be maintained in good operating condition and in tune per manufacturers' specification, and equipment idling shall be limited to no more than five minutes unless needed for proper operation.

AQ 3c On-road Equipment Emissions Control. All non-employee on-road vehicle engines shall be turned off when not in use. Engine idling shall not exceed five (5) minutes unless required for proper operation. All non-employee on-road vehicle engines shall be maintained in good operating condition and in tune per manufacturers' specification.

Facts in Support of Finding: Mitigation Measure AQ-3a reduces particulate (PM10) emissions. Mitigation Measure AQ-3b specifies the use of off-road equipment that meet or exceed Tier 3 emission standards to reduce nitrogen oxide (NOx) and volatile organic compound (VOC) emissions. Mitigating the on-road vehicle emissions by restricting the type or model year of the engine would be difficult to implement, so on-road vehicle mitigation is limited to idle duration control and proper engine maintenance (Mitigation Measure AQ-3c).

Cumulatively Considerable Increase in Non-Attainment Pollutants (Impact AQ-3)

1. **Construction Impact:** The Project will create air pollutant emissions during construction (Tables 3.1-6/3.1-10, Option 1B/1A Maximum Daily Uncontrolled Construction Emissions; Tables 3.1-7/3.1-11, Option 1B/1A Uncontrolled Total Construction Emissions; Tables 3.1-8/3.1-12, Option 1B/1A Maximum Daily Controlled Construction Emissions; Tables 3.1-9/3.1-13 Option 1B/1A Controlled Total Construction Emissions). The Ventura County Air Pollution Control District's (VCAPCD) CEQA Guidelines do not provide quantitative emissions significance criteria for construction based on the emissions being temporary; however, the guidelines do indicate that NOx, VOC, and fugitive dust emissions from construction should be mitigated in consideration of Ventura County being nonattainment of the federal and State ozone ambient air quality standards and the State PM10 ambient air quality standards. (EIR pages 3.1-12 through 3.1-17)
2. **Finding:** Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Air Quality identified in the EIR.

Mitigation Measures

AQ-3a Fugitive Dust Control. See text above.

AQ 3b Off-road Equipment Emissions Control. See text above.

AQ 3c On-road Equipment Emissions Control. See text above.

Facts in Support of Finding: For this Project, the NOx and VOC emissions sources comprise off-road equipment and on-road vehicles. Mitigation Measure AQ-3a reduces particulate (PM10) emissions. Mitigation Measure AQ-3b specifies the use of off-road equipment that meet or exceed Tier 3 emission standards to reduce nitrogen oxide (NOx) and volatile organic compound (VOC) emissions. Mitigating the on-road vehicle emissions by restricting the type or model year of the

engine would be difficult to implement, so on-road vehicle mitigation is limited to idle duration control and proper engine maintenance (Mitigation Measure AQ-3c).

Incidents of San Joaquin Valley Fever (Impact AQ-7)

- 1. Construction Impact:** Fugitive dust emissions from Project construction could cause exposure to the arthroconidia (spores) of the fungus *Coccidioides immitis* (CI) if those spores are present in areas being excavated or in areas with unpaved vehicle/equipment travel. Exposure to the CI spores could cause Project construction workers, area residents, or others using recreation facilities downwind of the Project construction activities to contract valley fever. The primary way to avoid valley fever is to limit exposure to the CI spores. This is considered a significant impact and mitigation is required. (EIR page 3.1-19)
- 2. Finding:** Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Air Quality identified in the EIR.

Mitigation Measure

AQ-3a Fugitive Dust Control. See text above.

Facts in Support of Finding: Mitigation Measure AQ-3a reduces particulate (PM10) emissions through compliance with applicable VCAPCD rules and regulations, as well as additional measures, such as application of soil stabilizers, pre-watering of areas to be graded or excavated, installation of track-out control devices, properly securing and covering fine bulk material loads, and limiting vehicle speeds.

B. BIOLOGICAL RESOURCES

Loss of Native Vegetation (Impact BIO-1)

- 1. Construction Impact:** Construction of Option 1A will result in 12.41 acres of permanent and 6.63 acres of temporary disturbance to land cover types and vegetation communities including developed areas, ruderal areas, maintained landscape, vegetation management zones, arroyo willow thickets, black cottonwood forest, California sagebrush scrub, eucalyptus groves, coyote brush scrub, mulefat thickets, giant reed breaks, Fremont cottonwood forest, quailbush scrub, and myoporum stands (EIR Figure 3.2-2 and Table 3.2-7). The majority of Project-related impacts (permanent and temporary) will occur within developed areas on the land side of the levee away from the Santa Clara River. Impacts include a total of 0.91 acres of permanent and 0.94 acres of temporary impacts to native vegetation. Impacts to native vegetation will largely be related to the construction of the flood wall in Reach 4, and to a lesser extent the levee modifications in Reaches 1 and 3. Similarly, construction of Option 1B will result in 7.89 acres of permanent and 6.09 acres of temporary disturbance (EIR Figure 3.2-2 and Table 3.2-6). Impacts include a total of 0.51 acres of permanent and 0.46 acres of temporary impacts to native vegetation. This is considered a significant impact and requires mitigation. (EIR pages 3.2-81 through 3.2-90)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

BIO-1a Implement a Worker Environmental Education Program. Prior to any Project activities on the site (i.e., surveying, mobilization, fencing, grading, or construction), a Worker Environmental Education Program (WEEP) shall be prepared and implemented by a qualified biologist(s). The WEEP shall be finalized and administered prior to construction mobilization, and implemented throughout the

duration of the construction activities, such as when new contractor employees or subcontractors begin working on site.

- The WEEP shall include, at a minimum, the following items:
 - Training materials and briefings shall include but not be limited to: a discussion of the Federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; hazardous substance spill prevention and containment measures; a contact person and phone number in the event wildlife needs to be relocated or dead or injured wildlife is discovered; and a review of mitigation requirements.
 - A discussion of measures to be implemented for avoidance of the sensitive resources discussed above and the identification of an onsite contact in the event of the discovery of sensitive species on the site; this shall include a discussion on microtrash.
 - Protocols to be followed when road kill is encountered in the work area or along access roads and the identification of an onsite representative to whom the road kill will be reported. Road kill shall be reported to the appropriate local animal control agency within 24 hours.
 - Maps showing the known locations of special-status wildlife, populations of rare plants and sensitive vegetation communities, seasonal depressions and known waterbodies, wetland habitat, exclusion areas, and other construction limitations (e.g. limited operating periods, etc.). These features shall be included on the Project plans and specifications drawings.
 - Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species shall be provided to all Project contractors and heavy equipment operators.
- Evidence that all onsite construction and security personnel have completed the WEEP prior to the start of site mobilization. A special hardhat sticker or wallet size card shall be issued to all personnel completing the training, which shall be carried with the trained personnel at all times while on the Project site. All new personnel shall receive this training and may work in the field for no more than 5 days without participating in the WEEP, accompanied by staff that has undergone the training. A log of all personnel who have completed the WEEP training shall be kept on site.
- The contract specification books shall include all Project conditions as they relate to biological resources and shall be kept on site at all times (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This information shall be easily accessible for personnel in all active work areas.
- Develop a standalone version of the WEEP, that covers all previously discussed items above, and that can be used as a reference for maintenance personnel during Project operations.
- An environmental monitor shall be retained during construction of the Project and shall be directly involved with the implementation and enforcement of the WEEP. A log of all personnel who have completed the WEEP training shall be kept on site.

BIO-1b Implement Best Management Practices (BMPs). BMPs shall be implemented as standard operating procedures during all ground disturbance and construction-related activities to avoid or minimize Project impacts on biological resources. These BMPs shall include, but are not limited to, the following:

- Compliance with BMPs shall be documented and provided in a written report upon conclusion of construction activities. The report shall include a summary of the construction activities completed, a review of the sensitive plants and wildlife encountered, a list of compliance actions and any remedial actions taken to correct the actions, and the status of ongoing mitigation efforts.
- Prior to ground disturbance of any kind, the Project work areas shall be clearly delineated by stakes, flags, or other clearly identifiable system.
- Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- Speed limit signs, imposing a speed limit of 15 miles per hour, shall be installed throughout the Project site prior to initiation of site disturbance and/or construction. To minimize disturbance of areas outside of the construction zone, all Project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas shall be included in pre-construction surveys and to the extent possible, be established in locations disturbed by previous activities or within designated permanent impact areas to prevent further impacts. Off-road traffic outside of designated Project areas shall be prohibited.
- No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.
- All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris shall be stored in animal proof containers and/or removed from the site each day. No deliberate feeding of wildlife shall be allowed.
- All pipes and culverts removed from the existing levee (that remain on-site after removal) or brought on-site as part of new construction, with a diameter of greater than 4 inches, shall be capped or taped closed. Prior to capping or taping the pipe/culvert shall be inspected for the presence of wildlife by a qualified biologist. If encountered, wildlife shall be allowed to escape unimpeded.
- No firearms shall be allowed on the Project site, unless otherwise approved for security personnel.
- To prevent harassment or mortality of listed, special-status species and common wildlife, or destruction of their habitats, no domesticated animals of any kind shall be permitted in any Project area with the exception of sheep grazing for weed management.
- Use of chemicals, fuels, lubricants, or biocides shall be in compliance with all local, state and federal regulations, and shall include secondary containment. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and

Agriculture, and other state and federal legislation, as well as additional Project-related restrictions deemed necessary by the USFWS and CDFW. Use of rodenticides is restricted as described in the existing VCWPD Integrated Pest Management Program.

- Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, shall immediately report the incident to the onsite representative identified in the WEEP. The representative shall contact the USFWS, CDFW, and VCWPD by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, formal notification shall be provided in writing within three working days of the incident or finding. Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFW or USFWS for care, analysis, or disposition.
- Avoidance of vegetation removal or any other construction activities outside of the Project boundaries. All Project impact areas must be clearly flagged prior to initiating work. In areas of temporary impacts where no excavation is required, native vegetation shall be cut to ground level and the root system left intact to permit resprouting following work. All non-native vegetation within the temporary impact area shall be removed initially, and any regrowth eliminated throughout construction, the habitat restoration period (see BIO-1c), and during the 5-year plant establishment period.
- Avoidance and minimization of construction activities resulting in impacts to streambeds and banks of any ephemeral drainage.
- All excavation, steep-walled holes or trenches in excess of 6 inches in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches shall also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped wildlife. Any wildlife discovered shall be allowed to escape before construction activities are allowed to resume, or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).

BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. To compensate for temporary impacts to sensitive vegetation communities within the Project construction footprint, all temporary impact areas shall be restored south of the existing levee in Reaches 1 – 3 and north of the floodwall in Reach 4. The intent of this mitigation measure is for VCWPD to restore temporarily disturbed areas to pre-construction conditions, or better, for arroyo willow and mulefat thickets, Fremont and black cottonwood forest, and coyote brush, sagebrush, and quailbush scrub habitats (refer to Final EIR Figure 3.2-2).

The plans and specifications for the Project shall include, at a minimum, the following items:

- Engineering drawings depicting locations and vegetation types within the temporary disturbance areas immediately prior to Project implementation.

- Description of site preparation work, such as scarification of compacted soils, removal of debris, minor grading for proper drainage, etc.
- The plant species, quantities, and type of stock (e.g. container size, seed) for each of the vegetation communities. Seed and source material will be from genetic stock appropriate to the lower Santa Clara River watershed, if available.
- A description of planting methods for all materials.
- Detailed irrigation system plans and specifications, with criteria for soil moisture conditions to be maintained throughout the plant establishment period.
- Erosion controls and other best management practices for all restoration work.
- Methods for non-native species control and herbivory control.
- Detailed schedule of actions for the 5-year mitigation period.

The temporary impact areas shall be revegetated to 50 percent of their pre-construction cover and diversity values within three (3) years, and 90 percent within 5 years. Quantitative vegetation community characterization studies shall be conducted prior to construction, to establish the target values for years 3 and 5. These studies shall be conducted by qualified biologists knowledgeable in the area of habitat restoration specific to the on-site vegetation communities.

Qualified biologist(s) shall conduct monitoring within the on-site vegetation communities during the restoration period. Monitoring shall include, at a minimum:

- **Qualitative Monitoring** – Qualitative monitoring surveys will be performed monthly in all restored/revegetated areas for the first year following planting in any phase of the Project. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion and approval by the appropriate regulatory agencies. Qualitative surveys will assess native plant species performance, including growth and survival, germination success, reproduction, and plant fitness and health as well as pest or invasive plant problems. The monitoring reports will describe site progress toward achieving success criteria, conditions, and all observations pertinent to eventual success, and make recommendations as appropriate regarding remedial work, maintenance, etc. Qualitative monitoring will also include noting wildlife species present (or sign) during each of the monitoring visits.
- **Quantitative Monitoring** – Quantitative monitoring will occur annually for years one to five or until the success criteria are met. The biologist(s) will collect data using standard scientific methods to estimate cover and density of each plant species within the revegetated areas. These data will describe native species growth performance, native and non-native species coverage, seed mix germination, native species recruitment and reproduction, and species diversity. Based on these results, the biologist(s) will make recommendations for maintenance or remedial work on the site.

Reporting – Reporting will comprise annual progress reports prepared by the biologist(s) summarizing the qualitative and quantitative data collected, and recommended or conducted remedial measures to ensure compliance with success criteria. Reports will include aerial photo maps showing restoration areas, transect locations, and photo documentation locations, an explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants, and any other pertinent information. Reports will be sent to each of the

appropriate regulatory agencies (i.e., USACE, CDFW, USFWS) until the established success criteria have been met.

BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. To compensate for permanent impacts to sensitive vegetation communities within the construction footprint of the Project, similar habitats shall be enhanced in the vicinity of the Project. Enhancement includes removing non-native species and increasing native plant cover. The enhancement mitigation ratios for permanent impacts are 3:1 for arroyo willow and mule fat thickets, as well as Fremont and black cottonwood forest; a ratio of 1:1 shall be applied to coyote brush, California sagebrush, and quailbush scrub habitats.

The enhancement shall be conducted on lands protected by a conservation easement or other legal instrument ensuring the lands will remain in natural open space in perpetuity. The lands shall also have long-term maintenance and management by a conservation entity. Ideally, the enhanced lands will be near or part of larger blocks of lands also protected in perpetuity, have low level recreational use, be outside of the five-year storm flow limits, and free of hazardous materials and wastes.

Prior to the removal of any vegetation on the Project site, plans and specifications shall be developed to enhance the required vegetation communities on lands described above. Enhancement shall begin within 90 days of the initiation of Reach 4 (Phase 2) Project construction, or September 16th following bird nesting season if the 90 day period falls between March 1 and September 15th. The plans and specifications for the Project shall be reviewed by a qualified restoration biologist.

The plans and specifications shall include, at a minimum, the following items:

- Engineering drawings depicting locations and vegetation types targeted for enhancement.
- Description of site access, staging areas, and any preparation work, such as fencing/signage and removal of debris.
- Non-native plant and animal removal methods and materials, and herbivory control.
- The plant species, quantities, and type of stock (e.g. container size, seed) for each of the vegetation communities which may need planting following non-native species removal. Seed and source material will be from genetic stock appropriate to the lower Santa Clara River watershed, if available.
- A description of planting methods for all materials.
- Detailed irrigation system plans and specifications, with criteria for soil moisture conditions to be maintained throughout the plant establishment period.
- Erosion controls and other best management practices for all restoration work.
- Detailed schedule for the 5-year enhancement period.

The enhancement areas shall be revegetated to 50 percent of their target cover and diversity values within three (3) years, and 90 percent within 5 years. Quantitative vegetation community characterization studies shall be conducted prior to enhancement in nearby reference habitat areas to establish the target values for years 3 and 5. These studies shall be conducted by qualified biologists knowledgeable in the area of habitat restoration specific to the on-site vegetation communities.

Qualified biologist(s) shall conduct monitoring within the enhancement areas during the mitigation period. Monitoring shall include, at a minimum:

- **Qualitative Monitoring** – Qualitative monitoring surveys will be performed monthly in all enhancement areas for the first year, and on a quarterly schedule thereafter, until final completion and approval by the appropriate regulatory agencies. Qualitative surveys will assess native plant species cover, and plant fitness and health, as well as pest or invasive plant problems. The monitoring reports will describe site progress toward achieving success criteria, vegetation conditions, and all observations pertinent to eventual success, and make recommendations as appropriate regarding remedial work, maintenance, etc. Qualitative monitoring will also include noting wildlife species present (or sign) during each of the monitoring visits.
- **Quantitative Monitoring** – Quantitative monitoring will occur annually for years one to five or until the success criteria are met. The biologist(s) will collect data using standard scientific methods to estimate cover and density of each plant species within the enhancement areas. These data will describe native species growth performance, native and non-native species cover, native species recruitment and reproduction, and species diversity. Based on these results, the biologist(s) will make recommendations for maintenance or remedial work within the enhancement areas.
- **Reporting** – Reporting will comprise annual progress reports prepared by the biologist(s) summarizing the qualitative and quantitative data collected, and recommended or conducted remedial measures to ensure compliance with success criteria. Reports will include aerial maps showing restoration areas, transect locations, and photo documentation locations, an explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants, and any other pertinent information. Reports will be sent to each of the appropriate regulatory agencies (i.e., USACE, CDFW, USFWS) until the established success criteria have been met.

BIO-1e Implement Biological Construction Monitoring. Prior to the commencement of ground disturbance or site mobilization activities, a qualified biologist(s) shall be in place to monitor Project construction. The biologist will have demonstrated expertise with special-status plants, terrestrial mammals, reptiles, and birds. Monitoring will occur continuously during initial ground disturbance for each phase of construction. Once initial ground disturbance is complete, monitoring will occur periodically during all construction activities. The qualified biologist(s) shall be present at all times during ground-disturbing activities immediately adjacent to, or within, habitat that supports populations of listed or special-status species. Any special-status plants shall be flagged for avoidance. Any special-status terrestrial species found within a Project impact area shall be relocated by the authorized biologist to suitable habitat outside the impact area. Surveys for special-status species shall be conducted by the authorized biologist prior to the initiation of construction each day during initial ground disturbance, and weekly thereafter. If nesting birds are found during the pre-construction surveys, buffers shall be installed (as prescribed in Mitigation Measure BIO-3 [Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures]) discussed below.

If, during construction, the biological monitor observes a dead or injured special-status wildlife species on the construction site, a written report shall be sent to CDFW

and USFWS (as appropriate) within five calendar days. The report will include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Injured animals will be taken immediately to the nearest appropriate veterinary or wildlife rehabilitation facility. The biological monitor shall, immediately upon finding the remains or injured animal, coordinate with the onsite construction foreman to discuss the events that caused the mortality or injury, if known, and implement measures to prevent future incidents. Details of these measures shall be included with the report. Species remains shall be collected and frozen as soon as possible, and CDFW and USFWS, as appropriate, shall be contacted regarding ultimate disposal of the remains.

Facts in Support of Finding: Implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e will minimize impacts to sensitive vegetation communities. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts, development of a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to sensitive vegetation communities.

