

# Notice of Preparation and Notice of Public Scoping Period

# Ventura River (VR-1) Levee Rehabilitation Project

Date: September 9, 2020

To: Residents, Agencies, Organizations, and Interested Parties

Subject: Notice of Preparation of an Environmental Impact Report for the

**Ventura River Levee Rehabilitation Project** 

This Notice of Preparation (NOP) has been prepared to notify agencies, organizations, and interested parties that the Ventura County Public Works Agency - Watershed Protection (Watershed Protection or VCPWA - WP), as the Lead Agency, is beginning preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) for the Ventura River Levee Rehabilitation Project (VR-1 Project or proposed project).

Watershed Protection is soliciting input from reviewing agencies and the public regarding the scope and content of the EIR. In accordance with CEQA, Watershed Protection requests that agencies review the Project Description provided in this NOP and provide comments on environmental issues related to the statutory responsibilities of the agency. The EIR will be used by Watershed Protection when considering approval of the proposed project and by other Responsible and Trustee Agencies to support their discretionary actions related to the proposed project. Watershed Protection is also seeking the views of residents, property owners, and the public regarding issues that should be addressed in the EIR.

The process of determining the focus and content of the EIR is referred to as "scoping" under State CEQA Guidelines Section 15083. Scoping helps to identify the range of actions, alternatives, environmental effects, and mitigation measures to be analyzed in depth, and eliminates from detailed study those issues that are not pertinent to the final decision on a proposed project. Scoping is also an effective way to bring together and address the concerns of the public, affected agencies, and other interested parties. Significant issues may be identified through public and agency comments.

Scoping, however, is not conducted to resolve differences concerning the merits of a project or to anticipate the ultimate decision on the proposal. Rather, the purpose of scoping is to help ensure that a comprehensive and focused EIR will be prepared that provides a firm basis for the decision-making process. Members of the public; affected federal, State, and local agencies; interest groups; stakeholders; and other interested parties may participate in the scoping process for the proposed project by providing written comments or recommendations concerning the issues to be analyzed in the EIR.

**Submitting Comments:** Comments may be sent anytime during the 30-day NOP comment period. The NOP review and comment period begins **September 9, 2020** and ends **October 8, 2020**. All comments must be received during the comment period. Please include the name of a contact person for your agency, if applicable. All comments should be directed to:

Ventura County Public Works Agency - Watershed Protection Attn: Tyler Barns 800 S. Victoria Ave., #1600 Ventura, CA 93009

If you do not have internet access or for general questions, please contact Tyler Barns at (805) 654-2064.

**Scoping Period:** To avoid physical gatherings in compliance with restrictions caused by COVID-19, Watershed Protection will conduct an online virtual public scoping comment period instead of the traditional Scoping Meeting. Scoping materials are provided on the VR-1 Levee Rehabilitation Project website (https://www.vcpublicworks.org/wp/venturariverlevee/) to provide an overview of the proposed project and an opportunity for the public to ask questions and submit comments.

Comments and questions may also be emailed to **vr1.info@ventura.org**. Scoping comments will be addressed in the EIR analyses.

## **Project Overview and Location**

#### **Overview**

The proposed project would involve structural improvements to the existing VR-1 levee, which would achieve compliance with the Federal Emergency Management Agency (FEMA) levee certification requirements and United States Army Corps of Engineers (Corps) levee permit requirements, address structural deficiencies, and extend the levee's capital service life. In 2008, FEMA determined that the VR-1 levee did not fully comply with all the federal levee certification regulatory requirements. Additionally, the Corps rated the levee as "minimally acceptable," meaning that the levee has multiple deficiencies. These deficiencies put the levee at risk of failing from a one percent annual chance (also known as the 100-year) flood event. The proposed project would improve flood protection to residents and businesses in the City of San Buenaventura (commonly known as Ventura) located within the one percent annual chance flood zone (a.k.a. FEMA flood zone) by achieving a one percent annual chance flood capacity with 3 feet of freeboard (i.e., the height of the levee above the flood water).

#### Location

The proposed project is in, and directly west of the City of San Buenaventura in Ventura County, approximately 60 miles northwest of Los Angeles. The proposed project would extend along the existing approximately 2.65-mile-long VR-1 levee system, which is owned and operated by Watershed Protection (Figure 1). The VR-1 levee begins at the Pacific Ocean within the Ventura City limits directly west of the Ventura County Fairgrounds and extends northerly into unincorporated County of Ventura. The VR-1 alignment within Watershed Protection's right-of-way (ROW) extends northerly along the Ventura River, crosses the Union Pacific Railroad (UPRR), passes underneath Highway 101, and runs parallel to State Route (SR) 33, and crosses SR 33 and extends easterly terminating at high ground south of Cañada De San Joaquin.

## **Project Objectives**

The objectives of the proposed project are to:

- Construct new, upgrade existing, and maintain VR-1 structures to address structural deficiencies
  and continuously provide flood protection to properties in Ventura that would otherwise require
  flood insurance under the National Flood Insurance Program, and do so in a cost-effective manner
  prior to FEMA revision of Flood Insurance Rate Maps, as funding becomes available,
- Achieve compliance with FEMA levee certification requirements as identified in 44 CFR 65.10 through the implementation of structural improvements to VR-1, and
- Extend the levee's capital service life.

