

# **Appendix B**

## **Mitigated Negative Declaration & Initial Study**

B.1 Mitigated Negative Declaration

B.2 Initial Study



**Appendix B.1**  
**Mitigated Negative Declaration**

**DRAFT  
MITIGATED NEGATIVE DECLARATION**

**for the**

**SESPE CREEK LEVEE  
IMPROVEMENTS PROJECT**

*Prepared for the:*

**VENTURA COUNTY  
WATERSHED PROTECTION DISTRICT**

*Prepared by:*

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## MITIGATED NEGATIVE DECLARATION

### Ventura County Watershed Protection District Sespe Creek Levee Improvements Project

#### 1. INTRODUCTION

The Sespe Creek Levee Improvements Project (herein referenced as the “proposed project” or “project”) involves increasing the height of a portion of the existing Sespe Creek Levee to the 100-year flood level of protection to remove over 1,000 properties from the 100-year floodplain currently shown on the Federal Emergency Management Agency’s (FEMA) Digital Flood Insurance Rate Maps (FIRMs). Currently, the levee’s capacity is estimated to be about 100,000 cubic feet per second (cfs) or slightly less than a 50-year level of flood protection.

The Sespe Creek Levee was originally constructed by the U.S. Army Corps of Engineers (Corps) in 1984 to protect residences located in the floodplain at that time. The levee was constructed along the east bank of the east branch of the creek, and extends from approximately 5,300 feet upstream of the Old Telegraph Road Bridge at Goodenough Road, downstream to the State Route (SR) 126 bridge. The original project included two miles of rock revetted earthen levee with 25 rock groin structures placed on the channel side of the levee and was designed to provide protection from the “Standard Project Flood” discharge of 121,000 cfs. (VCWPD, 2012)

Since the Sespe Creek Levee was completed in 1984, the largest flood recorded in this area occurred on January 10, 2005 and reached a peak flow rate of 85,300 cfs. Recent hydraulic analyses indicate that portions of the Sespe Creek Levee downstream of Old Telegraph Road, known as Sespe Creek 2 (SC-2), would be overtopped during a storm event with flow in excess of approximately 100,000 cfs at the confluence of the east-west connector channel and the east branch. (VCWPD, 2012)

In September of 2006, the sixth largest wildfire event in California history, known as the Day Fire, burned through the Sespe Creek Watershed and a large portion of Los Padres National Forest. This fire consumed vegetation across 55,300 acres, or more than one third of the watershed. In combination with changing hydrology in the watershed over the past decades, the threat of debris flows associated with damage from the Day Fire introduced an urgent need to re-assess the level of flood protection that the Sespe Creek Levee provides to the City of Fillmore. (RBF, 2010)

Key contributing factors to VCWPD’s request to modify/alter the SC-2 Levee include: peak flow rates have increased by 35 percent compared to the original levee design; dominant alluvial channel has shifted from the west fork to the east fork of the active streambed; the active channel is subject to resetting<sup>1</sup> after major storm events; and long-term sediment deposition and local erosion have occurred along the levee (VCWPD, 2012).

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<sup>1</sup> Resetting may involve significant bed aggradation during single floods, accompanied by abrupt changes in the river’s course. Channel position will shift and bed elevations will rise and fall according to the primary controls on sediment delivery to the creek, namely the influence of sediment pulses caused by wildfire (sediment production and delivery to the channel network) and flood events.

The Ventura County Watershed Protection District (VCWPD) submitted a “Provisionally Accredited Levee” or “PAL” request for the entire Sespe Creek Levee system in 2007; FEMA issued a PAL for the SC-1 Levee portion (Goodenough Road to Old Telegraph Road), but denied the PAL request for the SC-2 Levee portion (Old Telegraph Road to SR 126) in June of 2008 (VCWPD, 2012). The proposed project area has since been re-mapped by FEMA. FEMA’s 2010 mapping results for the project area show that the SC-2 Levee is incapable of withstanding the 100-year storm flow in two locations between Old Telegraph Road to the north and SR 126 to the south; these areas would be improved to meet FEMA standards with implementation of the proposed project.

## **2. PROJECT LOCATION**

The project is located along Sespe Creek near the City of Fillmore in Ventura County, California. Project activities would occur along the 1.1-mile section of the Sespe Creek Levee system, known as SC-2, between Old Telegraph Road and the SR 126 (see Initial Study Figure A-1, Project Location).

Sespe Creek drains 260 square miles of the Santa Clara River Watershed, which is a semiarid and tectonically active region of southern California. Sespe Creek flows 60 miles from its headwaters at the western edge of Ventura County downstream to its confluence with Santa Clara River near the City of Fillmore. The creek is fed by thirty named stream tributaries as it flows generally eastward in the upper reaches through the narrow, bedrock-confined Sespe Creek gorge and then out into a broad, alluvial fan towards the City of Fillmore and the Santa Clara River. (VCWPD, 2012)

The upper and middle portions of Sespe Creek flow through a narrow, v-shaped canyon with rugged mountain ridges separating the watershed from adjacent watersheds. Upstream of Fillmore, the stream leaves the steep canyons and flows through the proposed project area over a broad alluvial fan. The stream gradient in this area is about 40 feet per mile. A variety of factors contribute to intense, debris-laden floods in Sespe Creek, including the following: high-intensity rainfall during the winter and spring seasons, impervious soils, sparse vegetation, and steep gradient on some channels.

## **3. PROJECT DESCRIPTION**

The proposed project consists of implementing improvements along approximately 1.1 miles, or 5,808 feet, of the SC-2 Levee. Primary structural elements of the proposed project include raising the existing levee height by one to six feet along approximately 1,521 feet of the levee (fill slope) and adding a 321-foot-long retaining wall along the landward side of a portion of the levee by Residences #1 and #2 on Robin Court, as shown in Initial Study Figure A-4.

The proposed project also includes actions to rectify design deficiencies identified in a 2010 Periodic Inspection Report. In general, deficiencies to be addressed include removal of vegetation from the 15-foot-wide vegetation-free zone (VFZ) designated by the Corps, removal of three existing unpermitted turnouts, closure of illegal access points, and establishing a formal pedestrian access to the Sespe Creek Bike Trail from Mallard Street. These actions are described in greater detail below.

Construction of the proposed project is anticipated to occur over a five- to six-month period, from approximately April 2014 through September 2014. Construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. No construction is expected on weekends or holidays.

**Fill Slope.** Fill slope to raise the height of the levee would be installed along approximately 1,521 feet of the levee, from just north (upstream) of the Mallard Street cul-de-sac, to Residence #6, at Bluejay Street. The fill slope characteristics are described below, from north to south.

- *Residence #3.* For approximately 200 feet, from just north of Mallard Street to the southern property line of Residence #3, fill slope would raise the levee by 0.76 feet. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward side of the levee would have a slope ratio of two horizontal (H) to one vertical (V), or 2H:1V, and the riverward slope would be 3H:1V. The riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment. No impacts (property acquisition) at Residence #3 would occur.
- *Residence #2 and Residence #1.* For the next 321 feet (north to south), from the southern property line of Residence #3 (northern property line of Residence #2), fill slope would raise the levee by 1.08 feet along Residence #2 to 3.07 feet along Residence #1. The top of the levee along Residence #2 would be 17 feet wide, with a two percent riverward slope. Near Residence #1, there is a vehicle turnout area that widens the top of the levee to approximately 44 feet, maintaining a riverward slope of two percent. This turnout would be removed as part of the proposed project. The landward slope of the levee would be 2H:1V, and the riverward slope would be 3H:1V. The riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment. This portion of the levee improvements would also include installation of a retaining wall, discussed below.
- *Faith Community Church.* For the next 652 feet (north to south), from the southern property line of Residence #1 (northern property line of Faith Community Church) to the southern property line of Faith Community Church (northern property line of Residence #4), fill slope would raise the levee by 4.32 feet. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward and riverward slopes would both be 2H:1V, and the riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment.

Due to encroachment of the Faith Community Church property into the levee ROW and VFZ, this portion of fill slope would affect approximately 1,345 square feet of the Faith Community Church property, or a 652-foot-long stretch with a width of up to 3.2 feet.

- *Residence #4, Residence #5, and Residence #6.* South of the Faith Community Church fill slope improvements, for the next 348 feet from the southern property line of the church (northern property line of Residence #4) to Residence #6 at Bluejay Street, fill slope would raise the levee by 2.5 feet along Residence #4, one foot along Residence #5, and zero feet along Residence #6. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward slope would be 2H:1V and the riverward slope would be 3H:1V. No ungrouted stone reinforcement has been identified for the riverward slope on this section of levee improvements. These residential parcels do not encroach into the levee ROW or VFZ, and no property or easement acquisition would be required.
- Fill slope would be installed along approximately 100 feet of the southern portion of the levee, just north of SR 126. This portion of levee improvements would raise the existing levee by

zero to one foot, tapering. All improvements in this area would occur on the top and landside of the levee.

**Soil Cement Protective Pad.** This is an erosion protection barrier that would be installed to protect structure integrity in case water overtops the levee, which would only occur in response to storms of a magnitude greater than the 100-year storm event. The soil cement protective pad would be located between the landward retaining wall and the existing garden walls for an approximately 15-foot width and 320-foot length. A total of 180 cubic yards of cement would be required for the protective pad.

**Gravel Toe Drain.** Toe drains would be installed along landside levee toes to address seepage impacts in the vicinity of the levee toe, and to ensure long-term steady seepage conditions. In addition, if design flood elevations are heightened in the future, toe drains would aid in seepage collection, or standing water. Toe drains would be installed in the following locations:

- Stations 15+00 to 21+25 (starting at the north side of the VCWPD stockpile area, and ending just north of the existing turnout to be removed with this project, including a break in the toe drain at Station 18+65, at the south entrance of the Sespe Creek Bike Trail),
- Stations 28+00 to 34+66 (starting just north of the cul-de-sac at the end of Condor Court and just south of the Faith Community Church, and ending just north of the Faith Community Church Property and just south of the cul-de-sac at the end of Robin Court), and
- Stations 37+87 to 40+00 (starting between the cul-de-sacs at the end of Robin Court and Mallard Street, and ending just north of the cul-de-sac at the end of Mallard Street).

The gravel toe drains would be situated five feet horizontally into the embankment at the toe, and would be 18 inches in height. Approximately 1,500 feet of toe drain is required, and an associated 550 cubic yards of gravel would be applied for this purpose. Drain pipe may also be needed to collect seepage from levee landside toe areas; the pipe diameter would be at least six inches.

**Weighted Filter.** Weighted filters would be installed along detention basins and low-lying slope toe areas parallel to levee sections, in order to address potentially adverse effects associated with steady seepage conditions. Weighted filters would be installed at the following locations:

- Stations 7+25 to 15+00 (starting just north of SR 126 and ending at the north side of the VCWPD stockpile area, along the levee slope toe),
- Stations 21+25 to 22+50 (starting just north of the southern-most turnout to be removed and ending just south of Bluejay Street, along the detention basin toe), and
- Stations 42+50 to 45+25 (located in area of northern-most turnout to be removed near Oriole Court, along the detention basin toe).

Weighted filters would consist of rock riprap overlying a non-woven textile. Riprap would be classified as “Light Class,” with thickness of two to three feet, and would overlap the detention basin slope and extend beyond the toe by at least five feet. Approximately 550 cubic yards of rock would be required for the weighted filters.

**Retaining Wall.** A retaining wall would be installed for 321 feet along the landward side of the levee, from the northern property line of Residence #2 to the southern property line of Residence #1. The retaining wall would be comprised of concrete masonry unit. A 36-inch-tall cabled fence consisting of three smooth cables would be placed on top of the retaining wall as a safety feature. Visually, the height of the retaining wall would be lower than the existing garden walls along Residence #2 and Residence #1, although the cabled fence would be visible from both residences. The retaining wall would taper in height down to the existing levee height at either end. Along Residence #2, the total height of the retaining wall would be 7.7 feet, the bottom portion of which would be below grade, and along Residence #1, the total height of the retaining wall would be 5.4 feet, the bottom portion of which would also be below grade. The retaining wall would extend above the levee top slope by one foot. Fencing would be required at the top of the retaining wall to meet safety requirements associated with the location adjacent to a roadway.

**Vegetation Root Barrier.** A vegetation root barrier would be installed adjacent to Sheill Park for the entire 950 feet that the project runs along the park. This barrier would be 12 inches wide and four to five feet deep, comprised of either cement slurry, a buried concrete wall, or some other pre-manufactured geosynthetic product, such as interlocking panels made of Polyvinyl Chloride (PVC) or High Density Polyethylene (HDPE). Use of a geosynthetic would allow for installation using a “ditchwitch” type trenching operation, resulting in a narrow trench approximately several inches wide, but a ditchwitch would not be able to trench through larger rocks in the subsurface. A backhoe could be used to excavate the trench, but the trench width would be at least 12 inches. A wider trench width would facilitate the use of concrete as a root barrier, which is generally considered sturdier than a geosynthetic.

**Storm Drain Protection.** There is an existing storm drain on the levee-side of the garden wall along Residence #1; this feature would be protected in-place under the proposed project. By protecting the storm drain in place, it would continue to function towards the purpose of flood risk management during operation of the proposed project.

**Faith Community Church Easement.** The proposed project would remove an existing garden wall at the Faith Community Church property, a portion of the parking lot, and trees on the western portion of the parking lot. In addition, the existing storage structure located between the parking lot and the vacant parcel would need to be moved. The encroachment of Faith Community Church into the levee ROW conflicts with design of the proposed project; an encroachment easement of approximately 1,345 square feet, or 0.03 acre, would be required within the Faith Community Church parcel (APN 046030036).

The existing garden wall would likely be replaced by a five-foot-tall decorative fence, likely made of tubular steel poles, and situated inside the existing property line. The VCWPD would replace the existing landscaping trees along the property line on a 1:1 ratio with native trees in decorative pots.

The VCWPD is coordinating with Faith Community Church regarding the possibility of installing a gate at either end of the church parking lot area, in order to provide maintenance access to this portion of the levee. Formal access for maintenance is currently available via Old Telegraph Road, to the north, and SR 126, to the south; the church property would also provide access to the central portion of the levee.

There is an existing groundwater monitoring well on the SC-2 Levee across from the Faith Community Church property (not within the church property); with implementation of the proposed project, this monitoring well would be capped and abandoned in-place.

**Sespe Creek Bike Trail Access.** Current formal trail access in the project area is from Old Telegraph Road on the north, and the bike trail cross-over of the levee at E Street near SR 126 on the south. Unauthorized access points currently exist at openings in the garden wall at the end of Robin Court and Mallard Street. The unauthorized access point at the end of Robin Court would be closed as part of the project, and a new formal access ramp over the levee would be installed at the end of Mallard Street to provide for improved access to the Sespe Creek Bike Trail, as shown in Initial Study Figure A-6.

**Vegetation Removal.** All vegetation located within the Corps' 15-foot VFZ, or the 15-foot landward buffer from the toe of the levee, would be removed with implementation of the proposed project. The VFZ is a three-dimensional corridor designed to provide reliable access to and along the flood control structure, and to provide distance between root systems and the flood structure in order to moderate reliability risks associated with structural damage as well as potential piping and seepage due to root penetration (Corps, 2009). Tree roots would also be removed to where roots are less than one-half inch in diameter. Root removal excavations would be filled with compacted fill material.

Vegetation that would be removed in the project area to restore the VFZ include the following: mature trees located along Shiells Park, mature trees outside the property line behind a residence at the end of Quail Court, mature trees along the west side of the Faith Community Church parking lot, and one mature tree at the new vehicle turnout area. All trees removed as part of the project would be replaced on a 1:1 basis with native trees, with the exception of the Quail Court trees, which would not be replaced.

- *Shiells Park.* Regarding the trees located along Shiells Park, the Los Angeles District of the Corps has communicated to the VCWPD that a variance may be obtained to leave the trees in-place within the VFZ. However, the Regulatory Division of the Corps is the governing body responsible for issuing such a variance, and at the time of preparation of the Initial Study for the proposed project, the Regulatory Division has not issued a determination on whether the variance would be acceptable. Therefore, in order to be conservative in the assessment of potential impacts of the project, for the purposes of this analysis it is assumed that the trees along Shiells Park would be removed as part of the proposed project.

As shown in Initial Study Figure A-7 (Improvements at Shiells Park), eight trees along Shiells Park are currently located within the VCWPD right of way, in addition to 15 trees that are located within 15 feet of the design toe of the levee, the Corps' VFZ for structural integrity. In total, it is anticipated that 23 trees along Shiells Park would be removed under the proposed project. As noted above, all trees removed at Shiells Park would be replaced on a 1:1 basis with native trees.

- *Quail Court Residence.* The ornamental trees along the Quail Court residence are located outside of the property line, within the levee ROW and the VFZ. These trees would be removed as part of the proposed project, and would not be replaced.

- *Faith Community Church.* Existing trees located along the western side of the church parking lot are within the levee ROW and the VFZ. With implementation of the proposed project, these existing trees would be removed, along with the brick garden wall which separates the church development from the levee (described further below). The VCWPD would replace the existing trees on a 1:1 basis with native trees in decorative pots. Replacement trees would not conflict with the levee ROW or VFZ.
- *New Turnout.* There is one mature tree located in the new vehicle turnout area that would be removed as part of the proposed project. This tree would be replaced with one native tree.

**Unpermitted Encroachments.** Unpermitted encroachments along the levee include side-drainage structures, access ramps, three turnout areas, and a 24-inch diameter storm drain line that runs within 15 feet of the levee toe (the place where the levee slope meets the natural ground surface) along the downstream end of the levee on the landward side (Fugro, 2011). These unpermitted encroachments are described below.