Disturbance to Nesting Birds or Raptors (Impact BIO-3)

- 1. Construction Impacts:** Riparian and upland habitats within Options 1A and 1B, and adjacent areas of the Santa Clara River, provide foraging, cover, and/or breeding habitat for a variety of resident and migratory birds (e.g., Allen’s hummingbird). Direct impacts to nesting birds include ground-disturbing activities associated with excavation of the existing levee, construction of the new heightened levee, construction and grading of new access roads, and increased human presence. Potential indirect impacts to nesting birds include increased noise levels from heavy equipment and sheet pile installation, human disturbance, exposure to fugitive dust, the spread of noxious weeds, and disruption of breeding or foraging activity due to routine inspection and maintenance activities. Weed abatement through herbicide application or mechanized tools could also affect nesting. Disturbance of nesting birds or raptors would be a significant impact and mitigation is required. (EIR pages 3.2-92 through 3.2-95)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- BIO-1a** **Implement a Worker Environmental Education Program.**
- BIO-1b** **Implement Best Management Practices.**
- BIO-1c** **Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d** **Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e** **Implement Biological Construction Monitoring.**
- BIO-3** **Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures.** Prior to construction activities (i.e., mobilization, staging, grading, or construction) a qualified avian biologist shall be in place to conduct pre-construction surveys for nesting birds within the recognized breeding

season in all areas within 500 feet of all Project components (i.e., levees, staging areas, floodwalls, and access road locations). Surveys for raptors shall be conducted for all areas from January 1 to August 15. The required survey dates may be modified based on local conditions, as determined by the qualified avian biologist, in coordination with CDFW and USFWS. Measures intended to exclude nesting birds shall not be implemented without prior approval by CDFW and USFWS.

If breeding birds with active nests are found prior to or during construction, the qualified avian biologist shall establish a 300 foot buffer (500 foot for raptors) around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails.

The prescribed buffers may be adjusted by the qualified avian biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified avian biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The avian biologist shall be responsible for documenting the results of the surveys, nest buffers implemented, and presenting the results of ongoing monitoring in monitoring reports.

Surveys shall be conducted to include all impact areas on the Project site as well as all construction equipment. If birds are found to be nesting in facility structures or construction equipment and the nests contain eggs or young, buffers as described above shall be implemented.

If trees with nests are to be removed as part of Project construction activities, this will be done outside of the nesting season to avoid additional impacts to nesting raptors. If removal during the nesting season cannot be avoided, all trees will be inspected for active nests by the avian biologist. If nests are found within these trees and contain eggs or young, no activities within a 300 foot buffer for nesting birds and/or a 500 foot buffer for nesting raptors shall occur until the young have fledged the nest.

NV-1a **Moveable Construction Noise Barriers.** During construction, install an approximately 10-foot-high moveable barrier along the sidewalk between the construction activity and the residential property wall, extending approximately 30 feet in both directions from the construction activity. If determined to be infeasible due to space constraints, install alternative moveable noise barriers with sound-absorptive surfaces facing the noise source between construction equipment and sensitive receptors (i.e. residences) in Reach 4. As feasible, moveable noise barriers should also be used to shield habitat areas in the Santa Clara River from construction noise.

NV-1b **Monitor Noise Levels.** Periodically monitor noise levels during floodwall construction near noise-sensitive receptors in Reach 4 to determine whether construction noise levels exceed predicted levels. If construction noise is substantially greater than predicted, investigate whether it is feasible to install additional noise barriers or reposition construction equipment to reduce noise levels at sensitive receptors.

Facts in Support of Finding: To minimize impacts to nesting birds and raptors, the VCWPD would implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-3, NV-1a, and NV-1b. These measures include worker education describing the sensitive biological

resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), conducting pre-construction surveys, developing a Habitat Restoration and Monitoring Plan, conducting surveys for nesting birds and raptors prior to the start of construction activities, monitoring and comparing baseline and construction noise levels and requiring the installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. Additionally, the VCWPD will implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will minimize impacts to nesting birds and raptors to the extent possible.

Disturbance to Wildlife in Adjacent Habitat (Impact BIO-4)

- 1. Construction Impacts:** Construction activities associated with Options 1A or 1B, specifically the increased noise levels resulting from construction activities, will disturb a variety of common and sensitive wildlife within the adjacent habitats. The increased noise levels will likely alter and/or preclude the breeding activities for many common and sensitive bird species known to occur along the Santa Clara River. The disturbance to wildlife in adjacent habitats resulting from construction would be considered a significant adverse impact requiring mitigation. (EIR pages 3.2-95 through 3.2-97).

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Visual Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- NV-1a Movable Construction Noise Barriers.**
- NV-1b Monitor Noise Levels.**
- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**
- BIO-3 Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures.**

Facts in Support of Finding: To reduce impacts to wildlife in adjacent habitats resulting from the construction of the Project, the VCWPD will implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-3, NV-1a, and NV-1b. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts, development of a Habitat Restoration and Monitoring Plan, conducting pre-construction surveys, monitoring and comparison of baseline and construction noise levels and the installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. Additionally, the VCWPD will implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will minimize the impacts to wildlife in adjacent areas to the extent possible.

Disturbance to Nesting Southwestern Willow Flycatchers, Least Bell's Vireo, or Their Habitat (Impact BIO-5)

- 1. Construction Impacts:** Suitable breeding habitat for southwestern willow flycatchers is present within a very limited portion of the Project site (Reach 2) and in the adjacent riparian woodlands of the Santa Clara River (EIR Figure 3.2-7). Critical habitat for this species is mapped within the bed and banks of the Santa Clara River. Large amounts of suitable habitat for least Bell's vireo occur within the majority of the upland terrace in Reach 4 and in the riparian scrub habitats in Reaches 1-3. There is no critical habitat for least Bell's vireo in the Project area. Project activities have the potential to impact least Bell's vireos and southwestern willow flycatchers through direct impacts such as ground-disturbing activities associated with excavation of the existing levee, construction of new heightened levee and floodwall, and increased human presence. During the breeding season, construction activities could result in the displacement of breeding birds and the abandonment of active nests. Potential indirect impacts could include the deterioration of habitat as a result of the spread of noxious weeds, temporarily increased noise levels from heavy equipment and sheet pile installation, exposure to fugitive dust, and human presence during repairs to the levees and floodwalls or routine inspection of the facilities. Weed management could also affect nesting. (EIR pages 3.2-97 through 3.2-102).

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- NV-1a Movable Construction Noise Barriers.**
- NV-1b Monitor Noise Levels.**
- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**
- BIO-3 Conduct Pre-Construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures.**
- BIO-5 Conduct Protocol Surveys for Least Bell's Vireo and Southwestern Willow Flycatcher and Avoid Occupied Habitat.** If Project-related activities are scheduled to occur during the breeding season (March through September), a qualified avian biologist shall conduct focused surveys in suitable habitat within 500 feet of disturbance areas. The surveys shall be of adequate duration to verify potential nest sites if work is scheduled to occur during the breeding season.

If a territory or nest is confirmed in a previously unoccupied area, the CDFW and USFWS shall be notified within 48 hours. In coordination with the CDFW and USFWS, a 300 foot disturbance-free buffer shall be established and demarcated by fencing or flagging. This buffer may be adjusted as determined by a qualified avian biologist in coordination with the CDFW and USFWS. VCWPD, in consultation with the qualified biologist, shall halt construction if activities outside of but near the 300-foot buffer are determined to be negatively impacting the nesting birds. The qualified

biologist shall devise methods to reduce the noise and/or disturbance in the vicinity as needed. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge.

Facts in Support of Finding: To minimize impacts to least Bell's vireo and southwestern willow flycatcher, the VCWPD will implement Mitigation Measure BIO-5, which requires protocol surveys of suitable habitat, avoidance of any active nests, and monitoring of nest buffers. In addition, implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-3, NV-1a, and NV-1b will minimize impacts to least Bell's vireo and southwestern willow flycatcher. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, monitoring and comparing baseline and construction noise levels and requiring the installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. Additionally, the VCWPD will implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to least Bell's vireo and southwestern willow flycatcher.

Sensitive Invertebrate Species (Impact BIO-6)

- 1. Construction Impacts:** Sensitive snails are most often associated with riparian and upland communities that provide suitable microhabitat conditions, and therefore have the potential to occur in the Project area. Three common shoulderband snails (*Helminthoglypta* spp.) were detected in Reaches 2 and 4 during focused surveys. Suitable habitat for sensitive snail species is present within the riparian areas of Reaches 1 and 2 and both the riparian and upland habitats in Reach 4. If present, direct impacts include loss or mortality from levee or floodwall construction, grading of access roads, and increased human presence that crush individuals or alter microhabitat conditions to the degree the species can no longer survive (i.e., removal of leaf litter). Although not detected in the Project area, should they occur, direct impacts to monarch butterflies would most likely result from vehicle strikes and removal of roosting habitat. These impacts are considered significant and mitigation is required (EIR pages 3.2-102 through 3.2-103).

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- NV-1a Movable Construction Noise Barriers.**
- NV-1b Monitor Noise Levels.**
- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**

Facts in Support of Finding: To reduce or avoid impacts to sensitive invertebrate species, the VCWPD would implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, NV-1a, and NV-1b. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts, development of a Habitat Restoration and Monitoring Plan, monitoring and comparison of baseline and construction noise levels and the installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. Additionally, the VCWPD will implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to sensitive invertebrates.