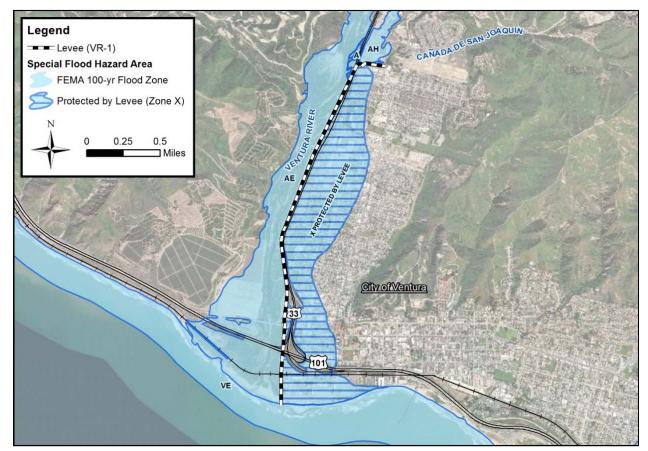


Figure 1. Existing FEMA Flood Hazard Map with Existing VR-1 Levee (87,080 cfs)

# **Project Description**

The proposed project consists of improvements to the VR-1 levee to meet the FEMA levee certification criteria to provide adequate flood protection from a Design Flow (100-year plus 10 percent as determined by Watershed Protection) flood event with a peak flow of 87,080 cubic feet per second (cfs). The proposed activities would generally be conducted on or in proximity to the existing VR-1 levee. For the purposes of analysis and identifying localized areas of modifications and improvements, VR-1 has been divided into five segments as noted below (Figure 2).

**Segment 1.** Extends northerly from the downstream limits of the VR-1 levee at the Pacific Ocean upstream approximately 0.21 mile to the UPRR crossing.

Segment 2. The approximately 27-foot long (0.005 mile) UPRR ROW.

Segment 3. Extends approximately 0.30 mile from the UPRR ROW upstream to Main Street.

**Segment 4.** Consists of Segments 4.1 through 4.4. Extends approximately 1.88 miles from Main Street upstream to the SR-33 crossing.

**Segment 5.** Includes the upstream end of the levee from the SR-33 crossing extending east approximately 0.25 mile to high ground south of Cañada De San Joaquin.

**Figure 2. Project Segments** 



The proposed project includes two options referred to as Scenario 1 and Scenario 2, as described below. The main difference between Scenario 1 and Scenario 2 is that the proposed levee improvements under Scenario 1 would begin at the downstream end of the levee by the Pacific Ocean, which would provide greater protection for structures within the FEMA flood zone south of Highway 101, including the Caltrans maintenance yards and Ventura County Fairgrounds (Figure 1). See the shaded cells in Table 1 for an overview of Scenarios 1 and 2 for the proposed project. (The unshaded cells in Table 1 are other alternatives developed in the *Ventura River Levee (VR-1) Rehabilitation: Alternatives Analysis* by Michael Baker International and Tetra Tech for Watershed Protection [see Possible Alternatives, pg.16].)

**Scenario 1.** Scenario 1 would implement Alternatives I.A, II.A, III.B, IV.A, and V.B (Table 1). Scenario 1 improvements would address deficiencies in VR-1 through improvements in all segments beginning at the Pacific Ocean. Improvements to Segment 1 would include levee rehabilitation by replacing portions of existing rock (referred to as rock riprap) along the riverside slope of the levee and constructing up to a 4-foot high floodwall adjacent to the UPRR ROW. The shaded cells in Table 1 represent alternatives selected for the proposed project Scenario 1 would implement Alternatives I.A, II.A, III.B, IV.A, and V.B. Scenario 2 would implement Alternatives I.B, II.B, III.D, IV.A, and V.B.

Improvements to Segment 2 would include installation of a floodgate or similar flood control device at the UPRR tracks to provide continuous flood protection between the Segment 1 and Segment 3 floodwalls. Inadequate levee bank protection (thickness, size, and amount of rock riprap material) also needs improvements. Some of the existing ungrouted riprap has significantly deteriorated into undersized

fragments and has been displaced in some areas. The existing riprap would be removed and replaced as needed along the embankment (side slope of the levee) and railroad bridge support structures.

Improvements to Segment 3 would consist of raising the height of the crown (i.e., top of the levee) and bike path. The existing floodwall adjacent to the UPRR ROW and the floodwall under Highway 101, which was not permitted by the Corps, would be removed and replaced with 4-foot high floodwalls. Similar to Segment 2, existing riprap levee bank protection material would be removed and replaced in select locations as necessary.

Improvements to Segment 4 would include restoring ungrouted rock riprap (i.e. loose rock riprap) directly upstream of the Main Street Bridge and constructing concreted rock riprap toe-down protection along the riverside face of the levee. The existing toe-down would also be extended deeper beneath the riverbed to provide necessary protection against scour. Structures that have been placed within the levee ROW, which were not permitted by the Corps, would be removed. These include a retaining wall, storage container, and metal storage building.