- Pedestrian access to the levee ROW is currently available through openings in the garden wall at the end of Robin Court and Mallard Street. The opening at the end of Robin Court would be closed as part of the proposed project. A new formal access ramp would be installed at the end of Mallard Street to provide for improved access to the Sespe Creek Bike Trail.
- As described above, the garden wall along the Faith Community Church parcel would be moved under the proposed project. Upon project completion the original wall would be replaced with an iron fence, which would be located up to 3.2 feet landward of the original wall location along approximately 652 feet of the church parcel's new property line, resulting in a reduction in the parcel size for the church of approximately 1,345 square feet (0.03 acres).
- There are three vehicle turnout areas along the creek side of SC-2 Levee which are currently unpermitted encroachments that would be removed as part of the proposed project; this would include removal and rock and earthwork, but would not require placement of new material, as the turnouts were constructed on top of existing revetment, which would be exposed once the turnouts are removed. One new replacement turnout, conforming to Corps specifications, would be constructed at the top of the levee on the riverward side, where the new pedestrian/bike access path would be configured from the Mallard Street cul-de-sac. The new turnout would not encroach onto the pedestrian/bike path, and would be an area measuring approximately 70 feet by 25 feet beyond the width of the top of the levee. One existing, mature tree would be removed to provide this turnout area; as mentioned above, this tree would be replaced with a native tree (1:1 replacement basis).

**Rock Revetment Displacements.** Areas of significant rip-rap displacement and stone degradation are present along the levee, and may pose a threat to the integrity of the levee. Unpermitted pedestrian access to the levee ROW currently occurs through openings in the garden wall at the end of Robin Court and Mallard Street; pedestrian access through these openings has resulted in rock revetment displacements. There are localized areas long the levee where the rip-rap has broken down or deteriorated into two- to 12-inch fragments, and some areas of displacement are the result of human interference where the stone has been moved to create foot traffic access through the levee ROW

(Fugro, 2011). Rock revetment replacement would be addressed during maintenance actions in 2012. However, as part of the project, the unpermitted access point at the end of Robin Court would be closed, and a new formal access point would be added at the end of Mallard Street, which would reduce future rock revetment displacements. Formal access to the bike trail would continue to be available at Old Telegraph Road (north end) and E Street (south end).

**Access Ramps.** Two new vehicle access ramps would be constructed on the landward side of the levee as part of the proposed project. One of the new ramps would be constructed near the southern boundary of Shiells Park, in order to allow access to the landward levee toe for maintenance and occasional flood-fighting activities (such as sand bag placement). As shown in Initial Study Figure A-7 (Improvements at Shiells Park), the new ramp would be 15 feet wide and 120 feet long, and would introduce a new impervious area of approximately 1,800 square feet. The second new ramp would be constructed on the landward side of the levee near the VCWPD stockpile property by Route 126 to provide construction and maintenance vehicle access. The ramp would be 15 feet wide and 180 feet long and would introduce a new impervious area of approximately 2,700 square feet.

#### **4. PROJECT PROPONENT**

The Ventura County Watershed Protection District (VCWPD) is the CEQA Lead Agency for the proposed project.

Ventura County Watershed Protection District  
800 South Victoria Avenue  
Ventura, California 93009-1610

Contact: Elizabeth Martinez, Environmental Planner  
Phone: (805) 658-4374

#### **5. AVAILABILITY OF DOCUMENTS**

Copies of the proposed project's Mitigated Negative Declaration and Initial Study are on file and available for review at the following location:

Ventura County Watershed Protection District  
800 South Victoria Avenue, 1<sup>st</sup> Floor  
Ventura, California 93009  
(805) 654-2001

Copies of the Mitigated Negative Declaration and Initial Study are also available for review at the following locations:

Fillmore Library  
502 Second Street  
Fillmore, California 93015  
(805) 524-3355

Santa Paula Public Library  
119 N. 8<sup>th</sup> Street  
Santa Paula, California 93060-2784  
(805) 525-3615

Piru Library  
3811 Center Street  
Piru, California 93040  
(805) 521-1753

Saticoy Library  
11426 Violeta Street  
Ventura, California 93004  
(805) 647-5736

The Mitigated Negative Declaration and Initial Study can also be accessed via the internet at:

<http://vcwatershed.org>

## 6. ENVIRONMENTAL DETERMINATION

This Mitigated Negative Declaration and Initial Study have been prepared to: (1) identify potential effects on the environment due to implementation of the proposed project; and, (2) evaluate the significance of these effects. Based upon the analysis contained in the Initial Study, the proposed project would have less than significant impacts or no impacts related to the following issue areas.

- Water Resources
- Agricultural Resources
- Scenic Resources
- Paleontological Resources
- Coastal Beaches and Sand Dunes
- Fault Rupture
- Ground Shaking
- Liquefaction
- Seiche & Tsunami Hazards
- Landslide / Mudflow
- Expansive Soils
- Subsidence
- Hydraulic Hazards
- Fire Hazards
- Aviation Hazards
- Hazardous Materials / Wastes
- Daytime Glare
- Public Health
- Greenhouse Gases
- Community Character
- Housing
- Transportation / Circulation
- Water Supply
- Waste Treatment / Disposal
- Utilities
- Flood Control / Drainage
- Law Enforcement / Emergency Services
- Fire Protection
- Education
- Recreation

However, the environmental analysis presented in the Initial Study concludes that the proposed project could have potentially significant adverse impacts associated with five issue areas unless mitigation measures are applied that can effectively reduce or avoid these impacts. These issue areas are listed below.

- Air Quality
- Mineral Resources
- Biological Resources
- Cultural Resources
- Noise and Vibration

Measures have been formulated that, with full implementation, would effectively mitigate all of the potentially significant adverse environmental impacts associated with the proposed project to a level of less than significant. These measures are presented in the next section of this Mitigated Negative Declaration.

Based upon the impact analysis contained in Section C of the of the proposed project's Initial Study and the mandatory findings of significance contained therein (Initial Study Section D), this Mitigated Negative Declaration documents the VCWPD's finding that there are no significantly adverse unavoidable impacts associated with the proposed project, and that preparation of an Environmental Impact Report (EIR) is not warranted.

## 7. MITIGATION MEASURES

Implementation of the following mitigation measures would either avoid potentially significant impacts identified in the proposed project's Initial Study, or reduce them to a level of less than significant:

### Air Quality

**MM AQ-1** All equipment shall be turned off when not in use. Engine idling shall not exceed five (5) minutes unless required for proper operation.

**MM AQ-2** All equipment engines shall be maintained in good operating condition and in tune per manufacturers' specification.

**MM AQ-3** All off-road construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 3 California Emission Standards for Off-road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Section 2423(b)(1). If a Tier 3 or Tier 3-equivalent engine is not available for a particular item of equipment, Tier 2 compliant engines shall be allowed on a case by case basis, as determined by the VCWPD.

**MM AQ-4** All project 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 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. Install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.
3. Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road.
4. Use properly secured tarps or covering that covers the entire surface area of the earthen fill, or other fine bulk material, loads.
5. Water or use environmentally safe chemical stabilization to treat the earthen fill storage piles to create stabilized surfaces that will minimize wind erosion emissions.
6. Limit vehicle speeds on the project site unpaved roads to 10 mph.

7. Discontinue work activities including all grading activities, but not 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).

**MM AQ-5** The construction contractor shall coordinate with representatives of the Faith Community Church, consistent with Mitigation Measures N-1, and representatives of Shiells Park to conduct tree removal or other project activities at these locations during periods when they are not specifically scheduled for use. Additionally, the construction contractor shall coordinate with representatives of the Upland Rock Sediment Removal/Mining of Sespe Creek project to identify if concurrent sediment removal and proposed project activities will occur in proximity to one another, and will schedule the proposed project activities, as feasible, to minimize such concurrent activities.

### **Mineral Resources**

**MM MR-1** The VCWPD shall coordinate with Upland Rock thirty (30) days prior to the start of construction to avoid disruptions to the sediment removal and mining activities associated with CUP-4185.

### **Biological Resources**

**MM B-1** The VCWPD shall not clear riparian vegetation during the migratory bird breeding season (March 15 through September 15). If construction activities extend into the breeding season (March 15 to September 15) the VCWPD shall conduct protocol surveys for least Bell's vireo in areas that support riparian habitat within 500 feet of the construction footprint. Work shall not occur within 500 feet of a nesting vireo unless authorized by the County, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).

**MM B-2** Prior to construction activities, a qualified biologist shall inspect the construction site and adjacent areas to determine if any sensitive plants, fish, or wildlife species are present. If a sensitive fish or wildlife species is present at the construction site during the work period, the VCWPD shall schedule work to avoid the species, if possible. If avoidance of any listed species is not feasible, the VCWPD shall cease work and consult with the USFWS or National Marine Fisheries Service, as appropriate.

**MM B-3** All personnel, including contractors, and VCWPD staff, involved in project activities will receive environmental training on sensitive biological resources that may be encountered in the Project Area. Environmental training shall be implemented throughout the duration of construction of the proposed project. The environmental training shall include, at a minimum, the following items:

- 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 will include a discussion on microtrash and its potential harmful effects on California condors.
- Training materials and briefings shall include but not be limited to: a discussion of the Federal and State Endangered Species Acts 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 of the discovery of dead or injured wildlife; and a review of mitigation requirements.

- Protocols to be followed when road kill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor 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.
- Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species will be provided to all project contractors and heavy equipment operators.
- A weather protected bulletin board or binder shall be centrally placed or kept onsite (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This board or binder will provide key provisions of regulations or project conditions as they relate to biological resources or as they apply to grading activities. This information shall be easily accessible for personnel in all active work areas.

**MM B-4** Upon development of final construction plans and prior to site disturbance, the VCWPD shall clearly delineate the limits of construction on project plans. All construction, site disturbance, and vegetation removal shall be located within the delineated construction boundaries. The storage of equipment and materials, and temporary stockpiling of soil shall be located within designated areas only, and outside of natural habitat areas. The limits of construction shall be delineated in the field with temporary construction fencing, staking, or flagging.

**MM B-5** The VCWPD shall retain a qualified biologist(s) with demonstrated expertise with listed and/or special-status plants, invertebrates and gastropods, birds, amphibians, terrestrial mammals and reptiles to monitor, a minimum of once a week, 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 the listed or special-status species identified within the project boundaries. Any listed or special-status plants shall be flagged for avoidance. Any special-status non-listed terrestrial species found within a project impact area shall be relocated by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the qualified biologist, the qualified biologist shall direct the installation of the fence.

If, during construction, the biological monitor observes a dead or injured listed or special-status wildlife species on the construction site, a written report shall be sent within five calendar days to the appropriate agencies (e.g., VCWPD, USFWS, and/or CDFW, where CDFW reporting is a requirement of the local sponsor under the California Endangered Species Act. The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). The biological monitor shall, immediately upon finding the remains, coordinate with the onsite construction foreman to discuss the events that caused the

mortality, if known, and implement measures to prevent future incidents. Details of these measures shall be included with the report. If possible, species remains shall be collected and frozen as soon as possible, and CDFW and/or USFWS shall be contacted regarding ultimate disposal of the remains.

**MM B-6**

Best Management Practices (BMPs) will be implemented as standard operating procedures during all construction-related activities to avoid or minimize impacts on biological resources. These BMPs will include but are not limited to the following:

- a. Vehicles and equipment shall be parked on designated staging or parking areas, pavement, existing roads, and previously disturbed areas to the extent practicable.
- b. 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 onsite 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.
- c. All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris scheduled to be removed weekly will be stored in animal-proof containers and/or removed from the site each day. No deliberate feeding of wildlife will be allowed.
- d. Use of chemicals, fuels, lubricants, or biocides will be in compliance with all local, state and federal regulations. 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. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, will immediately report the incident to the onsite representative identified in the environmental training. The representative will contact the appropriate agency(ies) (e.g. USFWS, CDFW, and/or 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 will include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured will be turned over immediately to CDFW or USFWS, as appropriate, for care, analysis, or disposition.
- e. Avoidance and minimization of construction activities resulting in impacts to jurisdictional wetlands, streambeds, and banks of any jurisdictional ephemeral drainage, except as authorized by regulatory agencies.
- f. 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 will 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 will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume, or removed from the trench or hole by a qualified approved biologist holding the appropriate permits (if required).

**MM B-7** A Spill Prevention and Contingency Plan for work adjacent to the Sespe Creek is a key component of the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be implemented prior to and during site disturbance and construction activities. The SWPPP will include measures to prevent or avoid an incidental leak or spill, including identification of materials necessary for containment and clean-up and contact information for management and agency staff. The SWPPP and necessary containment and clean-up materials shall be kept within the construction area during all construction activities. Workers shall be educated on measures included in the SWPPP at the pre-construction meeting or prior to beginning work on the project. VCWPD staff shall contact appropriate authorities in the County or affected municipalities.

**MM B-8** Prior to any site disturbance within the recognized breeding season (March 15 to September 15) for nesting birds (i.e., mobilization, staging, grading or construction), the VCWPD shall retain a qualified biologist to conduct pre-construction surveys for nesting birds in all areas within 500 feet of project components. Surveys for raptors shall be conducted for all areas from February 1 to August 15. The required survey dates may be modified based on local conditions, as determined by a qualified biologist, with the approval of the USFWS and/or CDFW. Measures intended to exclude nesting birds shall not be implemented without prior consultation with the USFWS and/or CDFW and shall not exceed Ventura County noise standards.

If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300 foot buffer around each nest and a 500 foot buffer for raptors from ground-based construction activities 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 to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the CDFW and/or USFWS as appropriate. If for any reason an active bird nest must be removed during the nesting season, written documentation providing concurrence from the USFWS and CDFW authorizing the nest relocation must be obtained.

**MM B-9.1** No more than 15 days prior to grading near or the removal of trees or other structures, the Applicant shall retain a qualified biologist, to conduct pre-construction surveys for sensitive bats. Should construction activities extend into the known maternity season for bats (1 March to 31 July) additional surveys shall be conducted in all suitable habitat within 300 feet of project activities.

If active maternity roosts or hibernacula are found, the structure or tree occupied by the roost shall be avoided (i.e., not removed), if feasible. If avoidance of the maternity roost is not feasible, the biologist shall survey for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are

alternative roost sites used by the maternity colony and young are not present then no further action is required, and it will not be necessary to provide alternate roosting habitat. (i.e., MM B-9.2 would not apply although MM B-9.3 would still apply). However, if there are no alternative roosts sites used by the maternity colony, MM B-9.2 is required. If no active roosts are found, then no further action is required. If active maternity roosts are absent, but a hibernaculum (i.e., a non-maternity roost) is present, then MM B-9.2 is not necessary, but MM B-9.3 is required.

**MM B-9.2** 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 bats requirements in coordination with CDFW. By making the roosting habitat available prior to eviction (MM B-9.2), 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 also be notified of any hibernacula or active nurseries within the construction zone.

If construction of alternative roost sites is required, the biologist shall provide a written report, documenting the required coordination with CDFW as well as the location of roost sites.

**MM B-9.3** If non-breeding bat hibernacula are found in structures or 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).

If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.

## **Cultural Resources**

**MM C-1** In the event that archaeological resources are found during project implementation, the on-site supervisor shall contact an approved archaeological consultant immediately. The on-site supervisor shall additionally divert all project-related activities to other areas

until the discovery has been evaluated by the approved archaeological consultant, who will determine if further mitigation measures are warranted.

**MM C-2** 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, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating 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.

### **Noise and Vibration**

**MM N-1** The VCWPD shall coordinate with the Faith Community Church (355 D Street), First Baptist Church of Fillmore (1057 First Street), and The Church of Jesus Christ of Latter Day Saints (1017 First Street) to schedule construction activities in the vicinity of these churches, including vegetation removal and wood chipping activities at Shiells Park, when the churches are not in use. However, if construction activities near the church(es) must occur when the church(es) is/are in use, the VCWPD shall monitor construction noise levels to ensure noise levels do not exceed the County of Ventura daytime noise threshold of 55 dBA Leq (hourly) within 10 feet of the sanctuary building. If noise levels are determined to exceed 55 dBA Leq (hourly), offending construction activities must be temporarily suspended until the affected church activity has finished.

**MM N-2** The wood chipper shall be sited at Shiells Park on the far western portion of the park, approximately equidistant from the north and south boundaries of the park, such that the chipper would be located as far away from residences as possible. To further reduce noise levels, a temporary paneled noise shield, barrier, or enclosure shall be installed around the wood chipper; the noise control shield shall be made of panels featuring a solid panel with a weather-protected, sound-absorptive material on the construction-activity side of the noise shield. Wood chipper operations shall be scheduled to occur during times of highest ambient noise levels, to the extent feasible and without conflict of MM N-1.

**MM N-3** All equipment shall include noise reduction measures, as applicable. These measures shall include, but may not be limited to, properly operating and maintaining mufflers, correct placement of equipment engine covers, and ensuring that small loading equipment is equipped with rubber tires.

- MM N-4** All machinery shall be equipped with the best available exhaust mufflers and “hush kits,” as applicable.
- MM N-5** Chain saws shall be maintained with sharp, damped blades with random tooth spacing.
- MM N-6** Noise producing signals, including horns, whistles, alarms, and bells shall be limited to safety warning purposes only.
- MM N-7** As part of the project’s advanced notification to all residences and property owners, a VCWPD contact person name and phone number shall be provided. The contact person shall respond to questions or concerns related to noise and vibration within 24 hours. If warranted by inquiries or complaints, on-site noise measurements shall be taken to determine if noise or vibration levels are substantially greater than expected levels.

## **8. MITIGATION MEASURE MONITORING AND REPORTING**

Section 15074(d) of the *State Guidelines for the Implementation of the California Environmental Quality Act (State CEQA Guidelines)* and Section 21081.6 of the Public Resources Code require the lead agency of an environmental review document to adopt a Mitigation Measure Monitoring Program to ensure that all mitigation measures are complied with during implementation of a proposed project. Consistent with these requirements, Appendix AA of this Mitigated Negative Declaration identifies the timing, monitoring methods, responsibility, and compliance verification method for all mitigation measures identified above in Section 7 of this Mitigated Negative Declaration.

## **REFERENCES**

- Fugro West, Inc. (Fugro). 2011. U.S. Army Corps of Engineers Periodic Levee Inspections: Sespe Creek 2 Levee (SC-2). Ventura County, California. Periodic Inspection Report. Submitted April 2011. Date of Inspection: May 24, 2010.
- RBF Consulting (RBF). 2010. Sespe Creek Hydrology, Hydraulics, and Sedimentation Analysis: Main Report and Appendices. Project Report for Flood Control and Environmental Assessment. Final. December.
- Ventura County Watershed Protection District (VCWPD). 2012. Public Stakeholder Information Handout: Sespe Creek (SC-2) Levee Rehabilitation and FEMA Certification Project. January.