Southwestern Pond Turtles (Impact BIO-7)

- 1. Construction Impacts:** Southwestern pond turtles have been observed in adjacent habitats within the Santa Clara River. There are numerous pools and/or secondary channels present at or near the toe of the existing levee structure that provide suitable habitat for this species (when water is present). Direct effects to southwestern pond turtle may occur as a result of loss of foraging, nesting, breeding or basking sites; mechanical crushing, and human trampling during vegetation removal activities, excavation of the existing levee, construction of the new heightened levee, and installation of floodwalls. Disruption of basking activity and potential impacts to southwestern pond turtles may result from construction activities, if pond turtles are present near the construction areas. In addition, access to zooplankton, an important hatchling food source, may be disrupted if water quality were to be severely degraded by the Project. Potential indirect impacts to southwestern pond turtles include alteration of habitat that precludes pond turtle use, degradation of water quality over time due to siltation and sedimentation, fugitive dust, and the spread of noxious weeds. Operational impacts include risk of mortality by vehicles and disturbance during routine maintenance inspections. These impacts are considered significant and mitigation is required. (EIR pages 3.2-103 through 3.2-106)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

BIO-1a Implement a Worker Environmental Education Program.

BIO-1b Implement Best Management Practices.

BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.

BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.

BIO-1e Implement Biological Construction Monitoring.

BIO-7 Conduct Surveys for Southwestern Pond Turtle and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing, a qualified biologist shall conduct focused surveys for southwestern pond turtle within the Project site and adjacent habitats to a distance of 200 feet away. Focused surveys shall occur between 1 April and 1 September, and shall consist of a minimum of four daytime surveys, to be completed prior to ground disturbance or vegetation clearing. The qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat located within 200 feet of occupied habitat in which ground disturbance will occur. Surveys will entail searching for evidence of pond turtle

nesting, including remnant eggshell fragments, which may be found on the ground following nest depredation.

If an active southwestern pond turtle nesting area would be adversely impacted by construction activities, the nesting area shall be avoided. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with the CDFW to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without written authorization from the CDFW.

A qualified biologist with demonstrated expertise with southwestern pond turtles shall monitor construction activities where pond turtles are present. The authorized biologist will be present full time during all vegetation removal activities immediately adjacent to, or within, habitat that supports populations of southwestern pond turtles, and part time for all remaining activities. If the installation of fencing to prevent turtles from entering the work area is deemed necessary by the qualified biologist, one pre-construction survey for southwestern pond turtles shall be conducted at the time of the fence installation. Pre-construction surveys for southwestern pond turtles shall also be conducted by the qualified biologist prior to vegetation clearing and/or removal of the existing levee structure.

Facts in Support of Finding: To reduce impacts to pond turtles, the VCWPD will implement Mitigation Measure BIO-7. This measure requires focused pre-construction surveys for this species and requires monitoring during ground disturbance and vegetation removal activities. In addition, the implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e will minimize impacts to sensitive southwestern pond turtles. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. Additionally, the VCWPD will implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to southwestern pond turtles.

Sensitive Garter Snakes (Impact BIO-8)

- 1. Construction Impacts:** The two-striped garter snake is highly aquatic but may move considerable distances into upland habitats, even where permanent water is lacking. Two-striped garter snakes have been observed in riparian, freshwater marsh, coastal sage scrub, chaparral, oak woodland, and grassland habitats. South coast garter snakes are only known from scattered locations in the Santa Clara River Valley; habitat requirements for this species are similar to those discussed above for two-striped garter snake. Direct impacts due to construction activities include mortality or injury of individual snakes as a result of mechanical crushing, loss of nesting, breeding, or basking sites, and human trampling. Other direct effects to these species include degradation of water quality and removal of vegetation. Potential indirect effects include compaction of soils, fugitive dust, and introduction of exotic plant species. Operational impacts include risk of mortality by vehicles and disturbance on access roads during routine maintenance and inspection activities. These impacts are considered significant and mitigation is required. (EIR pages 3.2-106 through 3.2-108)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

BIO-1a Implement a Worker Environmental Education Program.

BIO-1b Implement Best Management Practices.

BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.

BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.

BIO-1e Implement Biological Construction Monitoring.

BIO-8 Conduct Surveys for Two-Striped Garter Snakes and Implement Monitoring, Avoidance, and Minimization Measures. Prior to ground disturbance or vegetation clearing in the Project area, a qualified biologist shall conduct focused surveys for two-striped and south coast garter snakes where suitable habitat is present and directly impacted by construction vehicle access, or maintenance. Focused surveys shall consist of a minimum of four daytime surveys within one week of vegetation clearing. The qualified biologist will be present full time during all vegetation removal activities immediately adjacent to or within habitat that supports populations of the two-striped garter snake, and part time for all remaining activities. Surveys for garter snakes shall be conducted by the authorized biologist prior to the initiation of each day of vegetation removal activities. Any snakes found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project.

Facts in Support of Finding: To reduce effects on two-striped and south coast garter snakes, the VCWPD will implement BIO-8. This measure requires pre-construction surveys for two-striped and south coast garter snakes prior to vegetation or sediment removal, relocation of stranded or displaced animals, and construction monitoring. In addition, the implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e will minimize impacts to sensitive invertebrates. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to sensitive garter snakes.

Terrestrial Herpetofauna (Impact BIO-9)

- 1. Construction Impacts:** One special-status reptile (other than southwestern pond turtle, as discussed above), the coast horned lizard, was detected near the Project, within a dry, sandy area of the Santa Clara River during surveys conducted in 2014. Although not detected in the Project area, several other special-status or Ventura County Locally Important Species of reptiles and amphibians (terrestrial herpetofauna) could be affected by the Project. Direct impacts include being hit by vehicles on access roads, mechanical crushing during excavation or raising of the existing levee structure, or the construction of floodwalls. Other impacts include general disturbance due to increased human activity. Potential indirect impacts to these species include compaction of soils, fugitive dust; increased noise levels, and the introduction of exotic plant species. Operational impacts include risk of mortality by vehicles and disturbance on access roads during routine maintenance and inspection activities. These impacts are considered significant and mitigation is required. (EIR pages 3.2-108 through 3.2-110)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

BIO-1a **Implement a Worker Environmental Education Program.**

BIO-1b **Implement Best Management Practices.**

BIO-1c **Compensation for Temporary Impacts to Sensitive Vegetation Communities.**

BIO-1d **Compensation for Permanent Impacts to Sensitive Vegetation Communities.**

BIO-1e **Implement Biological Construction Monitoring.**

BIO-9 **Conduct Surveys for Terrestrial Herpetofauna and Implement Monitoring, Avoidance, and Minimization Measures.** Prior to ground disturbance or vegetation clearing at all Project locations, a qualified biologist shall conduct surveys for terrestrial herpetofauna where suitable habitat is present and directly impacted by construction vehicle access, or maintenance. Focused surveys shall consist of a minimum of three daytime surveys and one nighttime survey within one week of vegetation clearing. The qualified biologist will be present full time during all vegetation removal activities immediately adjacent to or within habitat that supports terrestrial herpetofauna, and part time for all remaining activities. Surveys for terrestrial herpetofauna shall be conducted by the qualified biologist prior to the initiation of each day of vegetation removal activities in suitable habitat. Terrestrial herpetofauna found within the area of disturbance or potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project.

Facts in Support of Finding: To reduce effects of the Project, VCWPD will implement Mitigation Measure BIO-9. This measure requires surveys for terrestrial herpetofauna prior to vegetation removal, relocation of stranded or displaced animals, and construction monitoring. In addition, Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e will minimize impacts to sensitive terrestrial herpetofauna. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to terrestrial herpetofauna.

Special-Status and Nesting Birds (Impact BIO-10)

- 1. Construction Impacts:** A variety of bird species, listed as California Species of Special Concern or as California Fully Protected species, were documented within the riparian and upland habitats within and adjacent to the Project. These include Cooper's hawk, yellow warbler, white-tailed kite, yellow-breasted chat, loggerhead shrike, Allen's hummingbird, and hermit warbler. Direct impacts to nesting birds include ground-disturbing activities associated with excavation of the existing levee, construction of the heightened levee and floodwalls, increased noise levels from heavy equipment and sheet pile installation, and increased human presence. Potential indirect impacts to nesting birds include human disturbance, increased noise levels from construction activities (i.e., excavation and sheet pile installation), exposure to fugitive dust, the spread of

noxious weeds, and disruption of breeding or foraging activity due to routine inspection and maintenance of facilities. Weed management could also affect nesting. Additionally, birds and other wildlife may temporarily or permanently leave their territories to avoid construction activity (i.e., increased noise levels), which could lead to reduced reproductive success and increased mortality. These impacts are considered significant and mitigation is required. (EIR pages 3.2-110 through 3.2-112)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- NV-1a Movable Construction Noise Barriers.**
- NV-1b Monitor Noise Levels.**
- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**
- BIO-3 Conduct Pre-Construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures.**
- BIO-5 Conduct Protocol Surveys for Least Bell's Vireo and Southwestern Willow Flycatcher and Avoid Occupied Habitat.**

Facts in Support of Finding: Nesting birds are protected under federal and State laws and regulations, including the Migratory Bird Treaty Act and California Fish and Game Code Section 3503.5. To further reduce effects of the Project on nesting birds, VCWPD will implement Mitigation BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-3, BIO-5, NV-1a, and NV-1b. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, monitoring and comparison of baseline and construction noise levels and installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will minimize impacts to the extent possible.

Special-Status Bats (Impact BIO-11)

- 1. Construction Impacts:** Bats have been routinely detected in and adjacent to the Project area and likely forage over most of the adjacent Santa Clara River. Bats have also been observed roosting in the Victoria Avenue Bridge just north of Reach 1. Direct impacts to bats include mortality or displacement of bats during ground-disturbing activities associated with construction of the levee and floodwalls, and increased human presence. Noise, vibration, and human activity could disrupt maternity roosts during the breeding season. Potential indirect effects could include increased traffic, increased noise levels from heavy equipment and sheet pile installation, exposure to fugitive dust, and human presence in the Project area that could result in bats abandoning their

roosts or maternal colonies. These impacts are considered significant and mitigation is required. (EIR pages 3.2-112 through 3.2-114)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

NV-1a Movable Construction Noise Barriers.