Improvements to Segment 5 would include constructing concreted rock riprap toe-down protection along the existing levee. The proposed toe-down protection would extend to the potential scour limit, which is approximately 35 to 40 feet below the riverbed. The extent of the toe-down protection would reduce as the potential for scour decreases (further away from the Ventura River). Double culverts would be added beneath SR-33 next to the existing double culverts to increase the conveyance capacity and to reduce floodwaters along Cañada De San Joaquin from backing up and "pooling" against the VR-1 levee. The existing 20-foot wide stoplog structure would be removed, and the Ventura River Trail (bike path) would be re-constructed to over the top of the levee with accessibility in compliance with the Americans with Disabilities Act.

All vegetation within 15 feet of the levee would be removed, if not previously removed as part of existing operations and maintenance (O&M) activities.

**Scenario 2.** Scenario 2 would implement Alternatives I.B (No Project Alternative), II.B (No Project Alternative), III.D, IV.A, and V.B (Table 1). Scenario 2 would not include improvements within Segment 1 and Segment 2. These segments would remain the same as existing conditions.

Improvements to VR-1 would instead begin in Segment 3 north of the UPRR ROW. As with Scenario 1, the levee crown and bike path from the UPRR ROW to the Main Street Bridge would be raised. Additionally, a 4- to 5-foot high floodwall would be constructed between Caltrans embankments for the northbound on-ramp from SR 33 to Hwy 101. This floodwall would be constructed with an automatic floodgate across Garden Street to prevent floodwaters from inundating downtown Ventura. Improvements to Segments 4 and 5 would be identical to those described for Scenario 1 above. All vegetation within 15 feet of the levee would also be removed, if not previously removed as part of existing O&M activities.

## **Project Components**

**Reinforcement of Levee Embankment.** The engineered levee embankment is the sloped area that holds and conveys water in a flood event. The levee embankment would be protected with loose rock riprap and concreted rock riprap material along the river face of the slope and beneath the riverbed for scour protection.

**Upgrading the Interior Drainage System.** A total of eight Corps-built and seven non-Corps built (unpermitted culverts and side-drainage structures) may require upgrades such as positive drainage devices (i.e., devices allowing only one-way flow). Culverts and side-drainage devices convey flow from the developed areas through the levee from east to west into the Ventura River. Upon review and

direction by the Corps and FEMA, improvements to existing culverts and drainage structures would be made.

**Toe-Down Protection.** The portion of the levee that extends underground beneath the riverbed to provide structural support, slope stability, and erosion control to the levee structure is referred to as the levee toe-down. The toe-down would be protected with concreted rock riprap extending from the existing toe protection to the potential scour limit thereby protecting against erosion at the levee toe.

**Floodwalls.** Floodwall is a vertical concrete barrier that would be constructed in deficient areas and replace unpermitted floodwalls. Floodwalls would be approximately 4 to 5 feet tall and would confine river flood flows to the river.

**Floodgates.** Under Scenario 1, a movable mechanical floodgate would be constructed at the UPRR tracks (Segment 2) to provide continuous flood control between proposed floodwalls in Segments 1 and 3. Under Scenario 2, no floodgate would be constructed at the UPRR tracks and instead a floodgate would be installed across Garden Street to close the gap between proposed and existing floodwalls on either side of the street.

**Raising the Levee Crown/Bike Path.** The crown and bike path that exists atop the levee would be raised approximately 1 to 4.5 feet in Segment 3 to address freeboard deficiencies.

**Removal of Unpermitted Encroachments.** Unpermitted structures located within the levee ROW along Segment 4 would be removed.

**Operations and Maintenance.** Although operations and maintenance (O&M) of the facilities that comprise the levee system may be considered Categorically Exempt pursuant to CEQA Section 15301, it is prudent to evaluate the potential impacts of these activities during the EIR process to address potential exceptions to the exemptions listed in Section 15300.2. Therefore, O&M activities planned for the VR-1 levee system will be evaluated in the EIR. Existing O&M will be considered the baseline condition for the proposed project.

Table 1. Ventura River Levee (VR-1) Rehabilitation Project Alternatives Summary Table				
Project Limits	Segment No.	Alternative No.	Alternative Name	Description
Pacific Ocean to UPRR Bridge (0.21 mile)	1	I.A Scenario 1	Levee Rehabilitation and Floodwall	<ul> <li>Reinforce existing rock riprap and construct a floodwall adjacent to the railroad from the UPRR tracks to 10 feet south of the UPRR tracks.</li> <li>Floodwall would be 4 feet high to address freeboard deficiency downstream of the UPRR.</li> <li>Repair bike trail asphalt after floodwall is replaced.</li> </ul>
		I.B Scenario 2	No Project Alternative	<ul> <li>No levee improvements in Segment 1. Existing conditions would remain the same.</li> <li>This portion would not receive FEMA accreditation and the fairgrounds would remain in the existing floodplain.</li> </ul>