**Appendix AA.**  
**Mitigation Measure Monitoring Program-**  
**Implementation Plan**

**Mitigation Measure Monitoring Program – Implementation Plan**

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<i>Air Quality</i>				
<b>AQ-1:</b> All equipment shall be turned off when not in use. Engine idling shall not exceed five (5) minutes unless required for proper operation.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure AQ-1.  Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document the equipment that was used in daily or weekly project implementation/inspection reports.
<b>AQ-2:</b> All equipment engines shall be maintained in good operating condition and in tune per manufacturers' specifications.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure AQ-2.  Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document the condition of the equipment that was used in daily or weekly project implementation/inspection reports.
<b>AQ-3:</b> All off-road construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 3 California Emission Standards for Off-road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Section 2423(b)(1). If a Tier 3 or Tier 3-equivalent engine is not available for a particular item of equipment, Tier 2 compliant engines shall be allowed on a case by case basis, as determined by the VCWPD.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure AQ-3.  Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document the equipment that was used in daily or weekly project implementation/inspection reports, and shall determine when it is acceptable for Tier 2-compliant engines to be allowed.
<b>AQ-4:</b> All project 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	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure AQ-4.  Project-related activities shall be periodically monitored by the VCWPD	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with VCAPCD Rules and Regulations, including documenting fugitive dust conditions based on visual inspections in daily or weekly project implementation/inspection

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>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:</p> <ol style="list-style-type: none"> <li>1. Apply environmentally safe chemical stabilization 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.</li> <li>2. Install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.</li> <li>3. Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road.</li> <li>4. Use properly secured tarps or covering that covers the entire surface area of the earthen fill, or other fine bulk material, loads.</li> <li>5. Water or use environmentally safe chemical stabilization to treat the earthen fill storage piles to create stabilized surfaces that will minimize wind erosion emissions.</li> <li>6. Limit vehicle speeds on the project site unpaved roads to 10 mph.</li> <li>7. Discontinue work activities including all grading activities, but not 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).</li> </ol>		<p>Construction Inspector, or his/her designee, to further ensure compliance.</p>		<p>reports.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p><b>AQ-5:</b> The construction contractor shall coordinate with representatives of the Faith Community Church, consistent with Mitigation Measure N-1, and representatives of Shiells Park to conduct tree removal or other project activities at these locations during periods when they are not specifically scheduled for use. Additionally, the construction contractor shall coordinate with representatives of the Upland Rock Sediment Removal/Mining of Sespe Creek project to identify if concurrent sediment removal and proposed project activities will occur in proximity to one another, and will schedule the proposed project activities, as feasible, to minimize such concurrent activities.</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure AQ-5.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Project Manager, or his/her appointed designee, shall document the date and nature of coordination between the contractor and representatives of the Faith Community Church and representatives of Shiells Park.</p>
<p><b>Mineral Resources</b></p>				
<p><b>MR-1:</b> The VCWPD shall coordinate with Upland Rock thirty (30) days prior to the start of construction to avoid disruptions to the sediment removal and mining activities associated with CUP-4185.</p>	<p>Prior to the start of project construction.</p>	<p>Project-related activities shall be coordinated with Upland Rock by the VCWPD Project Manager, or his/her designee, to ensure compliance with Mitigation Measure MR-1.</p>	<p>VCWPD</p>	<p>The VCWPD Project Manager, or his/her appointed designee, shall document the date and nature of coordination between the contractor and Upland Rock.</p>
<p><b>Biological Resources</b></p>				
<p><b>B-1:</b> The VCWPD shall not clear riparian vegetation during the migratory bird breeding season (March 15 through September 15). If construction activities extend into the breeding season (March 15 to September 15) the VCWPD shall conduct protocol surveys for least Bell's vireo in areas that support riparian habitat within 500 feet of the construction footprint. Work shall not occur within 500 feet of a nesting vireo unless authorized by the County, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-1.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-1 in the daily or weekly project implementation/inspection reports.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p><b>B-2:</b> Prior to construction activities, a qualified biologist shall inspect the construction site and adjacent areas to determine if any sensitive plants, fish, or wildlife species are present. If a sensitive fish or wildlife species is present at the construction site during the work period, the VCWPD shall schedule work to avoid the species, if possible. If avoidance of any listed species is not feasible, the VCWPD shall cease work and consult with the USFWS or National Marine Fisheries Service, as appropriate.</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-2.</p> <p>Prior to construction activities, the VCWPD's biological monitor shall inspect the construction site and adjacent areas to determine if any sensitive plants, fish, or wildlife species are present.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-2 in the daily or weekly project implementation/inspection reports.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-2 in his/her field notes and in the final Project Completion Report.</p>
<p><b>B-3:</b> All personnel, including contractors and VCWPD staff, involved in project activities will receive training on sensitive biological resources that may be encountered in the project area. Environmental training shall be implemented throughout the duration of construction of the proposed project. The environmental training shall include, at a minimum, the following items:</p> <ul style="list-style-type: none"> <li>• 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 will include a discussion on microtrash and its potential harmful effects on California condors.</li> <li>• Training materials and briefings shall include but not be limited to: a discussion of the Federal and State Endangered Species Acts 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</li> </ul>	<p>During project construction.</p>	<p>The VCWPD's biological monitor, or his/her designee, shall ensure that all project-related personnel are appropriately trained in the project's mitigation measures, protocols, standards, specifications, recommendations, and Best Management Practices.</p> <p>The project's <i>Plans and Specifications</i> shall additionally require the contractor to adhere to all environmental protection measures, protocols, standards, specifications, recommendations, and Best Management Practices.</p> <p>The contractor shall additionally ensure that all on-site work crews are equipped with, and trained in the use of, fuel and herbicide spill cleanup kits. The contractor shall also ensure that all on-site work crews have the California Department of Fish and Game's Office of Spill Prevention and Response (OSPR) phone number, and that all on-site work crew supervisors are instructed to call the OSPR immediately in the event of an</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-3 in the daily or weekly project implementation/inspection reports.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-3 in his/her field notes and in the final Project Completion Report.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>containment measures; a contact person and phone number in the event of the discovery of dead or injured wildlife; and a review of mitigation requirements.</p> <ul style="list-style-type: none"> <li>• Protocols to be followed when road kill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor 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.</li> <li>• Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species will be provided to all project contractors and heavy equipment operators.</li> <li>• A weather protected bulletin board or binder shall be centrally placed or kept onsite (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This board or binder will provide key provisions of regulations or project conditions as they relate to biological resources or as they apply to grading activities. This information shall be easily accessible for personnel in all active work areas.</li> </ul>		<p>accidental fuel or herbicide spill. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>		

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p><b>B-4:</b> Upon development of final construction plans and prior to site disturbance, the VCWPD shall clearly delineate the limits of construction on project plans. All construction, site disturbance, and vegetation removal shall be located within the delineated construction boundaries. The storage of equipment and materials, and temporary stockpiling of soil shall be located within designated areas only, and outside of natural habitat areas. The limits of construction shall be delineated in the field with temporary construction fencing, staking, or flagging.</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-4. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-4 in the daily or weekly project implementation/inspection reports.</p>
<p><b>B-5:</b> The VCWPD shall retain a qualified biologist(s) with demonstrated expertise with listed and/or special-status plants, invertebrates and gastropods, birds, amphibians, terrestrial mammals and reptiles to monitor, a minimum of once a week, 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 the listed or special-status species identified within the project boundaries. Any listed or special-status plants shall be flagged for avoidance. Any special-status non-listed terrestrial species found within a project impact area shall be relocated by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the qualified biologist, the qualified biologist shall direct the installation of the fence. If, during construction, the biological monitor observes a dead or injured listed or special-status wildlife species on the construction site, a written report shall be sent within five calendar days to the appropriate agencies (e.g.,</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-5. The VCWPD's biological monitor shall monitor construction activities (at a minimum of once a week) to protect special-status species, in accordance with the requirements of Mitigation Measure B-5. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-5 in the daily or weekly project implementation/inspection reports.  The VCWPD's biological monitor shall document compliance with Mitigation Measure B-5 in his/her field notes and in the final Project Completion Report.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>VCWPD, USFWS, and/or CDFW, where CDFW reporting is a requirement of the local sponsor under the California Endangered Species Act). The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). The biological monitor shall, immediately upon finding the remains, coordinate with the onsite construction foreman to discuss the events that caused the mortality, if known, and implement measures to prevent future incidents. Details of these measures shall be included with the report. If possible, species remains shall be collected and frozen as soon as possible, and CDFW and/or USFWS shall be contacted regarding ultimate disposal of the remains.</p>				
<p><b>B-6:</b> Best Management Practices (BMPs) will be implemented as standard operating procedures during all construction-related activities to avoid or minimize impacts on biological resources. These BMPs will include but are not limited to the following:</p> <ol style="list-style-type: none"> <li>a. Vehicles and equipment shall be parked on designated staging or parking areas, pavement, existing roads, and previously disturbed areas to the extent practicable.</li> <li>b. 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 onsite 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.</li> <li>c. All general trash, food-related trash items</li> </ol>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-6.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-6 in the daily or weekly project implementation/inspection reports.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>(e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris scheduled to be removed weekly will be stored in animal-proof containers and/or removed from the site each day. No deliberate feeding of wildlife will be allowed.</p> <p>d. Use of chemicals, fuels, lubricants, or biocides will be in compliance with all local, state and federal regulations. 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. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, will immediately report the incident to the onsite representative identified in the environmental training. The representative will contact the appropriate agency(ies) (e.g. USFWS, CDFW, and/or 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 will include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured will be turned over immediately to CDFW or USFWS, as appropriate, for care, analysis, or disposition.</p> <p>e. Avoidance and minimization of</p>				

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>construction activities resulting in impacts to jurisdictional wetlands, streambeds, and banks of any jurisdictional ephemeral drainage, except as authorized by regulatory agencies.</p> <p>f. 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 will 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 will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume, or removed from the trench or hole by a qualified approved biologist holding the appropriate permits (if required).</p>				
<p><b>B-7:</b> A Spill Prevention and Contingency Plan for work adjacent to the Sespe Creek is a key component of the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be implemented prior to and during site disturbance and construction activities. The SWPPP will include measures to prevent or avoid an incidental leak or spill, including identification of materials necessary for containment and clean-up and contact information for management and agency staff. The SWPPP and necessary containment and clean-up materials shall be kept within the construction area during all construction</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-7.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-7 in the daily or weekly project implementation/inspection reports.</p>

**Sespe Creek Levee Improvements Project**

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>activities. Workers shall be educated on measures included in the SWPPP at the pre-construction meeting or prior to beginning work on the project. VCWPD staff shall contact appropriate authorities in the County or affected municipalities.</p>				
<p><b>B-8:</b> Prior to any site disturbance within the recognized breeding season (March 15 to September 15) for nesting birds (i.e., mobilization, staging, grading or construction), the VCWPD shall retain a qualified biologist to conduct pre-construction surveys for nesting birds in all areas within 500 feet of project components. Surveys for raptors shall be conducted for all areas from February 1 to August 15. The required survey dates may be modified based on local conditions, as determined by a qualified biologist, with the approval of the USFWS and/or CDFW. Measures intended to exclude nesting birds shall not be implemented without prior consultation with the USFWS and/or CDFW and shall not exceed Ventura County noise standards.</p> <p>If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300 foot buffer around each nest and a 500 foot buffer for raptors from ground-based construction activities 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 to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the CDFW and/or USFWS as appropriate. If for any reason an active bird nest must be removed during the nesting season, written documentation providing concurrence from the USFWS and CDFW</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-8.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector and VCWPD's biological monitor, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-8 in the daily or weekly project implementation/inspection reports.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-8 in his/her field notes and in the final Project Completion Report.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
authorizing the nest relocation must be obtained.				
<p><b>B-9.1:</b> No more than 15 days prior to grading near or the removal of trees or other structures, the Applicant shall retain a qualified biologist, to conduct pre-construction surveys for sensitive bats. Should construction activities extend into the known maternity season for bats (1 March to 31 July) additional surveys shall be conducted in all suitable habitat within 300 feet of project activities.</p> <p>If active maternity roosts or hibernacula are found, the structure or tree occupied by the roost shall be avoided (i.e., not removed), if feasible. If avoidance of the maternity roost is not feasible, the biologist shall survey for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are alternative roost sites used by the maternity colony and young are not present then no further action is required, and it will not be necessary to provide alternate roosting habitat. (i.e., MM B-9.2 would not apply although MM B-9.3 would still apply). However, if there are no alternative roosts sites used by the maternity colony, MM B-9.2 is required. If no active roosts are found, then no further action is required. If active maternity roosts are absent, but a hibernaculum (i.e., a non-maternity roost) is present, then MM B-9.2 is not necessary, but MM B-9.3 is required.</p>	Prior to and during project construction.	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-9.1.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector and VCWPD's biological monitor, or his/her designee, to further ensure compliance.</p>	VCWPD	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-9.1 in the daily or weekly project implementation/inspection reports.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-9.1 in his/her field notes and in the final Project Completion Report.</p>
<p><b>B-9.2:</b> 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</p>	During project construction.	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-9.2.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector and VCWPD's biological monitor, or his/her designee, to</p>	VCWPD	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-9.2, if and when implemented, in the daily or weekly project implementation/inspection reports.</p> <p>If construction of alternative roost sites is</p>

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Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>bats requirements in coordination with CDFW. By making the roosting habitat available prior to eviction (MM B-9.2), 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 also be notified of any hibernacula or active nurseries within the construction zone.</p> <p>If construction of alternative roost sites is required, the biologist shall provide a written report, documenting the required coordination with CDFW as well as the location of roost sites.</p>		<p>further ensure compliance.</p>		<p>required, the VCWPD's biological monitor shall provide a written report, documenting the required coordination with CDFW as well as the location of roost sites.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-9.2 in his/her field notes and in the final Project Completion Report.</p>
<p><b>B-9.3:</b> If non-breeding bat hibernacula are found in structures or 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</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure B-9.3.</p> <p>Project-related activities shall be periodically monitored by the VCWPD Construction Inspector and VCWPD's biological monitor, or his/her designee, to further ensure compliance.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure B-9.3, if and when implemented, in the daily or weekly project implementation/inspection reports.</p> <p>The VCWPD's biological monitor shall document compliance with Mitigation Measure B-9.3 in his/her field notes and in the final Project Completion Report.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>tree removal).                      If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.</p>				
<b><i>Cultural Resources</i></b>				
<p><b>C-1:</b> In the event that archaeological resources are found during project implementation, the on-site supervisor shall contact an approved archaeological consultant immediately. The on-site supervisor shall additionally divert all project-related activities to other areas until the discovery has been evaluated by the approved archaeological consultant, who will determine if further mitigation measures are warranted.</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure C-1.</p> <p>The VCWPD Construction Inspector, or his/her designee, shall ensure that all project-related work is stopped or re-directed in the event that archaeological resources are found, and that a qualified archaeologist is contacted immediately to evaluate the subject site and discovery.</p> <p>The VCWPD Construction Inspector, or his/her designee, shall additionally ensure that any recommendations of the archaeological consultant are followed.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure C-1, if and when implemented, in the daily or weekly project implementation/inspection reports.</p>
<p><b>C-2:</b> 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, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure C-2.</p> <p>The VCWPD Construction Inspector, or his/her appointed designee, shall ensure that all project-related work is stopped or re-directed in the event that human remains are encountered during project construction, and that all laws and regulations governing the discovery and handling of human remains are complied with.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document compliance with Mitigation Measure C-2, if and when implemented, in the daily or weekly project implementation/inspection reports.</p>

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Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
<p>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.</p>				
<b>Noise and Vibration</b>				
<p><b>N-1:</b> The VCWPD shall coordinate with the Faith Community Church (355 D Street), First Baptist Church of Fillmore (1057 First Street), and The Church of Jesus Christ of Latter Day Saints (1017 First Street) to schedule construction activities in the vicinity of these churches, including vegetation removal and wood chipping activities at Shiells Park, when the churches are not in use. However, if construction activities near the church(es) must occur when the church(es) is/are in use, the VCWPD shall monitor construction noise levels to ensure noise levels do not exceed the County of Ventura daytime noise threshold of 55 dBA Leq (hourly) within 10 feet of the sanctuary building. If noise levels are determined to exceed 55 dBA Leq (hourly), offending construction activities must be temporarily suspended until the affected church activity has finished.</p>	<p>Prior to and during project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-1. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to ensure compliance. If construction activities near the church(es) must occur when the church(es) is/are in use, the VCWPD shall monitor construction noise levels to ensure noise levels do not exceed the County of Ventura daytime noise threshold of 55 dBA Leq (hourly) within 10 feet of the sanctuary building.</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document the results of any noise monitoring required by Mitigation Measure N-1 in daily or weekly project implementation/inspection reports.</p>
<p><b>N-2:</b> The wood chipper shall be sited at Shiells Park on the far western portion of the park, approximately equidistant from the north and south boundaries of the park, such that the chipper would be located as far away from</p>	<p>During project construction.</p>	<p>The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-2. Project-related activities shall be</p>	<p>VCWPD</p>	<p>The VCWPD Construction Inspector, or his/her appointed designee, shall document the equipment that was used in daily or weekly project implementation/inspection reports.</p>