NV-1b Monitor Noise Levels.

BIO-1a Implement a Worker Environmental Education Program.

BIO-1b Implement Best Management Practices.

BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.

BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.

BIO-1e Implement Biological Construction Monitoring.

BIO-11 Survey for Maternity Colonies or Hibernaculum for Roosting Bats. Prior to ground disturbance or vegetation clearing at all Project locations, a qualified biologist shall conduct surveys for sensitive bats. Surveys shall be conducted no more than 15 days prior to grading near or the removal of trees or other structures. Surveys shall also be conducted during the maternity season (1 March to 31 July) within 300 feet of Project activities. If active maternity roosts or hibernacula are found, the structure, tree or tower occupied by the roost shall be avoided (i.e., not removed), if feasible. If avoidance of the maternity roost is not feasible, the qualified biologist will implement the following actions.

- **Maternity roosts.** If a maternity roost will be impacted by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the Project site no less than three months prior to the eviction of the colony. Alternative roost sites will be constructed in accordance with the specific bat's requirements in coordination with CDFW. By making the roosting habitat available prior to eviction, the colony will have a better chance of finding and using the roost. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. The CDFW shall be notified of any hibernacula or active nurseries within the construction zone.
- **Exclusion of bats prior to eviction from roosts.** If non-breeding bat hibernacula are found in trees scheduled to be removed, the individuals shall be safely evicted, under the direction of a qualified biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of one-way doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified biologist shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker

hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal).

Facts in Support of Finding: To reduce impacts to bats, VCWPD will implement Mitigation Measure BIO-11. This measure requires pre-construction surveys for roosting bats and the avoidance of maternity colonies or hibernaculum. If maternity colonies are found, a construction buffer would be established and work diverted to another area. The loss of foraging habitat will be offset through Mitigation Measure BIO-1c and BIO-1d. In addition, Mitigation Measures BIO-1a, BIO-1b, BIO-1e, NV-1a, and NV-1b will protect bats by educating workers, implementing BMPs, monitoring construction, and minimizing noise levels. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to special-status bats.

Special-Status Mammals (Impact BIO-12)

- 1. Construction Impacts:** The Project footprint, and adjacent areas within the Santa Clara River, have the potential to support a variety of special-status mammals including the American badger, San Diego desert woodrat, and San Diego black-tailed jackrabbit, all CDFW Species of Special Concern. Direct impacts to these species include mechanical crushing by vehicles and construction equipment, trampling, and loss of habitat. Construction disturbance can also result in the flushing of small animals from refugia, which increases the predation risk for small rodents. Potential indirect impacts include exposure to fugitive dust, alteration of soils, such as compaction, that could preclude burrowing, the spread of exotic weeds, and increased noise levels. Impacts to special-status mammals are considered significant and mitigation is required. (EIR pages 3.2-114 through 3.2-116)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- NV-1a Movable Construction Noise Barriers.**
- NV-1b Monitor Noise Levels.**
- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**

Facts in Support of Finding: To reduce impacts to special-status mammals, VCWPD will implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e, NV-1a, and NV-1b. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including speed limits to control fugitive dust), development of a Habitat Restoration and Monitoring Plan, monitoring and comparison of baseline and construction noise levels and installation of sound barriers when necessary, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M

programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures and adherence with the O&M programmatic BMPs will reduce impacts to special-status mammals.

Listed and Special-Status Fish (Impact BIO-13)

- 1. Construction Impacts:** The Santa Clara River and several of its tributaries (i.e., Santa Paula Creek and Sespe Creek) support the federally listed endangered steelhead trout (southern California Distinct Population Segment [DPS]) and are designated as Critical Habitat for this species. The federally endangered tidewater goby occurs downstream of the Project site within the brackish water areas of the lagoon at the mouth of the Santa Clara River. The federally and State endangered and State fully protected unarmored threespine stickleback has been recorded in the upper Santa Clara River watershed. Special-status species including the partially armored stickleback, Owen's sucker, arroyo chub, Santa Ana sucker, and the prickly sculpin are all known to occur along portions of the Santa Clara River when flow is present. These impacts are considered significant and mitigation is required. (EIR pages 3.2-116 through 3.2-117)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

BIO-1a Implement a Worker Environmental Education Program.

BIO-1b Implement Best Management Practices.

BIO-1e Implement Biological Construction Monitoring.

Facts in Support of Finding: To minimize impacts to listed or special-status fish species, VCWPD will implement Mitigation Measures BIO-1a, BIO-1b, and BIO-1e. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts (including water quality protection measures), and biological monitoring during ground disturbing and other Project-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. Implementation of these mitigation measures will reduce impacts to listed or special-status fish.

Special-Status Plants (Impact BIO-14)

- 1. Construction Impacts:** Three California black walnuts (CRPR 4.2) have been identified adjacent to the toe of the existing levee structure within Reach 2, but are located outside the Project footprint (Option 1A or 1B). If present, direct impacts to listed or special-status plants include trampling or crushing from heavy equipment, vehicles, or foot traffic, alterations to the native seed bank due to soil compaction, and modifications to existing hydrological conditions. Potential indirect impacts include the disruption of native seed banks through soil alterations, the accumulation of fugitive dust, increased erosion and sediment transport, and the colonization of non-native, invasive plant species. Ground-disturbing activities that would occur during the Project can result in the proliferation and spread of non-native invasive plants to new areas. Because noxious weeds can permanently degrade rare plant and animal habitats, their proliferation could adversely affect listed plant species if they are present. These impacts are considered significant and mitigation is required. (EIR pages 3.2-117 through 3.2-119)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

BIO-1a **Implement a Worker Environmental Education Program.**

BIO-1b **Implement Best Management Practices.**

BIO-1c **Compensation for Temporary Impacts to Sensitive Vegetation Communities.**

BIO-1d **Compensation for Permanent Impacts to Sensitive Vegetation Communities.**

BIO-1e **Implement Biological Construction Monitoring.**

BIO-14 **Conduct Pre-construction Surveys for State and federally Threatened, Endangered, Proposed, Petitioned, Candidate, and Special-status Plants and Avoid Any Located Occurrences of Listed Plants or Perform other Conservation Strategy.** Focused surveys for federal- and state-listed and other special-status plants shall be conducted. All special-status plant species (including listed threatened or endangered species, Ventura County Locally Important species, and all CRPR 1A, 1B, 2, 3, and 4 species) subject to disturbance shall be documented in a pre-construction survey report. Surveys shall be conducted during the appropriate season in all suitable habitat located within the Project disturbance areas and within 100 feet of disturbance areas and access roads and be conducted by a qualified botanist. The field surveys and reporting must conform to current CDFW botanical field survey protocols (CDFW, 2009) or more recent updates, if available. The report will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock (e.g., poor rainfall, recent grazing, or wildfire).

If federally or State-listed plants are detected in disturbance areas or within 100-feet of the disturbance areas, these populations would be avoided and the USFWS and CDFW notified as appropriate.

Impacts to any State or federally listed plants shall be avoided to the extent feasible. If Project activities result in the loss of more than 10 percent of the known individuals within a special-status plant species (List 1.B and List 2 only) occurrence/population to be impacted, USFWS and CDFW shall be consulted regarding the most appropriate conservation strategy for the particular species being impacted.

Facts in Support of Finding: Implementation of Mitigation Measure BIO-14 will protect occurrences of listed plant species and require compensation for impacts to special-status plant species. In addition, implementation of Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e will minimize impacts to special-status plant species. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts, development of a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. To control the spread of weeds in Project areas, the VCWPD will conduct vegetation maintenance (i.e., routine herbicide application) according to the VCWPD's Routine Maintenance and Operations Program. Implementation of these mitigation measures and vegetation maintenance will reduce impacts to listed or special-status plants.

Jurisdictional Waters and/or Wetland Habitats (Impact BIO-16)

- 1. Construction Impacts:** An assessment of jurisdictional wetlands, other “waters of the U.S.,” waters of the State, and riparian habitat identified approximately 0.004 acres of federally jurisdictional wetlands, 0.10 acres of federal non-wetland waters, and 4.47 acres of CDFW jurisdictional waters within Option 1A (EIR Figure 3.2-3 and Table 3.2-9). For Option 1B, approximately 0.004 acres of federally jurisdictional wetlands, 0.18 acres of federal non-wetland waters and 2.47 acres of State waters were identified (EIR Figure 3.2-3 and Table 3.2-8). Direct impacts to State and federal waters include the removal of native riparian vegetation, the discharge of fill, degradation of water quality, and increased erosion and sediment transport. Potential indirect impacts could include alterations to the existing topographical and hydrological conditions and the introduction of non-native, invasive plant species. These impacts are considered significant and mitigation is required. (EIR pages 3.2-121 through 3.2-123)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Biological Resources identified in the EIR.

Mitigation Measures

See text above for the following measures:

- BIO-1a Implement a Worker Environmental Education Program.**
- BIO-1b Implement Best Management Practices.**
- BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities.**
- BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities.**
- BIO-1e Implement Biological Construction Monitoring.**

Facts in Support of Finding: To minimize impacts to jurisdictional habitats, VCWPD will implement Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e. These measures include worker education describing the sensitive biological resources that occur on the Project site, implementation of BMPs to minimize and avoid impacts, developing a Habitat Restoration and Monitoring Plan, and conducting biological monitoring during ground-disturbing and other construction-related activities. The VCWPD will also implement existing O&M programmatic BMPs as well as those listed in Mitigation Measure BIO-1b. These measures and adherence with the O&M programmatic BMPs will reduce impacts to jurisdictional features.