Table 1. Ventura River Levee (VR-1) Rehabilitation Project Alternatives Summary Table				
Project Limits	Segment No.	Alternative No.	Alternative Name	Description
UPRR Bridge (0.005 mile)	2	II.A Scenario 1	Install Floodgate to Close Gap Between Segment 1 and Segment 3 Floodwalls	<ul> <li>Install permanent slide, swing, or other flood control gate at UPRR railroad tracks to close the gap between the Segment 1 and Segment 3 floodwalls; provides continuous flood protection.</li> <li>Restore rock riprap as needed.</li> </ul>
		II.B Scenario 2	No Project Alternative	<ul> <li>No levee improvements in Segment 2. Existing conditions would remain the same.</li> <li>No impacts to the railroad and therefore, no need to upgrade the railroad signaling.</li> </ul>
UPRR Bridge to Main Street Bridge (0.30 mile)	3	III.A	Remove and Replace Floodwall and Replace Rock Riprap along Riverside Levee Slope  Raise Height of	<ul> <li>Remove and replace entire existing unpermitted concrete floodwall along the river with a wall that meets current Corps levee design criteria.</li> <li>Place new rock riprap to protect deficient areas of the levee slope, including slope near the UPRR.</li> <li>Raise floodwall height within 100 feet of the UPRR bridge and the Main Street Bridge to ensure adequate freeboard.</li> <li>Provides flood protection for the Caltrans maintenance yard and other properties and complies with Corps and FEMA levee criteria.</li> <li>Results in a hanging levee condition (i.e., a levee that is unable to tie into higher ground or connects to an uncertified structure) at the downstream end of this segment if Alternative II.A is selected, and therefore requires further coordination with FEMA.</li> </ul>
		III.B Scenario 1	Levee Crown/Bike Path and Construct Floodwalls at Select Locations	<ul> <li>Remove and replace the existing floodwall adjacent to UPRR ROW to address freeboard deficiencies.</li> <li>Remove and replace the unpermitted floodwall beneath Highway 101.</li> <li>Raise the height of the levee crown/bike path.</li> <li>Restore displaced rock riprap as needed.</li> </ul>
		III.C	No Project Alternative	<ul> <li>No levee improvements in Segment 3. Existing conditions would remain the same.</li> <li>Coordination with UPRR and Caltrans would not be required; bike path would remain open.</li> <li>This portion would not receive FEMA accreditation and the fairgrounds would remain in the existing floodplain.</li> </ul>
		III.D Scenario 2	Improve the Levee from the UPRR to Main Street with a Levee Floodwall and Floodgate at Garden Street	<ul> <li>Incorporate the same improvements as Alternative III.B.</li> <li>Construct an automatic floodgate across Garden Street adjacent to the UPRR crossing.</li> <li>Construct a floodwall between Caltrans embankments for the northbound on-ramp from SR33 to Highway 101 with a floodgate at Garden Street to prevent floodwaters from inundating downtown Ventura.</li> </ul>

Project	Segment	Alternative	Alternative	Project Alternatives Summary Table
Limits	No.	No.	Name	Description
		III.E	Improve the Levee from Highway 101 to Main Street with a Levee Floodwall and Floodgate at Garden Street	<ul> <li>Remove the existing floodwall between the UPRR bridge and the Main Street Bridge.</li> <li>Raise the levee crown and bike path between the Highway 101 bridge and the Main Street Bridge.</li> <li>Rock riprap to be placed along the bottom of the levee slope of the Caltrans freeway and connector ramps between Highway 101 and Garden Street.</li> <li>Construct a floodwall between Caltrans embankments for the northbound on-ramp from SR 33 to Highway 101 with a floodgate across Garden Street to prevent floodwaters from inundating downtown Ventura. This alternative would provide the same level of flood protection along Segment 3 as Alternative III.D.</li> </ul>
Main Street Bridge to the Cañada de San Joaquin Confluence (1.88 miles)	4 (4.1-4.4)	IV.A Scenarios 1&2	Concreted Rock Riprap Toe-Down Protection (1.5:1 Slope)	<ul> <li>Restore ungrouted rock riprap directly upstream of the Main Street Bridge.</li> <li>Construct 2.75-foot thick concreted rock riprap to extend toe-down protection from the existing toe-down protection to potential scour limit along all of Segment 4, which is calculated to be approximately 2 feet to 35 feet.</li> <li>Install concreted rock riprap matching existing bank protection; provides continuous slope protection.</li> <li>Remove unpermitted structures in levee ROW.</li> </ul>
		IV.B	Reinforced Concrete Lining Toe- Down Protection (1.5:1 Slope)	<ul> <li>Restore ungrouted rock riprap directly upstream of the Main Street Bridge.</li> <li>Construct a reinforced concrete lining toe-down protection along the riverside face of the levee, as opposed to the proposed project (Alternative IV.A), which would install concreted rock riprap.</li> <li>Extend proposed toe-down protection from the existing toe protection to potential scour limit.</li> <li>Remove unpermitted structures in levee ROW.</li> </ul>
		IV.C	Ungrouted Rock Riprap Toe-Down Protection (2.25:1 Slope)	<ul> <li>Restore ungrouted rock riprap directly upstream of the Main Street Bridge.</li> <li>Construct ungrouted rock riprap along the riverside face of the levee, as opposed to the proposed project (Alternative IV.A), which would install concreted rock riprap.</li> <li>Extend proposed toe-down protection from the existing toe protection to potential scour limit.</li> <li>Remove unpermitted structures in levee ROW.</li> </ul>
		IV.D	Hard Armor Toe-Down Protection (1.5:1 Slope)	<ul> <li>Restore ungrouted rock riprap directly upstream of the Main Street Bridge.</li> <li>Install hard armor or articulated concrete block mats to eliminate scour deficiency, as opposed to the proposed project (Alternative IV.A), which would install concreted rock riprap.</li> <li>This alternative has a smaller construction footprint due to the thinner depth of protection needed compared with Alternative IV.A, which installs concreted rock riprap.</li> <li>Remove unpermitted structures in levee ROW</li> </ul>