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
residences as possible. To further reduce noise levels, a temporary paneled noise shield, barrier, or enclosure shall be installed around the wood chipper; the noise control shield shall be made of panels featuring a solid panel with a weather-protected, sound-absorptive material on the construction-activity side of the noise shield. Wood chipper operations shall be scheduled to occur during times of highest ambient noise levels, to the extent feasible and without conflict of MM N-1.		periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.		
<b>N-3:</b> All equipment shall include noise reduction measures, as applicable. These measures shall include, but may not be limited to, properly operating and maintaining mufflers, correct placement of equipment engine covers, and ensuring that small loading equipment is equipped with rubber tires.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-3. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document the equipment that was used in daily or weekly project implementation/inspection reports.
<b>N-4:</b> All machinery shall be equipped with the best available exhaust mufflers and "hush kits," as applicable.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-4. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document excessive noise levels and all measures taken to minimize them in daily or weekly project implementation /inspection reports.
<b>N-5:</b> Chain saws shall be maintained with sharp, dampened blades with random tooth spacing.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-5. Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document excessive and/or unnecessary noise levels and all measures taken to minimize them in daily or weekly project implementation/inspection reports.
<b>N-6:</b> Noise producing signals, including horns, whistles, alarms, and bells shall be limited to safety warning purposes only.	During project construction.	The project's <i>Plans and Specifications</i> shall require the contractor to adhere to the requirements of Mitigation Measure N-6.	VCWPD	The VCWPD Construction Inspector, or his/her appointed designee, shall document excessive and/or unnecessary noise levels and all measures taken to

**Sespe Creek Levee Improvements Project**

Mitigation Measure	Mitigation Measure Implementation Phase	Monitoring Action	Responsible Agency	Monitoring Documentation
		Project-related activities shall be periodically monitored by the VCWPD Construction Inspector, or his/her designee, to further ensure compliance.		minimize them in daily or weekly project implementation/inspection reports.
<p><b>N-7:</b> As part of the project's advanced notification to all residences and property owners, a VCWPD contact person name and phone number shall be provided. The contact person shall respond to questions or concerns related to noise and vibration within 24 hours. If warranted by inquiries or complaints, on-site noise measurements shall be taken to determine if noise or vibration levels are substantially greater than expected levels.</p>	<p>Prior to and during project construction.</p>	<p>The VCWPD Project Manager, or his/her designee, shall ensure that notifications and re-notifications, if needed, are distributed to all potentially affected parties prior to the project implementation.</p> <p>The VCWPD Construction Inspector, or his/her designee, shall respond to any questions or complaints within a 24-hour period. The VCWPD Construction Inspector, or his/her designee, shall additionally modify project-related activities, as necessary, to address project-related complaints.</p>	<p>VCWPD</p>	<p>The VCWPD Project Manager, or his/her appointed designee, shall document the date(s) that all project-related notifications are transmitted in the project's pre-implementation status report(s) as well as any daily or weekly project implementation/inspection reports, as needed, for additional notifications.</p> <p>The VCWPD Construction Inspector, or his/her appointed designee, shall additionally document all project-related questions, concerns or complaints that are received in daily or weekly project implementation/inspection reports, as well as what measures were taken to address the received questions, concerns or complaints.</p>

## **Appendix B.2**

### **Initial Study**

# **DRAFT INITIAL STUDY**

**for the**

## **SESPE CREEK LEVEE IMPROVEMENTS PROJECT**

*Prepared for the:*

### **VENTURA COUNTY WATERSHED PROTECTION DISTRICT**

*Prepared by:*

**Aspen Environmental Group  
5020 Chesebro Road, Suite 200  
Agoura Hills, California**

**April 2013**

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## **A. PROJECT DESCRIPTION**

### **A.1 PROJECT TITLE**

Sespe Creek Levee Improvements Project

### **A.2 LEAD AGENCY NAME AND ADDRESS**

Ventura County Watershed Protection District  
800 South Victoria Avenue  
Ventura, California 93009-1610

### **A.3 INITIAL STUDY CONTACT PERSON**

Elizabeth Martinez  
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### **A.4 DESCRIPTION OF PROPOSED PROJECT**

#### **A.4.1 Project Background**

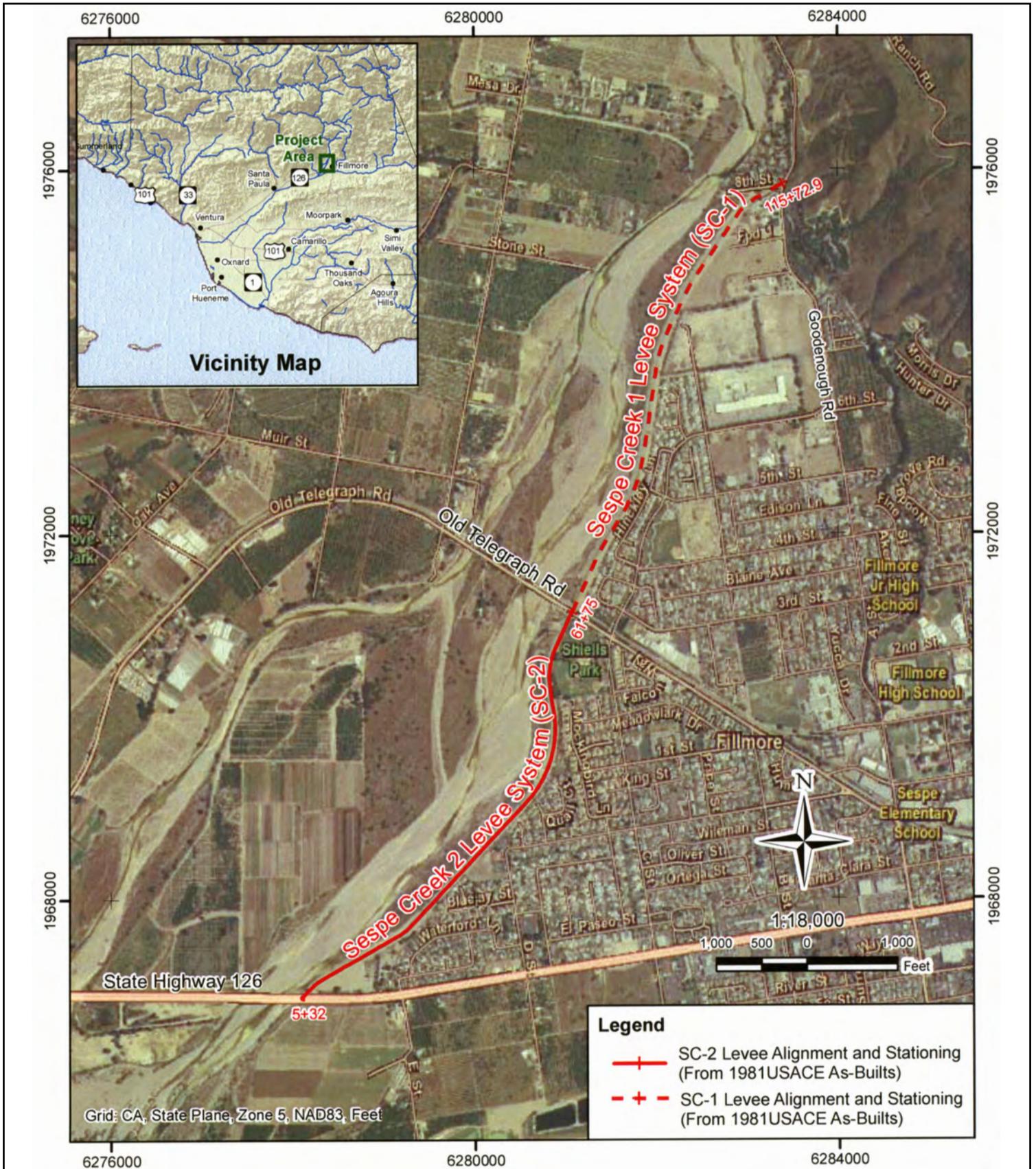
The proposed project involves increasing the height of a portion of the existing Sespe Creek Levee to the 100-year flood level of protection to remove over 1,000 properties from the 100-year floodplain currently shown on the Federal Emergency Management Agency's (FEMA) Digital Flood Insurance Rate Maps (DFIRMs). Currently, the levee's capacity is estimated to be about 100,000 cubic feet per second (cfs) or slightly less than a 50-year level of flood protection.

#### **Project Setting**

The Sespe Creek Levee Improvements Project (herein referenced as the "proposed project" or "project") is located along Sespe Creek near the City of Fillmore in Ventura County, California. Project activities would occur along the 1.1-mile section of the Sespe Creek Levee system, known as Sespe Creek 2 (SC-2), between Old Telegraph Road and State Route (SR) 126 (see Figure A-1, Project Location).

Sespe Creek drains 260 square miles of the Santa Clara River Watershed, which is a semiarid and tectonically active region of southern California. The majority of the Sespe Creek Watershed is located within the Los Padres National Forest. Sespe Creek flows 60 miles from its headwaters at the western edge of Ventura County downstream to its confluence with Santa Clara River near the City of Fillmore. The creek is fed by thirty named stream tributaries as it flows generally eastward in the upper reaches through the narrow, bedrock-confined Sespe Creek gorge and then out into a broad, alluvial fan towards the City of Fillmore and the Santa Clara River. (VCWPD, 2012a)

Sespe Creek Levee Improvements Project



Source: Fugro (Fugro West, Inc.), 2011. U.S. Army Corps of Engineers  
 Periodic Levee Inspections: Sespe Creek 2 Levee (SC-2). Ventura County, California.  
 Periodic Inspection Report. Submitted April 2011. Date of Inspection: May 24, 2010.

**Figure A-1**  
**Project Location**

Elevations in the Sespe Creek Watershed range from approximately 350 to 7,500 feet above mean sea level. The upper and middle portions of Sespe Creek flow through a narrow, v-shaped canyon with rugged mountain ridges separating the watershed from adjacent watersheds. Upstream of Fillmore, the stream leaves the steep canyons and flows through the proposed project area over a broad alluvial fan. The stream gradient in this area is about 40 feet per mile. A variety of factors contribute to intense, debris-laden floods in Sespe Creek, including the following: high-intensity rainfall during the winter and spring seasons, impervious soils, sparse vegetation, and steep gradient on some channels. The City of Fillmore has historically experienced numerous flooding events in Sespe Creek, resulting in millions of dollars in damage and loss of life. Severe damage from floodwaters in Sespe Creek occurred in 1938, 1969, and 1978. (RBF, 2010)

### **Project History**

The Sespe Creek Levee was originally constructed by the U.S. Army Corps of Engineers (Corps or USACE) in 1984 to protect residences located in the floodplain at that time. The 1984 project was constructed in response to a report prepared by the Corps in March of 1980 which characterized flooding hazards in the area. The levee was constructed along the east bank of the east branch of the creek, and extends from approximately 5,300 feet upstream of the Old Telegraph Road Bridge at Goodenough Road, downstream to the SR 126 bridge. The original project included the construction of two miles of rock revetted earthen levee with 25 rock groin structures placed on the channel side of the levee, which was designed to provide protection from the “Standard Project Flood” discharge of 121,000 cubic feet per second (cfs) (further discussed below, under “FEMA Flood Hazard Mapping”). (VCWPD, 2012a)

Since the Sespe Creek Levee was completed in 1984, the largest flood recorded in this area occurred on January 10, 2005 and reached a peak flow rate of 85,300 cfs. Recent hydraulic analyses indicate that portions of the SC-2 Levee downstream of Old Telegraph Road would be overtopped during a storm event with flow in excess of approximately 100,000 cfs at the confluence of the east-west connector channel and the east branch. (VCWPD, 2012a)

In September of 2006, the sixth largest wildfire event in California history, known as the Day Fire, burned through the Sespe Creek Watershed and a large portion of Los Padres National Forest. This fire consumed vegetation across 55,300 acres, or more than one third of the watershed. In combination with changing hydrology in the watershed over the past decades, the threat of debris flows associated with damage from the Day Fire introduced an urgent need to re-assess the level of flood protection that the Sespe Creek Levee provides to the City of Fillmore. (RBF, 2010)

As noted above, although the Sespe Creek Levee was originally designed to withstand flows of 121,000 cfs, it is currently not capable of withstanding flows of 100,000 cfs. Since the levee was originally constructed, changes in the watershed hydrology and dynamics of the creek streambed have occurred, as well as modifications in design requirements of the Federal Emergency Management Agency (FEMA), which are further addressed below, under “FEMA Flood Hazard Mapping” (VCWPD, 2012a).

Key contributing factors to VCWPD’s request to modify/alter the SC-2 Levee include: peak flow rates have increased by 35 percent compared to the original levee design; dominant alluvial channel has shifted from the west fork to the east fork of the active streambed; the active channel is subject to

resetting<sup>1</sup> after major storm events; and long-term sediment deposition and local erosion have occurred along the levee (VCWPD, 2012a).

### **FEMA Flood Hazard Mapping**

FEMA has estimated the boundaries of 100-year floodplains, or Flood Hazard Areas, which are shown on Flood Insurance Rate Maps (FIRMs) produced under the National Flood Insurance Program (NFIP). Each FIRM identifies the predicted area of land anticipated to be inundated during a 100-year storm event, or the storm with a one percent chance of occurring each year. The NFIP, implemented by the Congress of the United States in 1968 through the National Flood Insurance Act of 1968, enables participating communities to purchase flood insurance (FEMA, 2011). As a condition of participation in the NFIP, communities must adopt regulations for floodplain development intended to reduce flood damage for new development through such measures as flood proofing, elevation on fill, or floodplain avoidance.

As noted above under “Project History,” the Sespe Creek Levee was originally designed to provide protection from the Standard Project Flood. The Standard Project Flood was a site-specific determination made on the basis of flood frequency, damage potential, and cost of construction; it was not a uniform standard such as the FEMA-designated Flood Hazard Areas identified under the NFIP (FEMA, 2012). FEMA manages flood risk on the national level, and has initiated a five-year plan to update the nation’s flood hazard maps.

FEMA requires levee owners to certify that their levees meet the design criteria of the Code of Federal Regulations (CFR), Title 44, Section 65.10 (44 CFR §65.10), titled “Mapping of Areas Protected by Levee Systems”, which provides the minimum design necessary to “evidence that adequate design and operation and maintenance systems are in place to provide reasonable assurance that protection from the base flood exists.” In order for the proposed project to be certified by FEMA in accordance with 44 CFR 65.10, evidence must be submitted to demonstrate that the system meets current design, construction, maintenance, and operation standards to provide protection from the 100-year flood (VCWPD, 2012c). If a levee system cannot be certified as providing protection from the 100-year flood, FEMA will not accredit the levee system; levee systems that were previously shown as providing the sufficient level of flood protection on a NFIP FIRM will be de-accredited and the landward areas of these levee systems will be re-mapped as high-risk areas, referred to as Special Flood Hazard Areas (SFHA). Flood insurance would need to be purchased by owners within the SFHA. A levee that FEMA has previously accredited with providing sufficient flood protection and for which FEMA is awaiting data and/or documentation to demonstrate the levee’s compliance with 44 CFR §65.10 may be recognized by FEMA as a “Provisionally Accredited Levee,” or “PAL.” This program was developed to allow agencies time to acquire/assemble documentation showing that the levee fully complies with 44 CFR §65.10, and allows agencies two years to submit the required documentation (VCWPD, 2012a).

The Ventura County Watershed Protection District (VCWPD) submitted a PAL request for the entire Sespe Creek Levee system in 2007; FEMA issued a PAL for the SC-1 Levee portion (Goodenough Road to Old Telegraph Road), but denied the PAL request for the SC-2 Levee portion (Old Telegraph Road to SR 126) in June of 2008 (VCWPD, 2012a). The proposed project area has since been re-mapped by

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<sup>1</sup> Resetting may involve significant bed aggradation during single floods, accompanied by abrupt changes in the river’s course. Channel position will shift and bed elevations will rise and fall according to the primary controls on sediment delivery to the creek, namely the influence of sediment pulses caused by wildfire (sediment production and delivery to the channel network) and flood events.

FEMA and is shown on FIRM number 06111C0643E, Panel 643 of 1275 (FEMA, 2010); please see Figure A-2 (FEMA-designated Flood Hazard). This revised FEMA flood hazard mapping shows that the existing SC-2 Levee is not sufficient to prevent development on the landward side of the levee from being inundated during a 100-year flood event. FEMA's 2010 mapping results for the project area show that the SC-2 Levee is incapable of withstanding the 100-year storm flow in two locations between Old Telegraph Road to the north and SR 126 to the south; these areas would be improved to meet FEMA standards with approval and implementation of the proposed project.