C. SCENIC RESOURCES

Degradation of Views – Graffiti (Impact SR-3)

- 1. Construction Impacts:** The Project includes construction of a floodwall along Reach 4 with heights varying from four to six feet. Any graffiti placed on the proposed floodwall could be visible to the residences and users of the pedestrian pathway located on the southeast side of N. Ventura Road, the informal pedestrian route along the northwest side of N. Ventura Road, and to motorists traveling along N. Ventura Road. Graffiti on the floodwall could degrade the quality of the surroundings, as it would not be immediately removed even with implementation of the VCWPD’s Graffiti Abatement Program. This will create an adverse visual impact to local residences and mitigation is required. (EIR pages 3.3-11 through 3.3-12)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Scenic Resources identified in the EIR.

Mitigation Measure

SR-1 Graffiti Avoidance. The intent of this mitigation measure is to incorporate design features to avoid graffiti on the floodwall along Reach 4. Potential options include incorporating textured patterns on the wall, adding a mural or other artistic motif, providing vegetative screening, or application of an anti-graffiti coating which aids in the graffiti removal process (allows graffiti to be washed off). Prior to Project construction, the VCWPD and the City of Oxnard shall coordinate to develop a design plan for the floodwall, which is located within the City's jurisdiction.

Facts in Support of Finding: In addition to the provision for graffiti removal (VCWPD Graffiti Abatement Program), Mitigation Measure SR-1 recommends various options to avoid issues of persistent graffiti along the floodwall as well as coordination with the City of Oxnard on the design. With implementation of this measure, graffiti impacts will not be significant.

D. HAZARDS

Hazardous Waste (Impact HAZ-2)

- 1. Construction Impacts:** Hazardous waste may be encountered at landfill tie-ins (Option 1B only) and retaining wall footing excavation (Option 1A only). For Option 1A, no landfill tie-ins are required; however, a retaining wall will be required adjacent to the River Ridge Golf Course maintenance yard, where contaminated groundwater, landfill waste, and landfill gas may be encountered. For Option 1B, levee improvements require two landfill tie-ins (Coastal Landfill and Santa Clara Landfill). Excavation of the existing landfill cover soils to prepare for the tie-in may encounter landfill waste and landfill gas. These impacts are considered significant and mitigation is required. (EIR page 3.4-11)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Hazards identified in the EIR.

Mitigation Measure

HAZ-2 Pre-Construction Testing for Landfill Waste, Landfill Gas, and Groundwater. Prior to construction, develop and implement a landfill waste and landfill gas testing plan. The plan shall outline the procedures to conduct an investigation at each levee-landfill tie-in (Option 1B only – Coastal and Santa Clara landfills) and along the proposed retaining wall north of the golf course maintenance building (Option 1A only), depending on whether Option 1A or 1B is selected. Generally, the plan and investigation shall determine if landfill waste or landfill gas will be encountered to the planned depths of excavation and soil conditioning for the proposed tie-in. The plan shall also include procedures to sample waste debris and conduct laboratory testing to identify any hazardous waste contamination. The plan shall include a landfill gas testing program to collect vapor samples from the planned depth of soil disturbance and conduct gas measurements for methane and vinyl chloride.

Facts in Support of Finding: Implementation of Mitigation Measure HAZ-2 will require preparation and implementation of a landfill waste and landfill gas testing plan, outlining procedures for conducting an investigation at each levee-landfill tie-in (Option 1B only) and the retaining wall (Option 1A only) to identify hazardous materials. Impacts will be reduced through testing and avoided to the extent feasible through design based on testing results.

Public Health (Impact HAZ-3)

- 1. Construction Impacts:** Landfill gas recovery pipelines carry landfill gas to the Ventura Regional Sanitation District (VRSD) Flare Station as well as the former cogeneration facility located at the

current River Ridge Golf Course maintenance yard. Gas pipelines are buried and above ground and may be active or inactive (particularly near the former cogeneration facility). Damaging or rupturing a pipeline containing landfill gas could occur during grading for the Reach 1 landfill tie-ins (Option 1B only). Placing new levee fill over an existing gas pipeline may also cause rupture resulting in a public health impact to workers and possibly the public, or impede future maintenance of the pipeline. These impacts are considered significant and mitigation is required. (EIR pages 3.4-12)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Hazards identified in the EIR.

Mitigation Measure

HAZ-3 Coordination to Protect, Remove, or Relocate Landfill Gas Pipelines. Prior to construction, VCWPD shall coordinate the Project design with VRSD to identify and locate all landfill gas recovery wells, pipelines, condensate lines and sumps, and groundwater monitoring wells near the Project limits and ground disturbance areas. Based on the location of gas pipelines, a plan shall be developed to protect the pipelines in place or relocate them prior to construction. Active pipelines to be relocated will require additional coordination with VRSD to stop the gas flow, evacuate the line, and create the necessary connections to install the replacement pipeline. Inactive pipelines in the work areas shall be tested for residual gas or evacuated prior to removal or abandonment in place.

Facts in Support of Finding: Implementation of Mitigation Measure HAZ-3 will reduce impacts by designing the Project through coordination with VRSD, including protecting gas pipelines in place, going through proper channels for relocation, and following protocols for removal or abandonment.

E. TRANSPORTATION AND CIRCULATION

Road and Highway Level of Service (Impact TC-2)

- 1. Construction Impacts:** An analysis of the Project's impacts on the study area roadway segments indicates that the traffic generated by either Option 1A or 1B during construction will have a significant impact on one roadway segment for the existing conditions baseline scenario – Highway 101 southeast of Victoria Avenue (EIR Tables 3.6-14 and 3.6-15). The Project will have a significant impact on two roadway segments for the year 2017 baseline scenario – Highway 101 northwest of Victoria Avenue and Highway 101 southeast of Victoria Avenue (EIR Tables 3.6-16 and 3.6-17). The impacts will be significant because these roadways operate at an unacceptable level of service (LOS E or F) while the significance criteria state that a significant impact would occur if a project would add one or more peak hour trips to a roadway segment that is currently operating at an unacceptable LOS. These impacts are considered significant and mitigation is required. (EIR pages 3.6-22 through 3.6-23)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Traffic and Circulation identified in the EIR.

Mitigation Measure

TC-2 Restrict Project Traffic from Using Highway 101 at Victoria Avenue during Peak Hours. No Project construction traffic shall travel on Highway 101 immediately north and south of Victoria Avenue between the hours of 7:00 to 8:00 a.m. and 5:00 to 6:00 p.m.

Facts in Support of Finding: To reduce or avoid impacts to Highway 101 during construction, Mitigation Measure TC-2 will restrict the use of Highway 101 in the vicinity of Victoria Avenue during peak morning and afternoon traffic hours.

F. UTILITIES

Disruption of Utilities (Impact U-1)

1. **Construction Impacts:** Damaging or rupturing a pipeline containing landfill gas could occur during grading for the Reach 1 landfill tie-ins (Option 1B only). Placing new levee fill over an existing gas pipeline may impede future maintenance of the pipeline(s) (Options 1A and 1B). This impact would be significant and mitigation is required. (EIR pages 3.7-4 through 3.7-5)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Utilities identified in the EIR.

Mitigation Measure

See text above for the following measure:

HAZ-3 Coordination to Protect, Remove, or Relocate Landfill Gas Pipelines.

Facts in Support of Finding: Implementation of Mitigation Measure HAZ-3 will reduce impacts by designing the Project through coordination with VRSD, including protecting gas pipelines in place, going through proper channels for relocation, and following protocols for removal or abandonment.

G. CULTURAL RESOURCES

Unanticipated Discovery of Archaeological or Historic Resources

1. **Construction Impacts:** Project construction will not have any adverse physical or visual impacts on known archaeological resources; however, the nature of a record search or walkover can only confidently assess the potential for encountering surface cultural resource remains. As such, impacts to unknown resources could occur and would be significant; therefore, mitigation is required. (EIR page 5-6)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Cultural Resources identified in the EIR.

Mitigation Measures

CUL-1 Unanticipated Discovery of Archaeological or Historic Resources. In the event that archaeological or historic resources are found during Project implementation, an approved archaeological consultant shall be contacted immediately. Additionally, all ground-disturbing activities shall be halted at the discovery site and within 100 feet of it until the discovery has been evaluated by the approved archaeological consultant and all appropriate agencies have been notified. If the discovery is recommended as eligible for listing in the CRHR, mitigation of the impacts may include archaeological data recovery and/or monitoring.

CUL-2 Unanticipated Discovery of Human Remains. If human remains are encountered during excavations associated with this Project, all work must halt, and the County Coroner must be notified (Section 7050.5 of the California Health and Safety Code). The coroner will determine whether the remains are of forensic interest. If the coroner determines that the remains are subject to his or her authority and that the remains are Native American in origin, the coroner will contact the Native American

Heritage Commission (NAHC). The NAHC will identify the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the Public Resources Code. The MLD should make his/her recommendations within 48 hours of their notification by the NAHC. This recommendation may include (A) the nondestructive removal and analysis of human remains and items associated with Native American human remains; (B) preservation of Native American human remains and associated items in place; (C) relinquishment of Native American human remains and associated items to the descendants for treatment; or (D) other culturally appropriate treatment.

Facts in Support of Finding: To reduce or avoid impacts to unanticipated archaeological or historic resources, Mitigation Measure CUL-1 will require consultation with an approved archaeological consultant immediately upon discovery and halting of ground-disturbing activities in the immediate vicinity until evaluation has occurred. By obtaining a qualified archaeological monitor and empowering the monitor to stop construction activities, the cultural value of any discovered archaeological resources would be retained. In the event that human remains are uncovered during ground disturbing activities, implementation of Mitigation Measure CUL-2 would ensure that the appropriate agencies are contacted such that the remains are respectfully treated. By implementing mitigation measure CUL-2, potential impacts to human remains would be reduced to below a level of significance.