Table 1. Ven	tura River	Levee (VR-1)	Rehabilitation	Project Alternatives Summary Table
Project	Segment	Alternative	Alternative	Description
SR 33 Crossing to Upstream End of the Levee (0.25 mile)	No. 5	No.	Concreted Rock Riprap Toe-Down Protection Extending 1,000-ft. Upstream from the End of the Levee	<ul> <li>Extend the concreted rock riprap toe-down protection used in Segment 4 of the levee (if Alternative IV.A is selected). Extension would begin at the upstream end of Segment 4 and continues upstream parallel to SR -33.</li> <li>Install additional culverts adjacent to the existing double 10-foot wide by 8-foot high reinforced concrete boxes (RCBs).</li> <li>Install four 96-inch reinforced concrete pipes beneath SR-33 to prevent floodwaters flowing along Cañada De San Joaquin from backing up and ponding against the VR-1 levee, eliminating the need to raise the VR-1 levee (i.e., eliminates freeboard deficiency) in this segment. This would achieve the required freeboard height, as opposed to the proposed project, which would construct double 14-foot wide by 6-foot high RCB culverts.</li> <li>Remove existing 20-foot wide stoplog structure and construct bike path over the levee east of SR 33.</li> </ul>
		V.B Scenarios 1&2	Concreted Rock Riprap Toe-Down Protection Along the Existing Levee Alignment  Concreted Rock Riprap Toe-Down	<ul> <li>This alternative would limit the amount of construction in and around Caltrans' ROW and reduce traffic impacts on SR-33.</li> <li>Construct concreted rock riprap toe-down protection along the existing levee alignment.</li> <li>The proposed toe-down protection would extend from the existing toe protection to the potential scour limit.</li> <li>Construct 14-foot wide by 6-foot high RCB culverts beneath SR-33 to reduce ponded floodwaters and associated freeboard deficiency.</li> <li>Remove existing 20-foot wide stoplog structure and construct bike path over the levee.</li> <li>Incorporate the same concreted rock riprap scour protection and stoplog removal/bike path reconstruction as Alternative V.B.</li> </ul>
		V.C Along Existin Levee Alignment with RCB Extension to	Alignment	Construct a double RCB in place of the Cañada De San Joaquin open channel, which would join the existing double RCBs at SR-33 and continue along the Cañada De San Joaquin channel alignment upstream to an existing RCB to reduce ponded floodwaters and associated freeboard deficiency.

# **Proposed Scope of the EIR**

Pursuant to State CEQA Guidelines Section 15081, Watershed Protection has determined that an EIR is required for the proposed project. Watershed Protection has not prepared an Initial Study and will instead begin work directly on the EIR, as allowed under State CEQA Guidelines Sections 15063(a). The EIR will focus on the potentially significant effects of the proposed project and will document the reasons for concluding that other effects would be less than significant.

## **Areas of Potential Impact**

The issue areas listed below are anticipated to be analyzed in detail in the EIR. Certain criteria within these issue areas were determined not to be significant and no further analysis is warranted, as detailed in the next section. Issue numbering corresponds to the *County of Ventura Initial Study Assessment Guidelines* (2011), as modified to reflect current State CEQA Guidelines Appendix G.

Air Quality (Issue 1). Construction and O&M of the proposed project would generate pollutant emissions and fugitive dust which may have the potential to violate regional air quality standards or contribute to an existing or projected air quality violation. Additionally, there may be a risk of contracting Valley Fever, a respiratory illness caused by inhalation of disturbed soil containing a species of fungus that is suspected to occur in Ventura County.

Water Resources (Issue 2). Water resources include the quantity and quality of groundwater and surface water. The proposed construction and O&M activities would occur adjacent to the Ventura River, which may have potentially significant impacts to water resources in the form of runoff and infiltration.

**Biological Resources (Issue 4).** The proposed project would include construction and operation activities adjacent to the Ventura River, which could result in significant impacts to common wildlife, nesting birds, special-status or rare wildlife species, and special-status plant species. Additionally, construction and O&M could directly or indirectly impact jurisdictional waters, wetlands, Environmentally Sensitive Habitat Areas, Critical Habitat, and wildlife movement.

**Noise/Vibration (Issue 21).** Noise caused by construction equipment could potentially exceed ambient noise levels at sensitive receptors such as residential areas and schools. O&M may also involve similar activities and equipment as construction; therefore, O&M activities may potentially exceed noise thresholds.