In order for the SC-2 Levee to be recognized by FEMA as compliant with the flooding regulations described above, following approval and implementation of the proposed project the VCWPD would be required to submit to FEMA a Letter of Map Revision (LOMR), which is a letter that reflects an official revision to an effective NFIP map; LOMRs are issued in place of the physical revision and republication of the map. Evidence of adequate design and operation and maintenance systems must also be submitted to FEMA, in order for the improved SC-2 Levee to be recognized by FEMA as adequate to provide protection from the base flood. (RBF, 2009)

### **Corps' Deficiency Assessment**

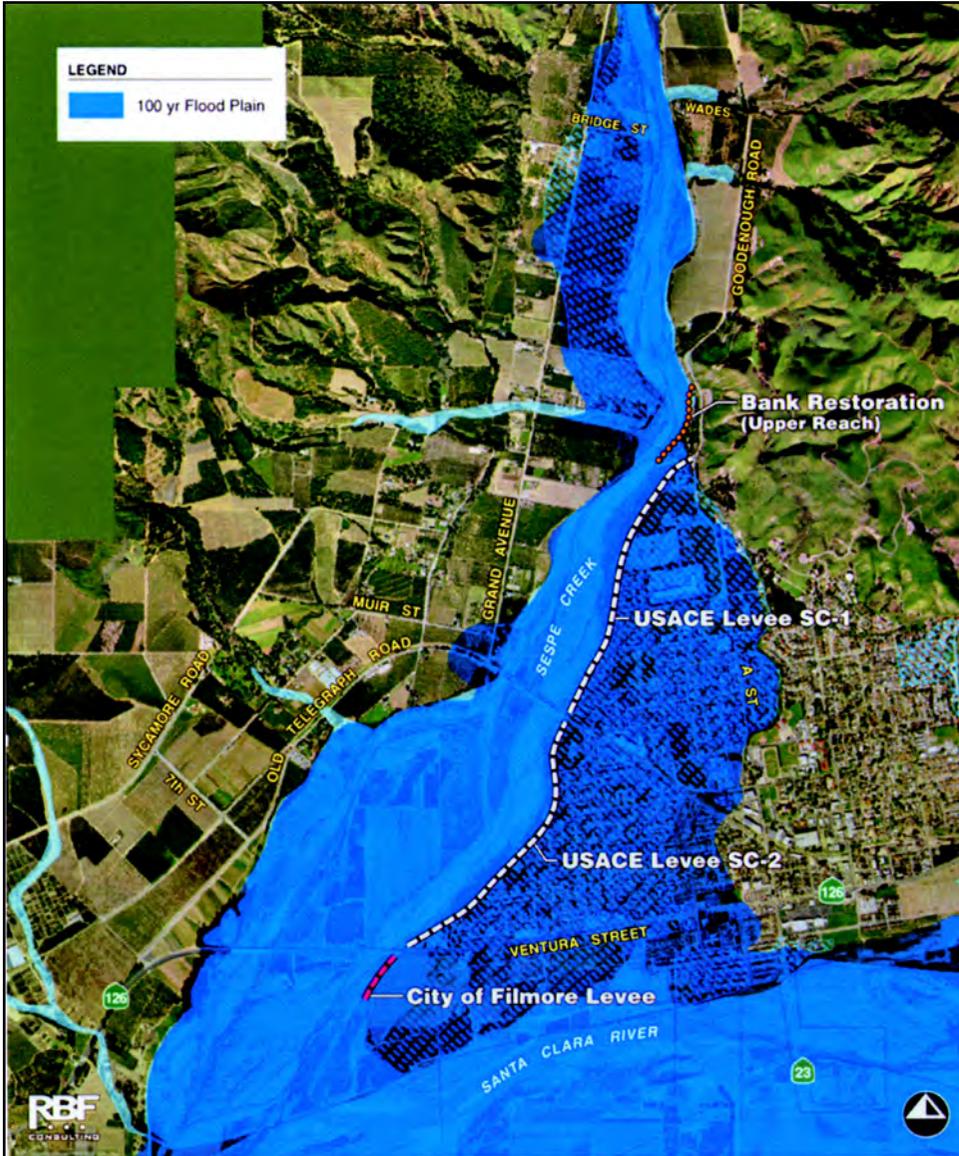
In May of 2010, the Corps performed a Periodic Inspection of the SC-2 Levee to verify proper operation and maintenance, evaluate operational adequacy and structural stability, review design criteria to identify changes in current design standards, and identify features to monitor over time. This effort did not include levee certification by FEMA, but rather identified deficiencies in the current levee condition which need to be corrected. The deficiency assessment included inspection of both the riverward and landward sides of the levee for physical issues with the structure. (Fugro, 2011)

The Periodic Inspection Report included the rating of each identified deficiency as "Acceptable," where the inspected item will function as intended during the next flood event, "Minimally Acceptable," where the inspected item will not seriously impair the functioning of the item as intended during the next flood event, or "Unacceptable," where the inspected item has serious deficiencies that will impair the functioning of the item as intended during the next flood event. Detailed descriptions and photographs of all identified deficiencies are included in appendices to the Periodic Levee Inspections Report. Identified deficiencies that were rated either Minimally Acceptable or Unacceptable include the following:

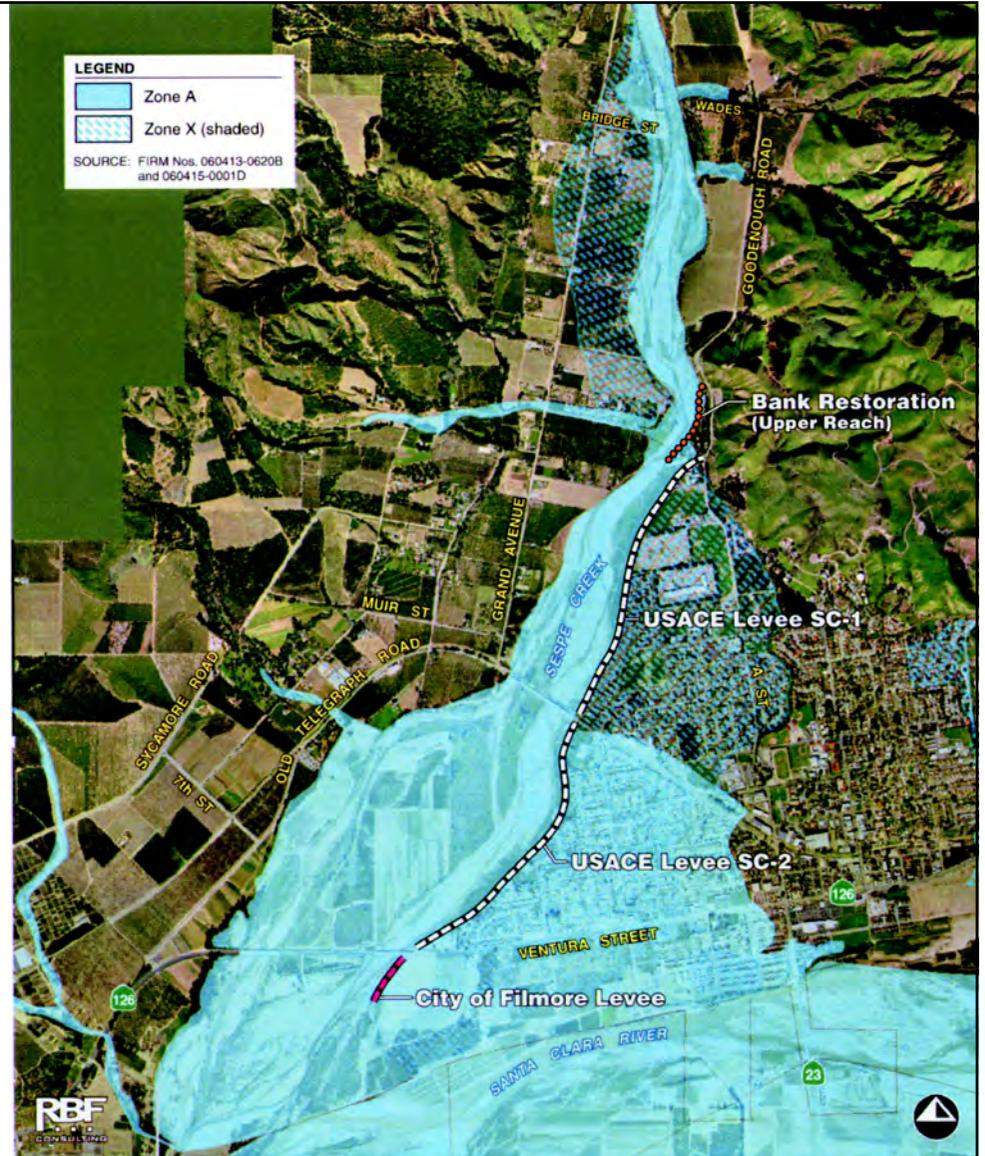
Vegetation growth within the USACE's standard vegetation-free zone (VFZ) of 15 feet from the toe of a levee; unpermitted encroachments within the levee easement, including side-drainage structures, access ramps, brick walls associated with adjacent residential neighborhood, and a 24-inch diameter storm drain line that runs within 15 feet of the toe along the downstream end of the levee on the landward side; rock revetment displacements resulting (at least partially) from human interference; unpermitted side drains and culverts; and obstructed pipe outlets.

Each of these deficiencies may pose a threat to the integrity of the levee. (Fugro, 2011)

The deficiencies to be addressed under the proposed project include vegetation removal (trees within ROW), closure of illegal access points, removal of three unpermitted turnouts along the top of the levee, and establishment of a formal pedestrian access to the bike trail midway along the levee. All elements of the proposed project are discussed in Section A.4.5 (Proposed Project).



2005 Flood Insurance Rate Map



2010 Flood Insurance Rate Map

## A.4.2 Project Objectives

The proposed project would provide flood protection and public safety for over 1,000 properties in the southwestern portion of the City of Fillmore which is currently subject to flooding due to existing deficiencies in the SC-2 Levee. Objectives of the proposed project are described below.

- Eliminate structural and non-structural deficiencies identified along the SC-2 Levee in the Corps' Periodic Inspection Report completed in 2010, as described above.
- Facilitate FEMA certification by implementing structural improvements to ensure that the SC-2 Levee is capable of withstanding 100-year storm flows, and achieve compliance with 44 CFR §65.10.
- Minimize adverse environmental impacts and maximize cost-effectiveness through implementation of both fill slope and retaining wall design elements to achieve the necessary level of structural improvement.
- Maintain recreational opportunities along Sespe Creek Bike Trail to the maximum extent feasible and formalize the trail network through coordination with the City of Fillmore.
- Minimize potential future damage to rock revetment associated with human disturbance by eliminating unpermitted access points along the levee.

## A.4.3 Project Benefits

The primary recipients of benefits of the proposed project include residents of the City of Fillmore that are currently located within the inundation area on the landward side of the SC-2 Levee. People who own property and/or businesses within this area would also benefit from the flood hazard protection that would be introduced with the proposed project. According to the National Levee Database figures provided by the Los Angeles District of the Corps, the population at risk in the protected zone of the Sespe Creek Levees System, including the SC-1 Levee and the SC-2 Levee, is approximately 6,583 people, and the property value at risk is approximately \$552,621,000 in the southwestern portion of the City of Fillmore (Fugro, 2011). In improving the SC-2 Levee to provide 100-year flood protection to the City of Fillmore, the VCWPD would be able to submit to FEMA a LOMR for the project area and achieve FEMA levee certification in compliance with 44 CFR §65.10.

## A.4.4 Surrounding Land Uses and Setting

The proposed project is located along lower Sespe Creek through the City of Fillmore, just before the confluence of Sespe Creek with the Santa Clara River. Flood control improvements included under the proposed project would occur along the SC-2 Levee, between Old Telegraph Road to the north and SR 126 to the south. The active channel of Sespe Creek comprises the area west of the SC-2 Levee, and agricultural areas are located west of the active channel. Agricultural areas are also located to the south of SR 126, which comprises the southern limit of the project area. Residential developments in the City of Fillmore are located to the east and south of the levee, and north of Old Telegraph Road, which comprises the northern limit of the project area. Please see Figure A-3 (Project Site Plan), which shows land uses surrounding the proposed levee improvements.

Following is a discussion of land uses in the project area and immediate vicinity.

**Sespe Creek Bike Trail.** The Sespe Creek Bike Trail runs the length of the proposed project, aligned adjacent to the SC-2 Levee, on the riverward side of the levee. There are two formal public access points for this trail: at the north end of the SC-2 Levee at Old Telegraph Road, and at the south end of the levee, at E Street. Each of these access points is described below.

- *North Entrance.* The northern formal public access point for the Sespe Creek Bike Trail is located at Old Telegraph Road. There is also a formal entrance to the SC-2 Levee at this point, adjacent to the trail entrance. Both entrances are gated with chain link fencing. A warning sign is posted north of the entrances, stating that the trail is closed when storm flows present danger.
- *South Entrance.* The southern formal public access point for the Sespe Creek Bike Trail is located at E Street, approximately 1,400 feet (0.27 mile) north of SR 126 along the levee. At this point, E Street in the City of Fillmore provides a formal entrance point, approaching the levee from the south. The trail crosses over the levee between two access gates, located roughly 415 feet apart on the top of the levee. In crossing over the levee, the trail is aligned on the riverward side of the levee (as described above). There is a vehicle turnout area on the levee road just to the south of the formal Sespe Creek Bike Trail entrance at E Street.

Other informal entrances to the trail have been established by public users along the SC-2 Levee, where garden wall gates provide unpermitted access to the levee ROW. Use of these informal entrances has resulted in structural damage to the levee in places, where foot traffic has displaced rip-rap on the riverward side of the levee.

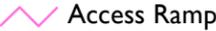
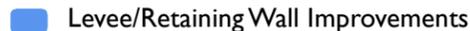
The Sespe Creek Bike Trail runs along the riverward side of the SC-2 Levee, generally bounded on the east by the SC-2 Levee and on the west by an existing equestrian trail fence and Sespe Creek. The trail is used by pedestrians and bicyclists as well as equestrians. It is estimated that approximately 25 to 50 recreationists per day use this trail during the week.

- **Shiells Park.** Shiells Park is adjacent to the south of Old Telegraph Road and west (land-side) of the SC-2 Levee. From Old Telegraph Road, Shiells Park is adjacent to the existing levee ROW for approximately 980 feet. There is an existing row of medium to large mature trees located along the western border of Shiells Park, within and adjacent to the USACE's 15-foot VFZ, which is introduced above under "Corps' Deficiency Assessment," and described with more detail in Section A.4.5, under "Vegetation Removal." Shiells Park is bounded to the west by C Street, and to the south by a property line which separates the park from residences around the cul-de-sacs at the northern ends of Mockingbird Lane and Finch Court. Shiells Park includes three baseball diamonds, bleachers, field markings for soccer and football, restroom facilities, and a parking lot with capacity for roughly 100 passenger vehicles. Other parks within the City of Fillmore include Central Park and Delores Day Park.

**Private Property.** There are a series of residences within the City of Fillmore, and property owned by the City, which abut the existing SC-2 Levee, as described below.

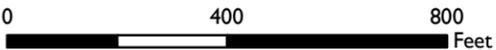
- *Residences South of Shiells Park.* From the southern end of Shiells Park, eight existing residences along Mockingbird Lane are adjacent to the levee ROW for approximately 500 feet.

**Project Area Features**

-  Access Ramp
-  Toe Drain
-  Weighted Filter
-  Contours for New Pedestrian Bike Path
-  New Pedestrian Bike Path
-  New Turnout
-  Levee/Retaining Wall Improvements
-  Existing Levee Boundary
-  Existing Turnout to be Removed
-  Residences Closest to Levee/Wall Improvements



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**Figure A-3**  
**Project Site Plan**

*Drainage Basin.* South of the fence line associated with the eighth residence mentioned above, there is an undeveloped, City-owned triangular parcel functioning as a drainage basin. This parcel is located adjacent to the levee ROW for roughly 380 feet, with a culvert through the levee after approximately 225 feet. The wall along the southern portion of this property (approximately 130 feet), south of culvert, appears to be within the 15-foot buffer area associated with the SC-2 Levee.

- *Quail Court and Mallard Street Residences.* From the southern point of the drainage basin described above, there are three private residences adjacent to the levee ROW on the cul-de-sac of Quail Court and one on the cul-de-sac of Mallard Street, before the first residence which has property included under the proposed project, identified as “Residence #3.” Figure A-4 (Detailed Map of Levee Improvements) shows the orientation of the parcels discussed below.

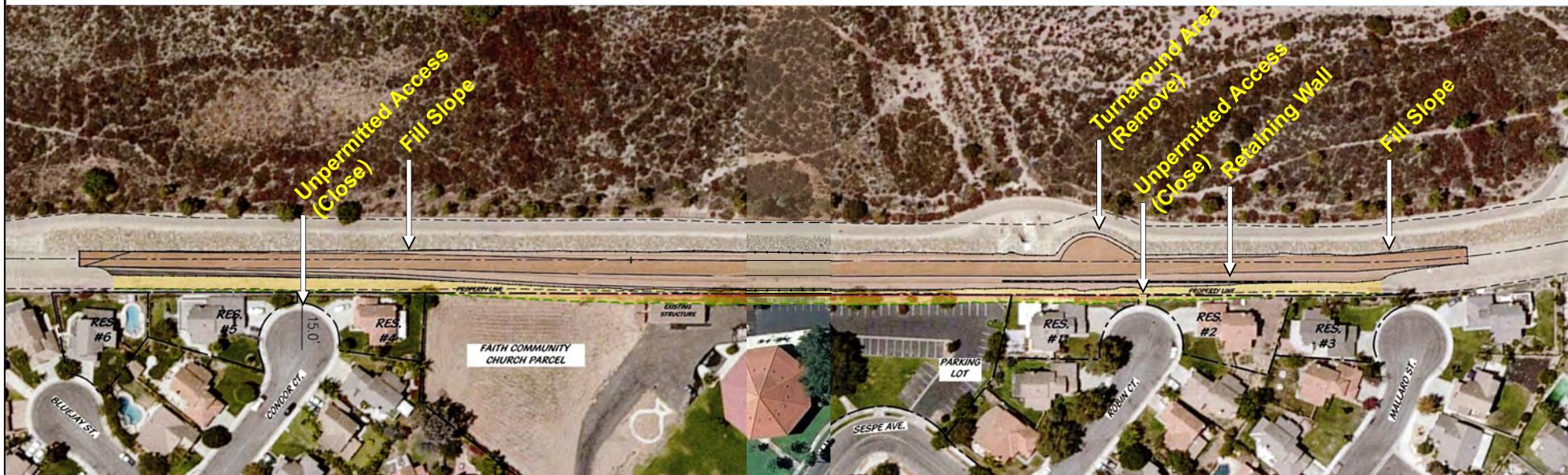
The first property immediately south of the drainage basin is triangular-shaped, and a fence associated with this property runs along the levee ROW for roughly ten feet; this fence appears to be within the 15-foot buffer area associated with the SC-2 Levee.

The second Quail Court residence south of the drainage basin abuts the levee ROW for the length of its property, approximately 90 feet. This landowner maintains a row of twelve mature ornamental trees on the levee-side of the brick garden wall. These trees appear to be watered via drip irrigation, and provide a visual screen between the residence and the levee. However, the placement of these trees within the levee ROW conflicts with the Corps’ VFZ, which is further discussed in Section A.4.5 under “Vegetation Removal.”

The third Quail Court residence south of the internal drainage basin abuts the levee ROW for approximately 40 feet, and does not encroach on the levee ROW or the Corps’ VFZ.

South of the third Quail Court residence is one residence on the north side of the cul-de-sac at the end of Mallard Street, which abuts the levee ROW for approximately 150 feet; as with the third Quail Court residence, this property does not encroach on the levee ROW or the VFZ.