H. DAYTIME GLARE

New Source of Glare

1. **Construction Impacts:** Nighttime lighting will be required during construction if the contractor chooses to work from sunset through 7:00 p.m. during the fall or winter. Nighttime lighting along major roadways, such as Ventura Road or Victoria Avenue, could result in potential glare affecting motorists or the residences across the street from Reach 4. This impact would be significant and mitigation is required (EIR page 5-12).

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Daytime Glare identified in the EIR.

Mitigation Measure

DG-1 Illumination and Glare. All nighttime lighting shall be shielded or positioned to avoid direct illumination onto any nearby roads or private homes.

Facts in Support of Finding: Implementation of Mitigation Measure DG-1 will reduce glare impacts by requiring the construction contractor to shield nighttime lights or position them to avoid direct illumination onto nearby roads and homes.

I. RECREATION

Disruption of Recreational Facilities (Option 1B only)

1. **Construction Impact:** Construction of Option 1B would fill in the drainage swale within the River Ridge Golf Course, which would temporarily disrupt recreation activities at the golf course for approximately one month. This would cause a significant impact and mitigation is required. (EIR pages 5-22 through 5-23)

Finding: Pursuant to *CEQA Guidelines* §15091(a)(1), changes or alterations have been required or incorporated in the Project which will avoid or substantially lessen the significant environmental effects to Recreation identified in the EIR.

Mitigation Measure

REC-1 Construction Notification. The River Ridge Golf Course shall be contacted thirty (30) days prior to the start of construction to minimize disruptions to activities within the golf course.

Facts in Support of Finding: Mitigation Measure REC-1 requires the VCWPD to coordinate with the River Ridge Golf Course prior to construction to minimize disruptions to activities within the golf course. Implementation of this mitigation measure will reduce recreational impacts.

J. PROJECT ALTERNATIVES

The *CEQA Guidelines* require an EIR to “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (*CEQA Guidelines* §15126.6(a)). The *CEQA Guidelines* direct that selection of alternatives focus on those alternatives capable of eliminating any significant environmental effects of the project or of reducing them to a less-than significant level, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. In cases where a project is not expected to result in significant impacts after implementation of recommended mitigation, review of project alternatives is still appropriate.

The range of alternatives required within an EIR is governed by the “rule of reason” which requires an EIR to include only those alternatives necessary to permit a reasoned choice. In addition to specifying that the EIR evaluate “a range of reasonable alternatives” to the Project, Section 15126.6(c) of the *CEQA Guidelines* requires that an EIR identify any alternatives that were considered but were rejected as infeasible. The following alternatives were considered for analysis in the Draft EIR, but were not considered for further evaluation. These alternatives are described below, along with a discussion of why they were rejected from further consideration.

1. Alternatives Eliminated from Further Consideration

Reaches 1-3: Raised Earthen Levee with Landfill Tie-ins

This proposed alternative would provide for a raised earthen levee on top of the existing levee that ties into the landfill areas as high ground.

Project Related Impacts: This alternative would minimize the construction required by taking advantage of the high ground along the existing landfills. However, the disadvantages of this alternative include the greater number of landfill tie-ins (four) and the fact that the levee maintenance road would not be above the design water surface along its entire length.

Project Objectives: This alternative would meet the objectives of this Project.

Conclusion: This alternative is rejected because it represents a minor variation of another alternative carried forward for analysis, Reaches 1-3: Levee System with Landfill Tie-ins and Protection to Golf Course (Alternative 1).

Reach 4: Floodwall along South Side of Ventura Road and Pump Station

This proposed alternative would include a floodwall that ties into the Reach 3 levee immediately upstream of the re-directive weirs, a floodgate extending across Ventura Road (near the east end of the Reach 3 levee), and then a floodwall extending almost entirely on the south side of Ventura Road up to the UPRR bridge. This alternative is a variation of the Project in Reach 4, with the floodgate placed farther west along N. Ventura Road as opposed to placing the floodgate at the high point in Ventura Road.

Project Related Impacts: This proposed alternative would result in a taller floodwall (7-13 feet) located closer to residences (25-40 feet) in Reach 4, especially along the western portion where there is less space between the roadway and the existing homes. As such, this alternative would result in potentially greater visual intrusion and create a constrained pathway through the area, which may not be pleasing to recreationists that use the path/sidewalk through this area.

Project Objectives: This alternative would meet the objectives of this Project.

Conclusion: This alternative is rejected because it would not reduce the potential significant impacts of the Project and would create significant impacts of its own.

Reach 4: Raised N. Ventura Road to Eliminate Floodgates

This alternative was developed based on scoping comments received, which requested eliminating the need for floodgate(s) in N. Ventura Road. This alternative design raised the height of N. Ventura Road along Reach 4. The VCWPD prepared a grading plan for this alternative, including cross-sections which show that the raised road on the west end of Reach 4 would be above the existing residential garden walls prompting the need for an additional sound wall to minimize traffic noise for residences along this western portion of Reach 4 (EIR Figures 4-1 and 4-2). Continuing east along N. Ventura Road, the roadway would continue to be raised, as well as raising the existing levee on the south side of the road to an elevation slightly below the existing garden walls (EIR Figure 4-2).

Project Related Impacts: This alternative would result in greater long-term visual and traffic noise impacts to the residences along Reach 4 than the Project. From an engineering standpoint, this alternative would be infeasible due to the constraints associated with the UPRR bridge. To pass under the UPRR bridge the raised road would need to dip back down at a reasonable/drivable slope, such that Reach 4 would receive little benefit from the raised roadway. It would be difficult in just over 0.1 mile (approximately 775 feet) to reduce the road elevation sufficiently and at an acceptable slope for vehicles to pass safely under the Highway 101 bridge. Conversely, if the road were to go over the UPRR bridge, the cost would be extraordinary. The other option would be to cross the UPRR bridge at the level of the train tracks, which would create an “at-grade” crossing or new intersection between the railroad and N. Ventura Road, increasing the risk for collisions. It is unlikely UPRR would approve a change to its facility that would reduce public and rail safety.

Project Objectives: This alternative would not meet the objectives of this Project as it is infeasible.

Conclusion: This alternative is rejected as infeasible due to the constraints associated with the UPRR bridge, as well as the additional significant impacts it would create.

Reaches 1-4: Watershed Management Techniques – Upstream Detention

This potential alternative was identified as an approach to reduce the peak flow rates in the Santa Clara River to a level that would not require additional flood protection along SCR-3. The concept was to place storm water detention basins on existing agricultural lands adjacent to the river, upstream of SCR-3. The required storage volume was calculated to be approximately 30,000 acre-feet (less than 10 percent of the total storm runoff volume). Assuming a maximum depth of 10 feet, the required surface area for the basins would be in excess of 3,000 acres (nearly five square miles). Additional acreage would be needed if vegetation were allowed to grow in the basins for habitat purposes, as its presence would reduce total water storage capacity. Using a market value of \$150,000 per acre for agricultural land, the estimated land cost alone would be \$450 million (design, permitting, mitigation, and construction costs would need to be added to this value). This cost is more than 20 times the estimated cost of the Project, which makes this alternative economically infeasible.

Project Related Impacts: This alternative would have the potential for substantial environmental impacts due to the loss of agricultural land, as well as air quality, noise, and traffic impacts associated with the excavation, grading, and export of over five million cubic yards (CY) of earthen material to

create the detention basins. To ensure excess flows reach the detention basins from the Santa Clara River, a diversion and conveyance system would be required. Regulatory feasibility would be uncertain due to potential entrapment of federally-endangered steelhead trout in this diversion and detention basin system. It may be necessary to construct flood protection for this system of detention basins as they would likely be located within the Santa Clara River 100-year floodplain. Because sediment transport in this steep, predominantly natural watershed can be substantial during large flood events, the detention basins would require periodic maintenance to remove accumulated sediments and preserve their flood capacity. If riparian vegetation were to grow on these sediments, recurring mitigation would likely be required to offset habitat loss during sediment removal maintenance episodes. To avoid recurring mitigation costs, annual operations would include removal of all vegetation on the 3,000-acre basin. Furthermore, in the event of successive large flow events, the flood protection intended to be provided by the detention basins could be reduced. If full detention basins cannot be emptied in time to receive runoff from a subsequent storm event generating flow greater than 175,000 cfs, residential, commercial, and public structures along SCR-3 would remain vulnerable to flooding.

Project Objectives: This alternative would not meet the objectives of this Project as it is infeasible.

Conclusion: This alternative is rejected as infeasible due to the substantial cost, environmental impacts, and the speculative nature of being able to acquire the lands to build the detention basins.

Reaches 1-4: Watershed Management Techniques – Low Impact Development (LID)

This potential alternative was identified as a method to modify existing watershed development to reduce impervious areas and lower storm water runoff to mimic pre-development conditions. LID can be used as an effective method to reduce the impacts of a development project and attempt to mimic the natural hydrology of a watershed area. However, LID techniques are most beneficial for reducing peak runoff from developed areas associated with more frequent storms, such as the 2-, 5-, and 10-year events. For larger storm events, such as the 100-year event being used for the SCR-3 levee design, it is assumed that the ground conditions are mostly saturated as a result of preceding storm events. Therefore, LID methods to reduce impervious areas and promote infiltration are less effective in reducing runoff from developed areas as the ground conditions are assumed to already be saturated, cancelling their ability to provide flood storage during a 100-year event.