**Transportation/Circulation (Issue 27 A.1, A.2, and H).** The proposed project may have significant impacts to level of service, safety of public roads, and vehicle miles traveled due to the extent of heavy equipment and vehicles required primarily during construction. Additionally, construction of Segment 5 would require phased lane closures of SR-33.

## **Effects Found Not to be Significant**

Based on the site or project characteristics, it is anticipated that impacts would not occur or would be minimized through project design features and environmental commitments within the following environmental issue areas and therefore, these specific environmental impact criteria from the *County of Ventura Initial Study Assessment Guidelines* (2011), as modified to reflect current State CEQA Guidelines Appendix G, will be included in the Effects Found Not to be Significant section of the EIR per State CEQA Guidelines Section 15128. A brief description of why each issue area or criteria has been found not to be significant, and therefore is expected not to be analyzed in detail in the EIR, is provided below.

#### Mineral Resources (Issue 3)

- **3A Aggregate.** The proposed project would not be located on or adjacent to land within the Ventura County Mineral Resource Protection Overlay Zone. Construction and O&M of the proposed project would not hamper or preclude extraction of aggregate resources.
- **3B Petroleum.** The majority of the proposed project alignment would not occur within the Ventura Oil Field. A short portion of the northern end of the VR-1 alignment would be within the oil field, but

all oil wells in the vicinity of the levee are abandoned, and construction activities would not hamper or preclude access to petroleum resources.

#### **Agricultural Resources (Issue 5)**

- **5A Soils.** The proposed project would not be located on soils designated Prime, Statewide Importance, Unique, or Local Importance and as such, would not result in the loss of any Farmland soils.
- 5B Land Use Incompatibility. The proposed project is consistent with the existing zoning and would
  not extend onto agricultural-designated lands. No conflicts with existing agricultural land uses would
  occur.

#### Scenic Resources (Issue 6)

Visual impacts caused by construction would be short-term and temporary as the project primarily involves modifications to an existing levee facility. The presence of construction equipment and materials would not substantially alter the scenic value of the two Eligible State Scenic Highways (Highway 101 and SR-33) near the project site. Rock riprap along the levee would be of natural colors that blend in with the surroundings. The floodwalls may be susceptible to graffiti; however, Watershed Protection's existing O&M procedures include the prompt removal of graffiti on floodwalls and implements a Graffiti Abatement Program that works with non-profit organizations and neighbors to form neighborhood graffiti patrols to assist with graffiti reporting and removal.

#### Paleontological Resources (Issue 7)

Ground-disturbing activities associated with the proposed project would occur in artificial fill with no to low paleontological sensitivity due to the river wash, stream terrace, and alluvial deposits.

#### **Cultural and Tribal Cultural Resources (Issue 8)**

- 8A Archaeological. No previously recorded eligible archaeological resources exist within the proposed project's area of potential effects (APE). However, ground-disturbing activities have the potential to cause adverse impacts to as-of-yet unidentified buried archaeological resources. Standard environmental commitments would be implemented including cultural resources monitoring per the project's Cultural Resources Monitoring Plan (developed as part of the project's 408 permit for geotechnical testing) and procedures for inadvertent discovery of human remains.
- 8B Tribal Cultural Resources. Pursuant to legal requirements, Watershed Protection has consulted
  with all relevant tribes. The Barbareño/Ventureño Band of Mission Indians identified prehistoric
  archaeological sites near the proposed project, which indicated that the project area may have high
  sensitivity for containing buried tribal cultural resources. Standard environmental commitments
  would be implemented including tribal cultural monitoring and procedures for inadvertent discovery
  of human remains.
- 8C Historic. No previously recorded eligible archaeological resources exist within the proposed project's APE. However, ground-disturbing activities may adversely impact as-of-yet unidentified buried archaeological and historical resources. Therefore, standard environmental commitments would be implemented including cultural resources monitoring per the project's Cultural Resources Monitoring Plan and procedures for inadvertent discovery of human remains.

#### Coastal Beaches and Sand Dunes (Issue 9)

Construction along Segment 1 under Scenario 1 of the proposed project would include temporary construction access zones along the top of the levee that extends onto the beach; therefore, any beach disturbance would be temporary.

#### Fault Rupture (Issue 10)

The proposed project would comply with Corps requirements, Watershed Protection's Design Manual, and geotechnical recommendations. Furthermore, Watershed Protection would commit to repair post-seismic event damage to reduce adverse effects due to fault rupture (the levee would be repaired following earthquake damage).

#### **Ground Shaking (Issue 11)**

Compliance with Watershed Protection's Design Manual and geotechnical recommendations would reduce the project's potential for damage associated with seismically induced ground shaking.

#### Liquefaction (Issue 12)

Compliance with the Corps requirements and Watershed Protection's Design Manual, commitment of Watershed Protection to repair post-seismic event damage, and the minimal potential for liquefaction at the VR-1 levee would reduce liquefaction hazards.