- *Residence #3.* As shown in Figure A-4, Residence #3 is located on the south side of the cul-de-sac at the end of Mallard Street, within the City of Fillmore. This residence is roughly 400 feet south (along the levee) of the undeveloped parcel mentioned above. There is an existing brick wall (“garden wall”) which separates the property from the levee ROW, with no access along the wall between the residence and the levee ROW. The property line and garden wall for Residence #3 is consistent with the levee ROW and the 15-foot VFZ.
- *Residence #2.* As shown in Figure A-4, Residence #2 is adjacent to the south of Residence #3, on the north side of the cul-de-sac for Robin Court. There is an existing brick garden wall which separates the property from the levee ROW, with no access along the wall between the residence and the levee ROW. The property line of Residence #2 is within the proposed project’s 15-foot buffer area along the length of the property. There is some development, including a garden shed, on the side-yard of Residence #2 which is within the levee’s 15-foot buffer area. The retaining wall included under the proposed project would be installed adjacent this property, within the levee ROW; the retaining wall would eliminate potential encroachment of this property into the ROW and VFZ.



Source: VCWPD 2012e.

**Figure A-4**  
Detailed Map of Levee Improvements

- *Residence #1.* As shown in Figure A-4, Residence #1 is adjacent to the south of Residence #2, on the south side of the cul-de-sac for Robin Court. There is a gate in the brick garden wall at the end of the Robin Court cul-de-sac, between Residence #2 and Residence #1. The property line of Residence #1 is within the proposed project's 15-foot buffer along the length of the property. The residence's backyard area is in the southern portion of the property, and includes a shaded patio area that partially extends into the project's buffer area. As with Residence #2, the retaining wall to be constructed within the levee ROW under the proposed project would eliminate potential encroachment of this property into the ROW and VFZ.

There is an existing storm drain on the levee-side of the garden wall along Residence #1. The SC-2 Levee includes a turnout area on the riverward side of the levee in this area. In addition, there is an existing flap gate<sup>2</sup> in the levee in this area, across from the southern portion of the Residence #1 property.

- *Faith Community Church.* Faith Community Church is located at 355 D Street in Fillmore, adjacent to the levee ROW for roughly 640 feet, between Residence #1 to the north and Residence #4 (described below) to the south. There is an existing brick garden wall which separates the property from the levee ROW. The church property includes a parking lot which is adjacent to the levee ROW for roughly 280 feet and accommodates approximately 55 to 60 passenger vehicles. There is an undeveloped portion of the church property which abuts the levee ROW for roughly 250 feet along the southern portion of the property; it is understood that the church intends to develop this portion of the property in the future. There is an existing storage shed on the church property and adjacent to the levee ROW, between the parking lot to the north and the undeveloped parcel to the south. There are six to eight trees along the western edge of the church parking lot. There is also a 20-foot-wide driveable access point at the northern corner of the parking lot. The proposed project's 15-foot buffer extends within the church property line for the length of the property, particularly along the parking lot area, and including the aforementioned structure between the parking lot and the undeveloped parcel. The church's main building is located approximately 58 feet east of the church's western property line, with access from Sespe Avenue; this structure is well outside of the proposed project's buffer area. There is an existing groundwater monitoring well on the SC-2 Levee across from the church property.

The Faith Community Church offers services at 9:00 a.m., 10:45 a.m., and 6:00 p.m. on Sundays, which are not within the proposed construction schedule of 7:00 a.m. through 7:00 p.m. on Monday through Friday. Faith Community Church holds other events and services throughout the week that may occur during active construction hours.

- *Residence #4.* As shown in Figure A-4, Residence #4 is adjacent to the south of the Faith Community Church property, on the northern side of the Condor Court cul-de-sac. This residence includes a balcony over the backyard, on the north side of the property, which has views of the SC-2 Levee and the Sespe Creek watershed. A brick garden wall separates this property from the levee ROW, and is outside of the proposed project's 15-foot buffer zone.

<sup>2</sup> A "flap gate" is a stormwater control feature designed to control the flow of discharge through the levee. Differential pressure on the back of the gate will cause it to open automatically so that flow passes through the levee, and when water on the face side of the gate rises above water on the back side, the gate closes automatically to prevent backflow.

- *Residence #5.* As shown in Figure A-4, Residence #5 is adjacent to the south of Residence #4, on the southern side of the Condor Court cul-de-sac. This residence includes a balcony over the backyard, on the south side of the property, which has views of the SC-2 Levee and the Sespe Creek watershed. A brick garden wall separates this property from the levee ROW, and is outside of the proposed project's 15-foot buffer zone. There is no opening in the garden wall at the end of the Condor Court cul-de-sac, between Residence #4 and Residence #5.
- *Residence #6.* This residence is located adjacent to the south of Residence #5, on the north side of the cul-de-sac at the end of Bluejay Street. This residence does not include a balcony, but second-story windows have a view of the SC-2 Levee over the garden wall. The property line and garden wall for Residence #6 are outside of the proposed project's 15-foot buffer zone.

Roughly 400 feet south of the Residence #6 parcel, along the SC-2 Levee, is the southern access point for the Sespe Creek Bike Trail at E Street, described above. This trail access is separated from levee access by two gates, located roughly 415 feet apart, one on each side of the E Street trail access. There is a vehicle turnout area on the levee road just to the south of the formal Sespe Creek Bike Trail entrance at E Street. Residences in this area are located roughly 150 feet to 80 feet to the east/southeast of the levee. E Street is aligned in a north-south orientation, perpendicularly between SR 126 and the levee. There is a private property adjacent to the intersection of E Street and the levee, which continues the length of E Street to SR 126.

In addition to the private properties described above which are within or adjacent to the proposed project area, there are two churches located within the City of Fillmore which are considered sensitive noise receptors during daytime hours and could potentially be affected by the proposed project. These two churches are summarized below.

- *First Baptist Church of Fillmore.* This church is located at 1057 First Street in the City of Fillmore, at the northeast corner of C Street and First Street, approximately 0.15 mile east of the SC-2 Levee vehicle turnout area mentioned above, and 0.10 mile southeast of Shiells Park, at the nearest point. First Baptist Church holds Sunday morning service at 11:00 a.m., which is not during the proposed construction activities for the SC-2 Levee improvements, although the church may hold other events during the week that coincide with project construction.
- *The Church of Jesus Christ of Latter-Day Saints (LDS), Ventura California Stake – Fillmore Ward.* The LDS Fillmore Ward is located at 1017 First Street in the City of Fillmore, adjacent to the east of the First Baptist Church of Fillmore, described above. The Fillmore Ward offers meetings and sacrament at starting at 10:00 a.m., with Sunday School and Primary School starting at 11:10 a.m., and Priesthood/RS/YW starting at 12:10 p.m. As with the First Baptist Church of Fillmore, the LDS Fillmore Ward may hold other events and services throughout the week.

**VCWPD Stockpile Area.** On the south side of the intersection of E Street / Sespe Creek Bike Trail and the SC-2 Levee, the levee road continues for roughly 1,800 feet (about 0.2 mile) to SR 126, providing access to the levee from the highway. The intersection of the levee road and SR 126 forms a triangular-shaped parcel between the levee and the highway, abutting the private property that runs along E Street to the east. This undeveloped parcel is owned by the VCWPD and is currently utilized as a basin for local drainage and for stockpiling material used for maintenance activities. Piles of rock and gravel, separated by size and type, are currently stored on this parcel.

### A.4.5 Proposed Project

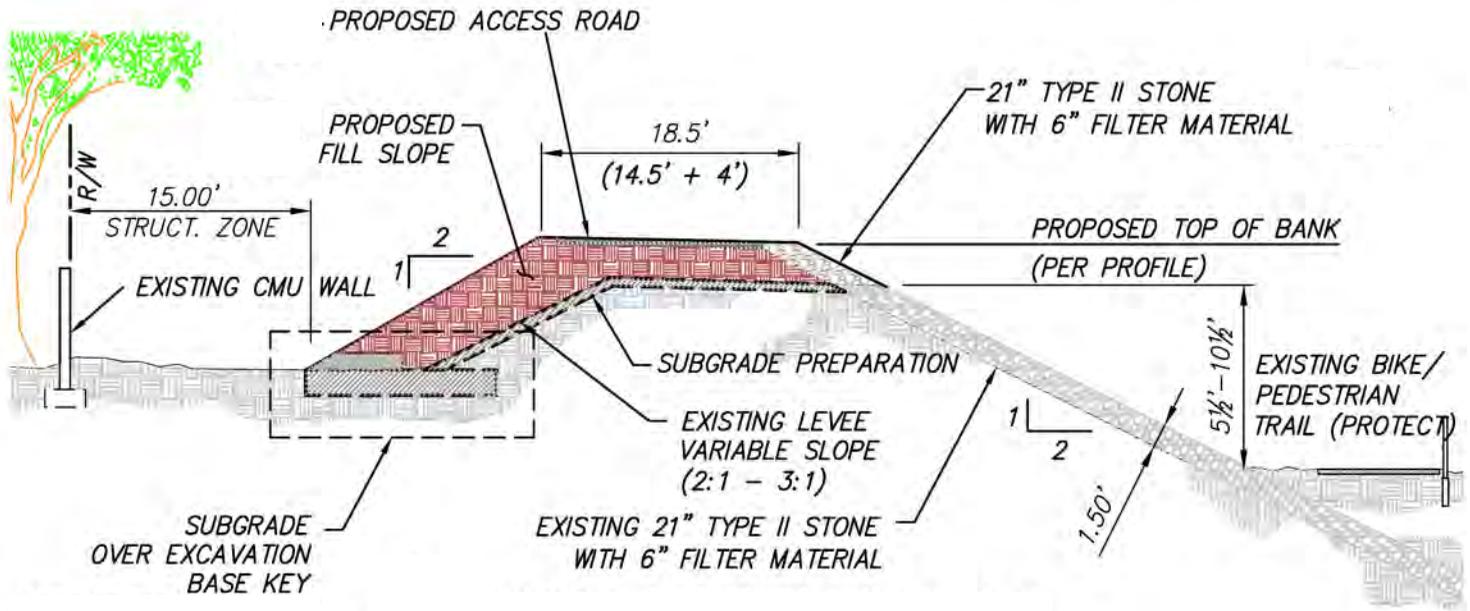
The proposed project consists of implementing improvements to a section of the Sespe Creek Levee, a stone-revetted levee located on the east side of Sespe Creek between Old Telegraph Road and SR 126 near the City of Fillmore, California. Project improvements would occur along approximately 1.1 miles, or 5,808 feet, of the SC-2 Levee. Primary structural elements of the proposed project include raising the existing levee height by one to six feet along approximately 1,543 feet of the levee and adding a 321-foot-long retaining wall along the landward side of a portion of the levee by Residences #1 and #2 on Robin Court, as shown in Figure A-4. Please see Figure A-5 (Structural Improvements) for detailed cross-section views of the proposed levee fill and retaining wall design.

The proposed project also includes actions to rectify design deficiencies identified in a 2010 Periodic Inspection Report, described in Section A.4.1 under “Corps’ Deficiency Assessment.” Some deficiencies identified in this assessment would be addressed during maintenance actions in 2012, while others would be addressed under the proposed project. In general, deficiencies to be addressed by including them in the proposed project include removal of vegetation from the VFZ, removal of three existing unpermitted turnouts, closure of illegal access points, and establishing a formal pedestrian access to the bike trail from Mallard Street.

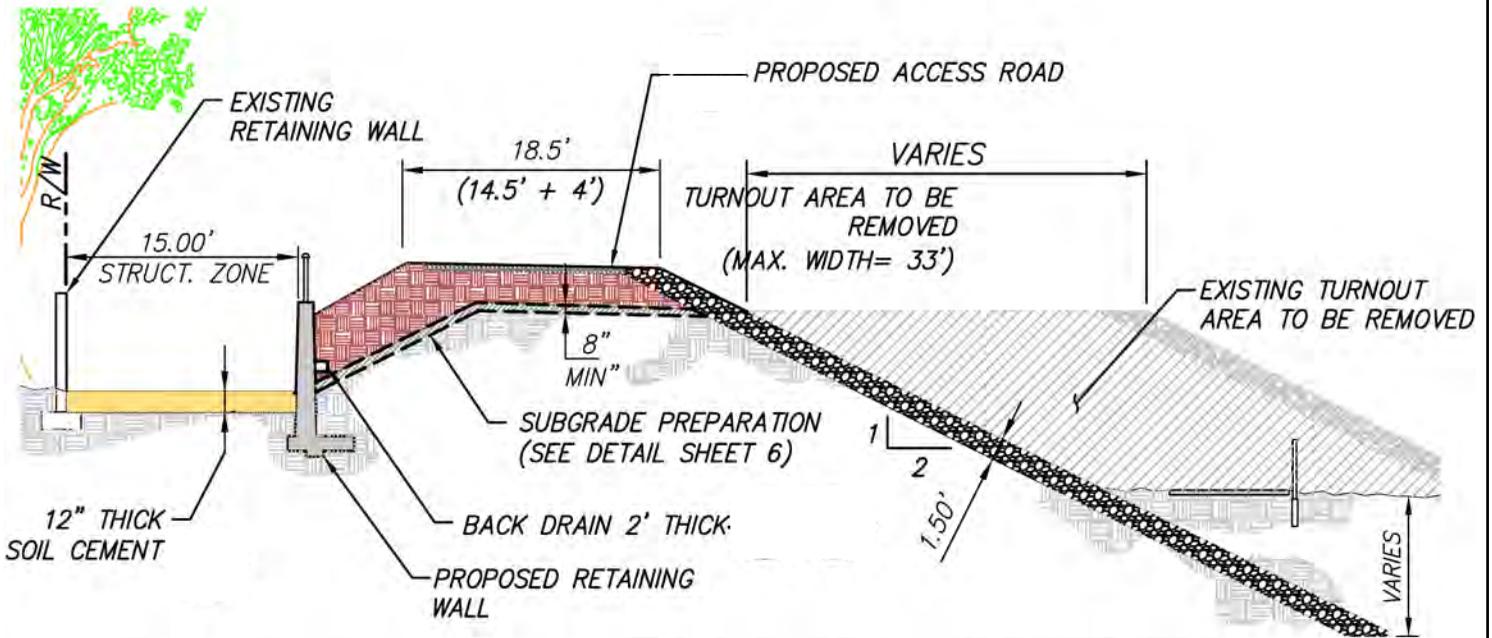
Actions included under the proposed project are described below.

**Fill Slope.** Fill slope to raise the height of the levee would be installed along approximately 1,543 feet of the levee, from just north (upstream) of the Mallard Street cul-de-sac, to Residence #6, at Bluejay Street. The fill slope characteristics are described below, from north to south.

- *Residence #3.* For approximately 205 feet, from just north of Mallard Street to the southern property line of Residence #3, fill slope would raise the levee by 0.76 feet. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward side of the levee would have a slope ratio of two horizontal (H) to one vertical (V), or 2H:1V, and the riverward slope would be 3H:1V. The riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment. No impacts (property acquisition) at Residence #3 are anticipated.
- *Residence #2 and Residence #1.* For the next 321 feet (north to south), from the southern property line of Residence #3 (northern property line of Residence #2), fill slope would raise the levee by 1.08 feet along Residence #2 to 3.07 feet along Residence #1. The top of the levee along Residence #2 would be 17 feet wide, with a two percent riverward slope. Near Residence #1, there is a vehicle turnout area that widens the top of the levee to approximately 44 feet, maintaining a riverward slope of two percent. This turnout would be removed as part of the proposed project. The landward slope of the levee would be 2H:1V, and the riverward slope would be 3H:1V. The riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment. This portion of the levee improvements would also include installation of a retaining wall, discussed below.



**Proposed Levee Fill Condition**



**Proposed Levee Retaining Wall Condition**



Source: VCWPD, 2013a.

**Figure A-5**  
**Structural Improvements**

- *Faith Community Church.* For the next 652 feet (north to south), from the southern property line of Residence #1 (northern property line of Faith Community Church) to the southern property line of Faith Community Church (northern property line of Residence #4), fill slope would raise the levee by 4.32 feet. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward and riverward slopes would both be 2H:1V, and the riverward slope would be reinforced with 21 inches of Type II ungrouted stone embankment.

Due to encroachment of the Faith Community Church property into the levee ROW and VFZ, this portion of fill slope would affect approximately 1,345 square feet of the Faith Community Church property, or a 652-foot-long stretch with a width of up to 3.2 feet.

- *Residence #4, Residence #5, and Residence #6.* South of the Faith Community Church fill slope improvements, for the next 365 feet from the southern property line of the church (northern property line of Residence #4) to Residence #6 at Bluejay Street, fill slope would raise the levee by 2.5 feet along Residence #4, one foot along Residence #5, and zero feet along Residence #6. The top of the levee would be 17 feet wide, with a two percent riverward slope. The landward slope would be 2H:1V and the riverward slope would be 3H:1V. No ungrouted stone reinforcement has been identified for the riverward slope on this section of levee improvements. These residential parcels do not encroach into the levee ROW or VFZ, and no property or easement acquisition would be required.

**Soil Cement Protective Pad.** An erosion protection barrier would be installed to protect the integrity of the levee structure in case water overtops the levee, which would only occur if a storm with a magnitude greater than the 100-year storm event were to occur. The soil cement protective pad would be located between the proposed landward retaining wall (see discussion of “Retaining Wall” below) and the existing garden walls. The protective pad would have a width of approximately 15 feet and extend the length of the retaining wall, or 320 feet. A total of 180 cubic yards of cement would be required for the protective pad.

**Gravel Toe Drain.** Toe drains would be installed along landside levee toes to address seepage impacts in the vicinity of the levee toe, and to ensure long-term steady seepage conditions. In addition, if design flood elevations are heightened in the future, toe drains would aid in seepage collection, or standing water. Toe drains would be installed in the following locations:

- Stations 15+00 to 21+25 (starting at the north side of the VCWPD stockpile area, and ending just north of the existing turnout to be removed with this project),
- Stations 28+00 to 34+66 (starting just north of the cul-de-sac at the end of Condor Court and just south of the Faith Community Church, and ending just north of the Faith Community Church Property and just south of the cul-de-sac at the end of Robin Court), and
- Stations 37+87 to 40+00 (starting between the cul-de-sacs at the end of Robin Court and Mallard Street, and ending just north of the cul-de-sac at the end of Mallard Street).

The gravel toe drains would be situated five feet horizontally into the embankment at the toe, and would be 18 inches in height. Approximately 1,500 feet of toe drain is required, and an associated 550 cubic yards of gravel would be applied for this purpose. Drain pipe may also be needed to collect seepage from levee landside toe areas; the pipe diameter would be at least six inches.