Project Related Impacts: This alternative would reduce or eliminate impervious areas within the watershed, which may have some limited effect on a reduction to the peak flow rate, but would not be sufficient to reduce the peak flow rates along the SCR-3 Project area to a degree that would mitigate the existing flood hazard. Additionally, it is not reasonable to assume that all of the existing impervious surfaces within the watershed could be mitigated using LID techniques, particularly for the rare storm events during saturated soil conditions associated with watershed-scale flooding.

Project Objectives: This alternative would not meet the objectives of this Project as it would not mitigate the existing flooding hazard.

Conclusion: This alternative is rejected as it would not meet the basic Project objective of providing flood protection to properties in the City of Oxnard.

Reaches 1-4: Watershed Management Techniques – Natural Floodplain Attenuation

The concept for this potential alternative is to allow the Santa Clara River's overbank areas (floodplains) to provide a natural benefit for peak flow attenuation and flood risk reduction through storage of runoff volume. The Santa Clara River currently benefits from this natural function by allowing the river to overflow its banks for much of the river's length from the Ventura County line downstream to the Freeman Diversion structure. Many of the existing overbank areas along this

segment are maintained as agricultural areas and allowed to flood during extreme events (EIR Figure 4-6).

Project Related Impacts: Preservation of the natural benefits of floodplain attenuation will not address the current flood hazards along the downstream areas of the Santa Clara River.

Project Objectives: This alternative would not meet the objectives of this Project as it would not mitigate the existing flooding hazard.

Conclusion: This alternative is rejected as it would not meet the basic Project objective of providing flood protection to properties in the City of Oxnard.

2. Alternatives Evaluated in the EIR

Alternative 1: Reaches 1-3: Levee System with Landfill Tie-ins and Golf Course Protection

This alternative is identical to Options 1A and 1B in Reach 1 and Reach 3. In Reach 2, raising of the earthen levee would extend from Reach 1 east to provide flood protection for the VRSD flare and River Ridge Golf Course maintenance yard. A retaining wall would also be constructed at the golf course maintenance yard. The existing access road would be raised above the design water surface elevation, and along the center of the Santa Clara Landfill (along the swale portion of the golf course) the existing levee would also be raised. This alternative requires four landfill tie-ins. This alternative provides for full flood protection within Reaches 1-3. The design in Reach 4 would be identical to the Project.

Project Related Impacts: Alternative 1 would have impacts that are very similar to the Project. One of the primary differences is that it would have four landfill tie-ins compared to either none (Option 1A) or two tie-ins (Option 1B) for the Project. This slightly increases the chances of encountering hazardous waste during excavation work, which is a potential impact that can be effectively mitigated. Alternative 1 also does not involve the filling of the drainage swale across the River Ridge Golf Course, which reduces the amount of jurisdictional waters affected by the Project in comparison to Option 1B. In other regards the impacts of Alternative 1 are similar to the Project, but vary somewhat in area and magnitude. Generally, the impacts of Alternative 1 would be slightly greater than Option 1B in Reaches 1-3, and slightly less than Option 1A. This is because Option 1A involves construction of a full levee in Reaches 1-3, whereas Alternative 1 involves less levee construction in Reach 2, and Option 1B only includes levees in Reaches 1 and 3, which is less than Alternative 1. In comparison to Option 1A, Alternative 1's reduced footprint results in less construction and maintenance impacts, including less maintenance of adjacent habitat along the Santa Clara River. In comparison to Option 1B, Alternative 1 has a larger footprint and involves more construction, including more construction adjacent to the river channel.

Project Objectives: This alternative would provide the necessary level of protection against a one percent annual chance flood event. However, because of the four levee tie-ins to high ground rather than raising the entire existing levee, it is not certain whether Alternative 1 would meet FEMA levee certification requirements. Alternative 1 would accommodate a future bikeway along N. Ventura Road.

Conclusion: This alternative is rejected as it would not reduce the significant impacts of the Project and may not meet FEMA levee certification requirements.

Alternative 2: Reach 4: River Side Floodwall

This alternative includes an approximately 2,600-foot-long floodwall along the river side of N. Ventura Road from the east end of Reach 3 to Highway 101, which would vary in height from 6 feet to over 22 feet (at the UPRR bridge). This alternative would also include a floodgate across N. Ventura Road just west of the Highway 101 overpass. Substantial UPRR coordination is anticipated for implementation of this alternative. This alternative provides for full flood protection for the areas

downstream of Highway 101 along Reach 4 and would not affect the future SCR-1 levee improvements. The design in Reaches 1-3 would be identical to the Project (either Option 1A or 1B).

Project Related Impacts: Alternative 2 would have impacts that are largely similar to the Project. The primary differences between Alternative 2 and the Project are the alignment and length of the floodwall in Reach 4. Placing the entire floodwall on the river side of N. Ventura Road places more construction closer to the river channel and increases the average height of the wall. The riverside location of the floodwall increases adverse impacts to habitat and sensitive species in the river channel, including loss of native vegetation and habitat, and disturbance of wildlife during construction. The increased height of the riverside floodwall, primarily in the vicinity of the UPRR bridge, and longer length increases adverse visual impacts and further obstructs views of the river channel. Temporary noise and vibration impacts would be slightly reduced, as construction of the eastern portion of the floodwall would be farther away from nearby residences

Project Objectives: Alternative 2 would provide the necessary level of protection against a one percent annual chance flood event and it is also expected to meet FEMA levee certification requirements. Alternative 2 would accommodate a future bikeway along N. Ventura Road.

Conclusion: This alternative is rejected as it would not substantially reduce the significant noise and vibration impacts of the Project and would create greater biological resources and scenic resources impacts.

Alternative 3: Reach 4: River Side/Land Side Floodwall Extending Up El Rio Drain

This alternative is essentially the same as the Project; however, instead of the floodwall crossing the El Rio Drain and tying directing into the UPRR embankment, the floodwall would instead turn south along the west side of the El Rio Drain and extend to E. Pacific Coast Highway (PCH)/Oxnard Boulevard (approximately 0.7 mile). This alternative involves substantially greater floodwall construction than the Project. The design for Reaches 1-3 would be identical to the Project (either Option 1A or 1B).

Project Related Impacts: Alternative 3 would have impacts that are similar to the Project, but several impacts would be increased either in magnitude or geographic extent. The primary difference between Alternative 3 and the Project is the addition of a floodwall along the west side of the El Rio Drain. As a result, construction is increased in comparison to the Project resulting in increased air pollutant emissions, noise intrusion into new areas, and additional construction traffic. Slightly increased landscape removal and associated urban wildlife disturbance is also expected under this alternative. Visual impacts would also be increased in comparison to the Project due to the addition of the floodwall along the El Rio Drain.

Project Objectives: Alternative 3 would provide the necessary level of protection against a one percent annual chance flood event and it is also expected to meet FEMA levee certification requirements. Alternative 3 would accommodate a future bikeway along N. Ventura Road.

Conclusion: This alternative is rejected as it would not reduce the significant impacts of the Project and would create greater air, noise, traffic, and visual impacts.

Alternative 4: Reach 4: East Slope Lining of the UPRR Embankment

This alternative is essentially the same as the Project; however, concrete lining would be added on the northeast side of the UPRR embankment and parallel to the El Rio Drain from N. Ventura Road to E. PCH/Oxnard Boulevard (approximately 0.7 mile). This alternative would ensure adequate protection downstream of the UPRR in the event the Village Specific Plan (Wagon Wheel) development and its required flood protection are not constructed. The design for Reaches 1-3 would be identical to the Project (either Option 1A or 1B).

Project Related Impacts: Alternative 4 would have impacts that are similar to the Project, but several impacts would be increased either in magnitude or geographic extent. The primary difference between Alternative 4 and the Project is the addition of concrete lining to the east side of the UPRR embankment. Construction would be increased in comparison to the Project, resulting in increased air pollutant emissions, noise intrusion into new areas, and additional construction traffic. Minor increases in landscape removal and associated urban wildlife disturbance may also occur under Alternative 4. Concrete lining along the UPRR embankment is also likely to attract graffiti, thereby creating an adverse visual effect.

Project Objectives: Alternative 4 would provide the necessary level of protection against a one percent annual flood chance event and it is also expected to meet FEMA levee certification requirements. Alternative 4 would accommodate a future bikeway along N. Ventura Road.

Conclusion: This alternative is rejected as it would not reduce the significant impacts of the Project and would create greater air, noise, traffic, and visual impacts.

Alternative 5: No Project Alternative

Under the No Project Alternative no development would occur along the SCR-3 levee system. People who own property within the City of Oxnard located within the inundation area south of SCR-3 and who have federally-backed mortgages would be required to purchase flood insurance. In the event of the one percent annual chance flood event, flood waters would not be blocked and properties within the inundation area on the landward side of SCR-3 would experience flooding. Damages from the one percent annual flood event have been estimated at approximately \$345.5 million.

Project Related Impacts: Under the No Project Alternative, the Project would not be constructed. As a result, a large area in Oxnard south of the river and west of Highway 101 would continue to be subject to flooding in a one percent annual chance flood event. Construction impacts associated with the Project would be avoided completely under this alternative. Existing O&M activities associated with the existing levee would continue. If the Project is not built, it is possible that another project may be proposed in the future to address the area's flooding problem. It is likely that such a project would have features and impacts that resemble the Project or one of the alternatives discussed above.

Project Objectives: The No Project Alternative would not meet the Project's primary objective of providing flood protection for a one percent annual chance flood event. A future bikeway along N. Ventura Road could be accommodated under this alternative.

Conclusion: This alternative is rejected as it would not meet the Project's primary objective of providing flood protection for a one percent annual chance flood event, leaving homes and businesses susceptible to flooding. Additionally, residents and business may be required to purchase flood insurance for properties within an identified flood area if the Federal Emergency Management Agency revises the Digital Flood Insurance Rate Maps (DFIRMs) in the future.