#### Seiche & Tsunami Hazards (Issue 13)

No large enclosed bodies of water exist in the project area, so no impacts would occur regarding seiches. Segment 1 would be located within the tsunami inundation area; this portion of the proposed project involves construction improvements to the existing levee which may increase resistance to tsunami damage. The proposed project would not exacerbate tsunami hazards in this area.

#### Landslide/Mudflow (Issue 14)

The project area is relatively flat and not located within a California Geological Survey-designated earthquake-induced landslide area.

#### **Expansive Soils (Issue 15)**

The levee and adjacent soils where proposed project improvements would occur have low to no shrink-swell potential.

#### Subsidence (Issue 16)

Watershed Protection would conduct periodic settlement surveys along VR-1 to ensure the levee continues to function as designed.

#### **Hydraulic Hazards (Issue 17)**

- 17A Non-FEMA. The proposed project may cause erosion during construction; compliance with applicable laws, regulations, and environmental commitments would reduce non-FEMA hydraulic hazards.
- 17B FEMA. The proposed project is designed to provide flood hazard protection in accordance with federal, state, and local standards. It is also required for the FEMA Letter of Map Revision and FEMA certification.

#### Fire Hazards (Issue 18)

Although the proposed project would not be located within a designated High Fire Hazard Area/Fire Hazard Severity Zone or Hazardous Fire Area, most construction activities would occur adjacent to the Ventura River channel, which experiences seasonal dry periods making it susceptible to fires. Standard environmental commitments would be implemented as part of the proposed project, which would include compliance with applicable sections of the California Uniform Fire Code and the Ventura County Fire Protection ordinances, standards, and regulations.

#### **Aviation Hazards (Issue 19)**

The proposed project is not located within an airport land use plan boundary. It would also not involve any above-ground equipment or structures that could obstruct or interfere with aviation activities or navigable airspace.

#### Hazardous Materials/Waste (Issue 20)

- **20A Hazardous Materials.** The proposed project would include the use potentially hazardous materials for construction equipment and vehicles. Compliance with applicable laws, regulations, and environmental commitments for testing, handling, and disposal of lead-based paint would reduce impacts from hazardous materials.
- 20B Hazardous Waste. The proposed project would generate hazardous waste, and construction activities have the potential to encounter contaminated soil or groundwater, as well as abandoned oil wells. To reduce potential impacts, as part of final engineering a Soil and Groundwater Management Plan that outlines how construction crews would identify, handle, and dispose of potentially impacted soil and groundwater would be prepared and implemented during construction. Additionally, the location and status of abandoned oil wells would be verified, and a soil vapor study completed to determine if there is natural gas leaking from abandoned oil wells within 50 feet of Segment 5. If the laboratory tests confirm the presence of natural gas in the construction/excavation areas, a Health and Safety Plan would be developed that includes requirements for gas monitoring in work areas within 500 feet of abandoned oil wells.

#### Daytime Glare (Issue 22)

No major sources of daytime glare would occur during construction or operation of the proposed project.

#### **Public Health (Issue 23)**

The proposed project would benefit public health by reducing flood hazards in areas located within the inundation area on the land side of VR-1. Soil and groundwater contamination from construction would be avoided by incorporating environmental commitments. Potentially significant impacts regarding Valley Fever will be evaluated in the EIR (see Air Quality, above). No other public health impacts are anticipated from the proposed project.

#### **Greenhouse Gases (Issue 24)**

The proposed project is not expected to generate greenhouse gas emissions exceeding significance criteria or generate any new net operational greenhouse gas emissions over the life of the project.

#### **Community Character (Issue 25)**

The proposed project would provide flood control protection that would preserve and protect the surrounding community. Therefore, the proposed project would not conflict with the existing community character.

#### Housing (Issue 26)

The proposed project would neither remove existing housing nor prevent the future construction of homes in the project area. No increase to existing full-time employment is expected from implementation of the proposed project.

#### Transportation (Issue 27, A.3 and 4; B through G)

- 27A(3) Safety/Design of Private Access Roads. The proposed project would not require the construction of, or modification to, any private roads.
- 27A(4) Tactical Access. Access roads to the proposed project are gated and not accessible to the
  general public. Tactical access conforms with guidelines, as access is provided from both ends of the
  project area and at intermediate locations.
- 27B Pedestrian/Bicycle Facilities. The proposed project would not increase bicycle or pedestrian
  volumes and would not result in traffic-related safety issues or increase the demand for a protected
  highway crossing.
- **27C Bus Transit.** The proposed project would not interfere with any public bus routes or bus transit facilities and would not create a substantial demand for bus transit facilities or services.
- 27D Railroads. Under Scenario 1, construction of the proposed project would require coordination
  with the UPRR and completion of a UPRR Encroachment Permit. Coordination would avoid substantial
  interference with railroad facilities and operations.
- **27E Airports.** The proposed project would not interfere with airport operation or be located within the sphere of influence of an airport.
- **27F Harbors.** The proposed project is not located near any harbors; therefore, it would not affect the demand for boat traffic or facilities.
- **27G Pipelines.** The proposed project would renovate or upgrade pipes that serve as storm drains connecting to the levee and would not cause adverse impacts to existing pipeline infrastructure.