**Weighted Filter.** Weighted filters would be installed along detention basins and low-lying slope toe areas parallel to levee sections, in order to address potentially adverse effects associated with steady seepage conditions. Weighted filters would be installed at the following locations:

- Stations 7+25 to 15+00 (starting just north of SR 126 and ending at the north side of the VCWPD stockpile area, along the levee slope toe),
- Stations 21+25 to 22+50 (starting just north of the southern-most turnout to be removed and ending just south of Bluejay Street, along the detention basin toe), and
- Stations 42+50 to 45+25 (located in area of northern-most turnout to be removed near Oriole Court, along the detention basin toe).

Weighted filters would consist of rock riprap overlying a non-woven textile. Riprap would be classified as “Light Class,” with a thickness of two to three feet, and would extend beyond the levee toe to the detention basin slope, at least five feet. Approximately 550 cubic yards of rock would be required for the weighted filters.

**Retaining Wall.** A retaining wall would be installed for 321 feet along the landward side of the levee, from the northern property line of Residence #2 to the southern property line of Residence #1 (this section of the project is also described above, under “fill slope”). The retaining wall would be comprised of concrete masonry unit (CMU). A 36-inch-tall cabled fence consisting of three smooth cables would be placed on top of the retaining wall as a safety feature. Visually, the height of the retaining wall would be lower than the existing garden walls along Residence #2 and Residence #1, although the cabled fence would be visible from both residences. The retaining wall would taper in height down to the existing levee height at either end. Along Residence #2, the total height of the retaining wall would be 7.7 feet, the bottom portion of which would be below grade, and along Residence #1, the total height of the retaining wall would be 5.4 feet, the bottom portion of which would also be below grade. The retaining wall would extend above the levee top slope by one foot. Fencing would be installed at the top of the retaining wall to meet safety requirements.

**Vegetation Root Barrier.** A vegetation root barrier would be installed adjacent to Shiells Park for the entire 950 feet that the levee runs along the park. This barrier would be 12 inches wide and four to five feet deep, comprised of either cement slurry, a buried concrete wall, or some other pre-manufactured geosynthetic product, such as interlocking panels made of Polyvinyl Chloride (PVC) or High Density Polyethylene (HDPE). Use of a geosynthetic would allow for installation using a “ditchwitch” type trenching operation, resulting in a narrow trench approximately several inches wide; however, a ditchwitch would not be able to trench through larger rocks in the subsurface. A backhoe could be used to excavate the trench, which would result in a larger trench width (at least 12 inches). A wider trench width would facilitate the use of concrete as a root barrier, which is generally considered sturdier than a geosynthetic. Assuming concrete is utilized for the root barrier, approximately 180 cubic yards would be required.

**Storm Drain Protection.** There is an existing storm drain on the levee-side of the garden wall along Residence #1; this feature would be protected in-place under the proposed project. By protecting the storm drain in place, it would continue to function towards the purpose of flood risk management during operation of the proposed project.

**Faith Community Church Easement.** Section A.4.4 provides a description of the Faith Community Church property; the proposed project would remove the property's garden wall, a portion of the parking lot, and trees on the western portion of the parking lot. In addition, the existing storage structure located between the parking lot and the vacant parcel would need to be moved. As described above (see "Faith Community Church" under "Fill Slope"), the encroachment of Faith Community Church into the levee ROW conflicts with design of the proposed project; an encroachment easement of approximately 1,345 square feet, or 0.03 acre, would be required within the Faith Community Church parcel (APN 046030036).

The existing garden wall would likely be replaced by a five-foot-tall decorative fence, likely made of tubular steel poles, and situated inside the existing property line. The VCWPD may replace the existing landscaping trees along the property line with potted decorative trees.

The VCWPD is coordinating with Faith Community Church regarding the possibility of installing a gate at either end of the church parking lot area, in order to provide maintenance access to this portion of the levee. Formal access for maintenance is currently available via Old Telegraph Road, to the north, and SR 126, to the south; the church property would also provide access to the central portion of the levee.

There is an existing groundwater monitoring well on the SC-2 Levee across from the Faith Community Church property (not within the church property); with implementation of the proposed project, this monitoring well would be capped and abandoned in-place.

**Sespe Creek Bike Trail Access.** As described in Section A.4.4, current formal trail access in the project area is from Old Telegraph Road on the north, and the bike trail cross-over of the levee at E Street near SR 126 on the south. Unauthorized access points currently exist at openings in the garden wall at the end of Robin Court and Mallard Street. The unauthorized access point at the end of Robin Court would be closed as part of the project, and a new formal access ramp over the levee would be installed at the end of Mallard Street to provide for improved access to the Sespe Creek Bike Trail, as shown in Figure A-6.

**Vegetation Removal.** All vegetation located within the Corps' 15-foot VFZ, or the 15-foot landward buffer from the toe of the levee, would be removed with implementation of the proposed project. The VFZ is a three-dimensional corridor designed to provide reliable access to and along the flood control structure, and to provide distance between root systems and the flood structure in order to moderate reliability risks associated with structural damage as well as potential piping and seepage due to root penetration (Corps, 2009). Tree roots greater than one-half inch in diameter would be removed. Root removal excavations would be filled with compacted fill material. The VCWPD may request a variance from the standard vegetation guidelines set forth in the Corps Technical Engineering Letter No. 1110-2-571 to leave encroaching vegetation in place (Corps, 2009). The vegetation variance must be shown to be necessary and the only feasible means to preserve, protect, and enhance natural resources. The variance must also assure that safety, structural integrity, and functionality are retained, and accessibility for maintenance, inspection, monitoring, and flood-fighting are retained, where the term "retained" assumes a pre-variance condition (Corps, 2009).

Vegetation that would be removed in the project area to restore the VFZ include the following: mature trees located along Shiells Park, mature trees outside the property line behind a residence at the end of



Source: VCWPD, 2013c.

**Figure A-6**  
**Proposed Pedestrian**  
**Bike Trail Access**

Quail Court, mature trees along the west side of the Faith Community Church parking lot, and one mature tree at the new vehicle turnout area (see “Unpermitted Encroachments” below). These land uses are described above in Section A.4.4 (Surrounding Land Uses and Setting), and the associated encroaching vegetation is described below. All trees removed as part of the project, with the exception of those located behind the Quail Court residence, would be replaced with native trees on a 1:1 basis.

- *Shiells Park.* Regarding the trees located along Shiells Park, the Los Angeles District of the Corps has communicated to the VCWPD that a variance may be obtained to leave the trees in-place within the VFZ. However, the Regulatory Division of the Corps is the governing body responsible for issuing such a variance, and at the time of preparation of the Initial Study for the proposed project, the Regulatory Division has not issued a determination on whether the variance would be acceptable. Therefore, in order to be conservative in the assessment of potential impacts of the project, for the purposes of this analysis it is assumed that the trees along Shiells Park would be removed as part of the proposed project.

As shown in Figure A-7 (Improvements at Shiells Park), eight trees along Shiells Park are currently located within the VCWPD right of way, in addition to 15 trees that are located within 15 feet of the design toe of the levee, the Corps’ VFZ for structural integrity. In total, it is anticipated that 23 trees along Shiells Park would be removed under the proposed project.

- *Quail Court Residence.* The ornamental trees along the Quail Court residence are located outside of the property line, within the levee ROW and the VFZ, and will be removed as part of the proposed project. These trees would not be replaced.
- *Faith Community Church.* Existing trees located along the western side of the church parking lot are within the levee ROW and the VFZ. With implementation of the proposed project, these existing trees would be removed, along with the brick garden wall which separates the church development from the levee (described further below). The VCWPD may replace the existing trees with potted decorative trees that will not conflict with the levee ROW or VFZ.
- *New Turnout.* One mature tree located in the new vehicle turnout area would be removed as part of the proposed project. As noted above, this tree would be replaced with a native tree (1:1 replacement basis).

**Unpermitted Encroachments.** Unpermitted encroachments along the levee include side-drainage structures, access ramps, three turnout areas, and a 24-inch diameter storm drain line that runs within 15 feet of the levee toe (the place where the levee slope meets the natural ground surface) along the downstream end of the levee on the landward side (Fugro, 2011). These unpermitted encroachments are described below.

- Pedestrian access to the levee ROW is currently available through openings in the garden wall at the end of Robin Court and Mallard Street. The opening at the end of Robin Court would be closed as part of the proposed project. A new formal access ramp would be installed at the end of Mallard Street to provide for improved access to the Sespe Creek Bike Trail, as shown in Figure A-6 (Proposed Pedestrian Bike Trail Entrance).



Source: VCWPD, 2013c.

**Figure A-7**  
**Improvements at Shells Park**

- As described above, the garden wall along the Faith Community Church parcel would be moved under the proposed project. Upon project completion the original wall would be replaced with an iron fence, which would be located up to 3.2 feet landward of the original wall location along approximately 652 feet of the church parcel's new property line, resulting in a reduction in the parcel size for the church of approximately 1,345 square feet (0.03 acres).
- There are three vehicle turnout areas along the creek side of SC-2 Levee which are currently unpermitted encroachments that would be removed as part of the proposed project. This would include removal of rock and earthwork to expose underlying revetment. Placement of new material would not be required. One new replacement turnout, conforming to Corps specifications, would be constructed at the top of the levee on the riverward side, where the new pedestrian/bike access path would be configured from the Mallard Street cul-de-sac. The new turnout would not encroach onto the pedestrian/bike path, and would be an area measuring approximately 70 feet by 25 feet beyond the width of the top of the levee. One existing, mature tree would be removed to provide this turnout area.

**Rock Revetment Displacements.** Areas of significant rip-rap displacement and stone degradation are present along the levee, and may pose a threat to the integrity of the levee. As described above (under "Unpermitted Encroachments"), unpermitted pedestrian access to the levee ROW currently occurs through openings in the garden wall at the end of Robin Court and Mallard Street; pedestrian access through these openings has resulted in rock revetment displacements. There are localized areas long the levee where the rip-rap has broken down or deteriorated into two- to 12-inch fragments, and some areas of displacement are the result of human interference where the stone has been moved to create foot traffic access through the levee ROW (Fugro, 2011). Rock revetment replacement would be addressed during maintenance actions in 2012. However, as part of the project, the unpermitted access point at the end of Robin Court would be closed, and a new formal access point would be added at the end of Mallard Street (see "Sespe Creek Bike Trail Access" above), which would reduce future rock revetment displacements. Formal access to the bike trail would continue to be available at Old Telegraph Road (north end) and E Street (south end).

**Access Ramps.** Two new vehicle access ramps would be constructed on the landward side of the levee as part of the proposed project. One of the new ramps would be constructed near the southern boundary of Shiells Park, in order to allow access to the landward levee toe for maintenance and occasional flood-fighting activities (such as sand bag placement). As shown in Figure A-7 (Improvements at Shiells Park), the new ramp would be 15 feet wide and 120 feet long, and would introduce a new impervious area of approximately 1,800 square feet. The second new ramp would be constructed on the landward side of the levee near the VCWPD stockpile property by Route 126 to provide construction and maintenance vehicle access. The ramp would be 15 feet wide and 180 feet long and would introduce a new impervious area of approximately 2,700 square feet.

### **Construction**

**Schedule and Phasing.** Construction of the proposed project is anticipated to occur over a five- to six-month period, from approximately April 4, 2014 to September 19, 2014. Construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. No construction is expected on weekends or holidays. No daytime or nighttime lighting would be required during

**Sespe Creek Levee Improvements Project**

construction of the project, including at the staging area(s). Table A-1 provides an integrated construction schedule which indicates the duration and timing of separate work tasks associated with the proposed project; as noted, this table reflects an accelerated three-month construction period in order to characterize the worst-case scenario for potential impacts to air quality and traffic.

**Table A-1. Construction Schedule**

Task ID	Task Name	Duration	Start Date	Finish Date	Predecessor	Month 1				Month 2				Month 3			
						1	2	3	4	5	6	7	8	9	10	11	12
1	Mobilization	1 week	Mon 4/7/14	Fri 4/11/14	-	■											
2	Demolition - Existing Garden Wall	1 week	Mon 4/14/14	Fri 4/18/14	1		■										
3	Wall Foundation Excavation	1 week	Mon 4/21/14	Fri 4/25/14	2			■									
4	Wall Concrete Foundation	1 week	Mon 4/28/14	Fri 5/2/14	3				■								
5	CMU Wall Placement & Reinforcing	2 weeks	Mon 5/5/14	Fri 5/16/14	4					■	■						
6	Wall Grouting	2 days	Mon 5/19/14	Tues 5/20/14	5							■					
6a	Gravel Toe Drain & Weighted Filter	3 weeks	Mon 5/5/14	Fri 5/23/14	1					■	■	■					
7	Levee Surface Prep & Scarify	2 days	Wed 5/21/14	Thurs 5/22/14	6							■					
8	Wall Backfill	3 days	Fri 5/23/14	Tues 5/27/14	7								■				
9	Access Ramps and Turnouts	2 weeks	Fri 5/23/14	Thurs 6/5/14	7								■	■			
10	Levee Fill and Compaction	2 weeks	Fri 5/23/14	Thurs 6/5/14	7								■	■			
11	Levee Rock Rip-Rap Extension	1 week	Fri 6/6/14	Thurs 6/12/14	9										■		
12	Soil Cement Placement Landward	1 week	Wed 5/28/14	Tues 6/3/14	8								■				
13	Fence Installation	1 week	Wed 6/4/14	Tue 6/10/14	11										■		
14	Roadway Base Place & Compact	1 week	Fri 6/13/14	Fri 6/20/14	10											■	
14a	Tree Removal & Cement Root Barrier	1 week	Fri 6/13/14	Fri 6/20/14	9											■	
15	Clean-up & Demobilization	1 week	Mon 6/23/14	Fri 6/27/14	13												■

\* It is reasonably anticipated that construction of the proposed project will last approximately five to six months, potentially extending from April 2014 through September 2014; however, it is possible that construction could be completed within three months, which would represent a worst-case scenario for air quality and traffic impacts, and is therefore presented here in order to be conservative for the purposes of the impact assessment.

Source: VCWPD, 2012f; VCWPD, 2013b.

**Staging Areas.** As mentioned in Section A.4.4, the existing VCWPD stockpile area located at the southeast intersection of the levee and SR 126 would be used for staging of construction vehicles,

equipment, and materials. This area is already disturbed, and currently used as an interior drainage basin and stockpile area. Another potential staging area for the project is a 0.12-acre parcel (APN 046029078) owned by the City of Fillmore located along the formal bike trail entrance near SR 126 and E Street; this site is also previously disturbed and is currently vacant. The VCWPD is coordinating with the Community Faith Church to possibly use a portion of their parking lot as an additional staging area for construction vehicles, equipment, and material; the parking lot is completely paved. No ground disturbance will occur in any flow channels of Sespe Creek.

**Materials and Waste.** Construction of the proposed project would require approximately 18,181 cubic yards of compacted earthen fill, among other materials. Table A-2 provides estimates of the other types and quantities of materials associated with construction of the project.

**Table A-2. Construction Materials**

Material	Quantity	Units
Compacted Earthen Fill (excluding overex and remediation)	18,181*	cubic yards
Extend Rip-Rap Levee Armoring (Type II UngROUTed Stone)	97	cubic yards
Landside Levee Armoring (Type II UngROUTed Rip-Rap)	681	cubic yards
Landside Levee Structural Zone Vegetation Removal (Property Acquisition)	5,631	square feet
Crushed Miscellaneous Base (CMB) for Ramps and Bike Trail	205	cubic yards
Turnout Removal Stone Replacement	155**	cubic yards
Bike Trail AC Pavement	4,815	square feet
Private Parcel Structure Relocation / Re-construction	1,500	square feet
Private Parcel AC Removal and Repaving	5,631	square feet
Private Parcel Vegetation Removal and Re-planting / Potting (Assume 48" box)	15	each
Private Parcel Removable Fence Construction	622	linear feet
Retaining Wall (does not include overex)	2,612	square feet
Soil Cement Pad	180	cubic yards
Gravel Toe Drain	550	cubic yards
Weighted Filter (Rock)	550	cubic yards
Vegetation Root Barrier (Cement)	180	cubic yards

\* Turnout removal would require excavation of 1,500 cubic yards of material, which would be utilized as fill material for the new ramps and turnout (1,770 cubic yards), resulting in 270 cubic yards of additional earthen fill required. It is assumed that this quantity can be accommodated within the 18,181 cubic yards for levee improvements.

\*\* Total quantity of replacement stone is 470 cubic yards; however, 315 cubic yards of stone would be removed as part of the turnout removal activities and reused on site. Therefore, the total new/additional stone replacement material would be 155 cubic yards.

Source: VCWPD, 2012e; VCWPD, 2013b.

Earthen fill, stone, and rip-rap materials required for the project will likely be obtained from Santa Paula Rock, which is located approximately ten miles from the project site, in City of Santa Paula. Other materials such as concrete and fencing would be obtained from vendors within a 30-mile radius of the proposed project site.

Water for soil compaction and dust suppression during construction would be supplied by the City of Fillmore, via a water meter placed on a local fire hydrant (near SR 126 and E Street). A water tank truck would be used to transport water to the project site. It is estimated that approximately 1/16 inch of water coverage per acre per day would be required, to provide dust control on the entire length of the SC-2 Levee. As mentioned above, concrete would be obtained from a vendor located within 30 miles of the project; therefore, a water source for concrete manufacturing is not anticipated to be necessary.

Clear and grub green wastes generated during construction of the project would be hauled to the nearest green waste recycling facility for appropriate disposal. The only soil spoils associated with the project would be from tree removal (soil within tree root balls). An on-site raw material excavation and re-use/export plan will be implemented for each work task. Import of some materials would likely be required due to raising of the levee height. Solid waste generated during construction of the project would be disposed of in accordance with Ventura County Ordinances #4308 (solid waste disposal, waste reduction, waste diversion) and #4357 (requirements for the diversion of construction and demolition debris from landfills by recycling, reuse, salvage), to the extent practicable. The VCWPD will incorporate the requirements of these ordinances into the project's contract specifications requirements. Portable toilets will be available on-site during the construction period.