#### Water Supply (Issue 28)

- 28A Quality. The proposed project would not require a permanent source of domestic water supply.
   Wastewater from portable toilets used during construction would be managed by an approved liquid waste hauler.
- **28B Quantity.** The proposed project would not introduce a permanent water supply requirement and would not require a source of domestic water supply.
- **28C Fire Flow.** The proposed project's water requirements would be temporary and minimal, limited to periodic dust abatement during construction. Additionally, no private water sources would be used.

#### Waste Treatment/Disposal (Issue 29)

- 29A Individual Sewage Disposal Systems. No permanent sewage facilities would be constructed or modified.
- 29B Sewage Collection/Treatment Facilities. The proposed project would not affect sewage treatment facility capacity during construction and does not include any on-site sewage disposal facilities for operation.
- **29C Solid Waste Management.** The proposed project would generate minimal solid waste and would not substantially affect existing landfill capacities.
- **29D Solid Waste Facilities.** The proposed project would generate a minimal amount of non-recyclable solid waste and is not anticipated to impact the capacity of waste disposal facilities.

#### **Utilities (Issue 30)**

A minimal amount of electricity for minor work would be required during construction and would not substantially increase demand on a utility facility. Utilities such as the UPRR signals and utility lines may be relocated. Under Scenario 1, coordination with applicable utilities and compliance with the UPRR Encroachment Permit would ensure that the proposed project would not substantially interfere with existing utility systems.

#### Flood Control/Drainage (Issue 31)

- 31A Watershed Protection Facilities/Watercourses. The proposed project would not result in the
  obstruction, impairment, impediment, or alteration of flow of water which could result in increased
  risk of flood hazards.
- **31B Other Facilities/Watercourses.** The proposed improvements to VR-1 would maintain low flows into the Ventura River and would not impact runoff within non-Watershed Protection facilities.

#### Law Enforcement/Emergency Services (Issue 32)

The proposed project would not increase the population of the project area and would not develop habitable structures that could impact law enforcement or emergency services.

#### Fire Protection (Issue 33)

- **33A Distance/Response Time.** The VR-1 alignment is located within two miles of the nearest fire station (Ventura Fire Department Station 1) such that impacts regarding the distance and response time of fire protections services would not be substantial.
- 33B Personnel/Equipment/Facilities. The proposed project would not increase the population of the
  project area and would not increase the demand for fire protection service personnel, equipment, or
  facilities.

#### **Education (Issue 34)**

34A Schools. The proposed project would not involve the construction, removal, or displacement of
any residences; consequently, it would not affect the demand for schools within Ventura County or
Ventura.

• **34B Libraries.** The proposed project would not involve the in-migration or departure of any residents. Given the 0.5-mile distance to the nearest library, the proposed project would not interfere with library operations or limit public access to libraries.

#### Recreation (Issue 35)

- 35A Local Parks/Facilities. The proposed project would neither induce growth that would increase
  the demand for local recreational facilities, nor would it interfere with recreation occurring within
  existing nearby parks.
- 35B Regional Parks/Facilities. The proposed project would neither induce growth that would increase
  the demand for regional recreational facilities, nor would it interfere with recreation occurring within
  existing regional parks.
- **35C Regional Trails/Corridors.** Construction of the proposed project would require periodic temporary closures of Omer Rains Trail along Segments 1, 2, and 3; and the Ventura river Trail along Segments 4 and 5. Public access at these trail locations would be restored upon completion of the levee improvements. Watershed Protection would coordinate with the City of Ventura's Planning and Public Works Departments and the Ventura County Public Works Agency Roads and Transportation regarding bicycle and pedestrian circulation. Any required restrictions to ensure compliance with safety standards during construction and O&M would also be identified.

#### **Energy**

The proposed project would improve the existing VR-1 levee, which would reduce future flood-related damage and reconstruction needs, thereby reducing future energy consumption that would be required without the project. Energy usage during construction and O&M would not be wasteful, inefficient, or unnecessary. The proposed project does not include renewable energy, restrict renewable energy projects, or restrict the use of renewable energy.

### **Possible Alternatives**

This section describes a series of alternatives to be considered for levee Segments 1 through 5. These alternatives were developed in the *Ventura River Levee (VR-1) Rehabilitation: Alternatives Analysis* by Michael Baker International and Tetra Tech for Watershed Protection.

**No Project Alternative.** This alternative proposes no improvements to the entire levee system. The levee and its surroundings would remain the same as current conditions and would remain uncertified by FEMA and the Corps due to deficiencies.

**Segment Alternatives.** Table 1 presents various alternative designs considered during the project design for each segment of the levee. In addition, the EIR will address the No Project Alternative. The shaded cells represent alternatives selected for the proposed project (see Project Description). Scenario 1 would implement Alternatives I.A, II.A, III.B, IV.A, and V.B. Scenario 2 would implement Alternatives I.B, II.B, III.D, IV.A, and V.B.

# **Project Scoping Process and Scoping Period**

All interested parties are invited to submit comments on the scope and content of the EIR. Responsible and Trustee Agencies may need to use the EIR when considering permits or other discretionary approvals your agency may issue for the VR-1 Project. Written comments can be submitted as described under "Comment Period" above.