**Vehicles and Equipment.** The types and quantities of construction vehicles and equipment associated with the proposed project are described in Table A-3. During the construction period, one operator would be required for each piece of equipment specified in Table A-3 and one overall construction foreman. It is anticipated that there would be an average of five construction workers on-site per day, with a peak of 15 workers per day. Additionally, there would be one construction inspector and one biological monitor onsite daily.

Construction vehicles and equipment would be re-fueled onsite within the designated work area on the levee or on the landside of the levee. No on-site fuel storage would occur under the project.

Construction would require a minimal amount of electricity for minor form work, an electric saw, and a grinder for work on the retaining wall; electricity would be obtained from a local source (possibly by arrangement from the Faith Community Church). A construction management trailer would not be required for the proposed project.

**Access and Parking.** Construction access would be at both ends of the SC-2 Levee, including from Old Telegraph Road and SR 126; as well as from a new access ramp at the staging area, which would provide direct access between the staging area and the levee for importing equipment and materials to the site eliminating the need to travel along SR 126 between the staging area and the levee. The Sespe Creek Bike Trail formal entrance at E Street may also serve as an access point. These access points would be used for importing equipment and materials to the site. An average of approximately 35 truck trips per day and a peak of approximately 50 truck trips per day (based on the 3-month schedule presented in Table A-1, and assuming the levee fill material is brought to the staging area and stockpiled beginning at the start of construction [Week 1] through the first week of levee fill and compaction activities [Week 8]) would occur during construction of the project.

Parking during construction would occur along the whole length of the SC-2 Levee, and off-project worker parking would occur along the surrounding streets. Construction staging areas could include the VCWPD property at SR 126, which is currently utilized for maintenance activities, and the City-owned parcel east of the bike trail formal entrance at E Street, behind the homes on Waterford Lane. Parking

and/or staging areas may also be available at the Faith Community Church property, pending ongoing coordination between VCWPD and the church.

**Table A-3. Construction Vehicles and Equipment**

ID	Task	Duration	Equipment	Quantity
1	Mobilization	1 week		
2	Demolition – Existing Garden Wall	1 week	Excavator, Dump Truck, Hand Crew	Wall Removal Length = 622 feet
3	Wall Foundation Excavation	1 week	Excavator, Dump truck, Hand Crew	Foundation length = 380 feet
4	Wall Concrete Foundation	1 week	Cement Truck, Concrete Pump, Hand Crew	Foundation length = 380 feet
5	CMU Wall and Reinforcing	2 week	Flatbed Truck – supply steel / forms / lumber, Forklift, Front-End Loader, Portable Generator	Wall Area = 2,612 sq. feet
6	Wall concrete Grouting	2 days	Concrete Mixer Truck, Concrete vibrator, Generator, Supply Truck (CMU)	Wall Area = 2,612 sq. feet
6a	Gravel Toe Drain & Weighted Filter	3 weeks	Dump Truck, Backhoe, Roller, Water Truck	Toe Drain Gravel = 550 cubic yards Weighted Filter Rock = 550 cubic yards
7	Levee Surface Prep & Scarify	2 days	Bulldozer, Skip Loader	Area = 21,000 sq. feet
8	Wall Backfill	3 days	Lender, Dump Trucks	Wall Area = 2,612 sq. feet
9	Access Ramps and Turnouts	2 weeks	Front-end Loader, Excavator, Roller, Water Truck	*Fill volume = 270 cubic yards *Rock quantity = 155 cubic yards
10	Levee Fill and Compaction	2 weeks	Front-end Loader, Blade Grader, Dump Truck, Roller	Fill volume = 18,181 cubic yards
11	Levee Rock Rip-Rap Extension	1 week	Dump Truck, Loader, Excavator	Rock quantity = 97 cubic yards
12	Soil Cement Placement Landward	1 week	Loader, Blade, Dump Truck, Roller	Volume = 180 cubic yards
13	Fence Installation	1 week	Supply Truck, Hand Crew	Length = 622 feet
14	Roadway Base Place & Compact	1 week	Dump Truck, Loader, Roller	Area = 21,000 sq. feet
14a	Tree Removal & Cement Root Barrier	1 week	Chainsaw, Wood Chipper (staged at Shiells Park), Backhoe, Dump Truck, Cement Truck	Cement Volume = 180 cubic yards
15	Cleanup & Demobilization	1 week		---

\* Turnout removal would require excavation of 1,500 cubic yards of material, which would be utilized as fill material for the new ramps and turnout (1,770 cubic yards), resulting in 270 cubic yards of additional earthen fill required. It is assumed that this quantity can be accommodated within the 18,181 cubic yards for levee improvements (Task ID 10). Total quantity of replacement stone (rock) is 470 cubic yards; however, 315 cubic yards of stone would be removed as part of the turnout removal activities and reused on site. Therefore, the total new/additional stone replacement material would be 155 cubic yards.

Source: VCWPD, 2012f; VCWPD, 2013b.

Public access to the active construction work area along the Sespe Creek Levee shall be prohibited in order to maintain public safety. Due to the close proximity of the Sespe Creek Bike Trail to the project work area, the Sespe Creek Bike Trail between SR 126 and Old Telegraph Road would be temporarily closed during the five- to six-month project construction period. Temporary exclusionary fencing and signage would be erected at the entrances to this section of the bike path notifying the public of the temporary closure. A temporary detour for bicyclists and recreationists would be available along neighboring residential streets. A suggested temporary detour route is from the E Street entrance along to Cottonwood Lane, east along Waterford Lane, north along D Street, east along Sespe Avenue, and north along C Street to the trail entrance north of Old Telegraph Road, as shown in Figure A-8.

**Environmental Commitments.** This section describes the environmental commitments that would be implemented as part of the proposed project. Due to the short-term nature of the construction activities involved and the limited area of disturbance, the activities of the proposed project are not expected to cause any long-term adverse effects. The environmental commitments discussed below would decrease the severity of any short-term or temporary project-related impacts on resources. The environmental commitments described in this section are not legally binding and do not constitute a mitigation requirement.

### **Water Resources**

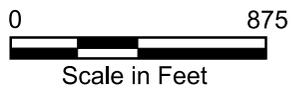
**WR-1:** All BMPs associated with the SWPPP shall include but are not limited to the following: General Site Design Control Measures (Conserve Natural Areas / Protect Slopes and Channels / Control Peak Stormwater Runoff Discharge Rates / Minimize Impervious Area); Site-Specific Source Control Measures (Storm Drain Message and Signage / Outdoor Material Storage Area Design / Outdoor Trash Storage Area Design / Fueling Area Design); and Treatment Control Measures (Grass Strip Filter / Grass Swale Filter / Detention Basin / Porous Landscape Detention / Infiltration Trench).

### **Public Health and Safety**

**PS-1:** Public access to the active construction work site shall be prohibited. The Sespe Creek Bike Trail between SR 126 and Old Telegraph Road will be temporarily closed during the five- to six-month project construction period. Temporary exclusionary fencing and signage will be erected at the entrances to this section of the bike path notifying the public of the temporary closure. The VCWPD shall inform the public of these construction period restrictions by posting project activity information on signs, newspaper announcements, and/or direct communication such as phone calls or mailers. These postings/communications by the VCWPD shall first occur at least one week prior to project activities.

**PS-2:** A Communication Plan shall be developed by VCWPD and implemented during all project activities. The Communication Plan shall describe how local authorities shall be notified of public safety concerns, incidents, and emergencies.

**PS-3:** The contractor shall employ appropriate signaling and signage to accommodate interruptions in existing traffic flows. These measures shall be defined in the Traffic Control Plan.



Source: Google Earth, 2012.

- Detour
- SC-2 Levee Improvement Site

**Figure A-8**  
**Sespe Creek Bike Trail**  
**Proposed Temporary Detour**

**PS-4:** Prior to implementation of the project, relevant fire, police, and other emergency service agencies of the proposed work areas shall be notified of potential congestion, and traffic management methods to be used to ensure access at all times.

**PS-5:** A Safety Plan, in accordance with applicable Corps standards, shall be developed and implemented during all construction activities. The Safety Plan shall include evacuation procedures in response to natural disaster(s), as well as from the channel with a forecast storm event.

**PS-6:** On-site re-fueling of the equipment would be accomplished at least 50 feet away from flowing water and with the use of liners. Best Management Practices (BMPs) would be used and include such actions as having hazardous waste clean-up equipment and spill kits staged on-site, using the appropriate size and gauge drip pans and absorbent diapers. Spill kits shall be in close proximity to the fuel truck in case of fuel or other fluid spills. All equipment would be checked for leaks prior to operation and repaired as necessary.

**PS-7:** Fluids released because of spills, equipment failure (broken hose, punctured tank) or refueling would be immediately controlled, contained, and cleaned-up per Federal regulations. All contaminated materials would be disposed of promptly and properly to prevent contamination of the site. Someone would be present to monitor refueling activities to ensure that spillage from overfilling, nozzle removal, or other action does not occur.

### **Traffic and Transportation**

**T-1:** Haul routes shall be designed to minimize distances to the work site and avoid heavily congested areas or large residential communities to the maximum extent feasible.

**T-2:** The contractor shall submit a Traffic Control Plan to the County of Ventura for review and approval at least 30 days prior to the onset of construction. The Traffic Control Plan shall demonstrate practices and safety precautions designed to minimize temporary traffic impacts, including but not limited to the signage requirements required per environmental commitment PS-3.

**T-3:** If damage to roads occurs, the contractor shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired. Roads disturbed by trucks or equipment shall be properly restored to ensure long-term protection of road surfaces. Such repairs shall occur as part of the active construction period.

**T-4:** The contractor shall obtain all applicable permits and clearances from appropriate agencies for transporting and hauling equipment and debris.

### **Operations and Maintenance**

Operation and maintenance of the proposed project would include routine inspections and repair, as needed over the lifetime of the project (50 years). It is anticipated that the intensity of post-construction operations and maintenance activities would not differ from pre-construction (existing) conditions. No daytime or nighttime lighting would be required during operation of the project. Operational and maintenance activities associated with the proposed project are described below.

- *Facilities Maintenance and Reconstruction.* Facilities deteriorate over time and may require repair or reconstruction, particularly after a winter with high flood flows. Maintenance activities will occur throughout the year on an as-needed basis, such as gate and fence repair, and repair of bank protection damaged from flood flows, including grouted and ungrouted riprap, pipe and wire revetment, and concrete sack walls. In general, the same type of bank protection is used for the repair or replacement, and the length of bank protection is similar to the original condition. The amount of earthwork depends on the length of the bank protection to repair and depth of the erosion (VCWPD, 2008).
- *Access Roads.* Compacted gravel surface roads require periodic resurfacing due to normal deterioration from use and from erosion. Resurfacing roads generally occurs in the winter when there is better crew availability but can occur any time of the year. Base aggregate is placed on the road and compacted with heavy equipment (VCWPD, 2008).
- *Maintenance of the 15-foot Vegetation Free Zone.* As described in Section A.4.1 (Project Background) and above, in the discussion of the proposed project, the project will include maintenance of the Corps' 15-foot VFZ from the toe of the levee, except where VCWPD obtains a variance from the Corps for certain types of vegetation to remain within the VFZ. During operation and maintenance of the proposed project, maintenance of the VFZ will include periodic herbicide application. No operational changes pertaining to brush clearance would occur as a result of implementing the proposed project.
- *Rodent Control.* Burrowing activities of California ground squirrels (*Spermophilus beecheyi*) and, to a lesser extent, pocket gophers (*Thomomys bottae*) can cause structural damage to flood control facilities, the California Division of Safety of Dams (DSOD) has a zero tolerance policy for ground squirrel and other rodent infestations at critical facilities where failure would affect public safety. The VCWPD has an ongoing rodent control program for critical structures that are listed in Table 2-8 (Critical Watershed Protection District Facilities with Anticoagulant Rodenticide Applications) of the Ongoing Routine Operations and Maintenance Program Final Program EIR; Sespe Creek Levee is listed in this table and is subject to the ongoing rodent control program. Under this program, VCWPD contracts with a Pest Control Operator that specializes in wildlife damage control to maintain anticoagulant bait stations throughout the year. Depending on the density of the ground squirrel population, bait stations are checked every 14 to 30 days (VCWPD, 2008).
- *Storm Related Emergency Activities.* During the winter season, VCWPD personnel are continually monitoring flow conditions in channels and inspecting facilities for identification of problem areas. Work conducted during storm events is usually not routine maintenance, but instead, is considered emergency activity. The nature, scope, and extent of emergency actions cannot be predicted but could range from minor actions (clearing a storm drain outlet) to major (repair of eroded bank threatening a road or structure under flood conditions) (VCWPD, 2008).
- *Scour surveys.* During the life of the project, long-term continued sediment deposition in the creek may alter the flood protection in the future, and annual scour surveys are recommended to monitor the condition of sediment deposition adjacent to the levee.
- *Flap gate inspections.* The flap gates must be regularly inspected and cleared of debris such as vegetation and refuse that may get trapped in the gate, particularly during low flow events.

Periodic inspection and cleaning should be scheduled when the water flowing through the flap gate carries floating material.

- *Graffiti removal.* Graffiti on the retaining wall would be removed as a part of regular maintenance. The VCWPD promptly removes graffiti with obscene comments or scenes; less offensive graffiti, such as tags, are removed as the VCWPD's budget allows. The VCWPD also implements a Graffiti Abatement Program, which works with volunteers to locate and remove graffiti from property owned by VCWPD (VCWPD, 2012b). Under this program, the Graffiti Abatement Coordinator works with non-profit organizations and neighbors to address graffiti throughout the County, towards the following program goals: form neighborhood graffiti patrols; work with the respective city's law enforcement; and recruit and train volunteer to assist with graffiti reporting and removal in their own neighborhoods (VCWPD, 2012b).

The VCWPD implements best management practices (BMPs) during routine maintenance activities such as those described above. Following is a summary list of existing BMPs which are typically used during routine maintenance activities.

- The minimum size/type of equipment is employed to complete the activity to minimize potential impacts;
- The minimum strength required to achieve the goal for each chemical product is used and staff follows specific pesticide protocols;
- Gates, fences, and "no trespassing" signs are kept in working order to discourage dumping and vandalism;
- Silt fencing, k-rail, sandbag barriers, and straw wattles are routinely installed and maintained during work to prevent soil from leaving the work areas into the stream or channel;
- Silt fencing or other barriers are placed around temporary soil stockpile sites to contain material;
- Soil stockpiles are maintained free of vegetation;
- Water diversions are routinely used to prevent soil and concrete from entering surface waters adjacent to maintenance work areas;
- Plastic-lined sandbag concrete wash out pits stationed in uplands are required for each site where concrete pouring occurs;
- Pipe and pump station flushing activities are conducted with a vacuum system to avoid release of materials into channels or surface waters;
- Trash is screened and separated from trash racks and debris collected from channels and basin; Rumble strips, street sweepers, and wattles over storm drain inlets are employed to prevent soil from entering streets and storm drains; and
- Local fire abatement requirements are met by conducting annual brush clearance in District right of way adjacent to residential areas (VCWPD, 2008).

Access and parking during operations and maintenance would be the same as during construction. An existing VCWPD stockpiling area located at the intersection of SR 126 and the SC-2 Levee would be

used to store gravel and other materials that may be required during maintenance, representing no change from present conditions at that site.

**A.5 PROJECT SITE ASSESSOR’S PARCEL NUMBERS, ZONING, AND GENERAL PLAN LAND USE DESIGNATIONS**

Proposed project activities would occur on parcels along the Sespe Creek Levee system owned by the VCWPD and would affect adjacent parcels owned by the City of Fillmore and Faith Community Church; these properties are identified by the Assessor Parcel Numbers (APNs) listed in Table A-4.

**Table A-4. Assessor’s Parcel Numbers (APNs)**

APN	Owner	Size
046002008	VCWPD	5.06 ac
046002011	VCWPD	3.16 ac
046003024	VCWPD	0.34 ac
046003033	VCWPD	13.20 ac
046003028	VCWPD	4.02 ac
046028608	VCWPD	0.14 ac
046028607	VCWPD	0.02 ac
046028606	VCWPD	0.16 ac
046028605	VCWPD	0.16 ac
046028604	VCWPD	0.16 ac
046028601	VCWPD	0.16 ac
046028602	VCWPD	0.16 ac
046028603	VCWPD	0.15 ac
046028106	VCWPD	0.16 ac
046028105	VCWPD	0.16 ac
046028104	VCWPD	0.16 ac
046028101	VCWPD	0.16 ac
046028102	VCWPD	0.16 ac
046028103	VCWPD	0.16 ac
046003031	VCWPD	3.12 ac
046003026	VCWPD	4.02 ac
046030036	Faith Community Church	3.08 ac
046003025	City of Fillmore (Shiells Park)	6.21 ac
046029078	City of Fillmore	0.12 ac

The SC-2 Levee is located on unincorporated County of Ventura lands adjacent to the City of Fillmore, paralleling Shiells Park and the Faith Community Church; levee improvements would also impact the parcel of land owned by the Faith Community Church within the City of Fillmore. Therefore, the proposed project is subject to the management direction of the City of Fillmore General Plan and the Ventura County General Plan. Each plan contains goals, policies, and programs that are used to evaluate proposed projects within the City and County. The General Plan programs are a coordinated set of measures to be implemented by City and County staff and other public agencies to carry out the goals and policies. In accordance with the Ventura County General Plan, the proposed project site is zoned as Open Space. The project site is not located within any County Area Plan. Portions of the project site are

within the sphere of influence of the City of Fillmore. The most relevant goals and policies of the applicable General Plans are listed below. The proposed project does not conflict with implementation of the General Plan programs, and the proposed project is considered to be consistent with all of the General Plan goals and policies.

***Ventura County General Plan***

- **Hazards Goals, Section 2.1.1**

(2) Protect public health, safety and general welfare from identified hazards and potential disasters.

(3) Shield public and private property and essential facilities from identified hazards and potential disasters.

(4) Minimize loss of life, injury, damage to structures, and economic and social dislocations resulting from identified hazards and potential disasters.

***City of Fillmore General Plan***

- **Goals**

(18) Minimize the risk of exposure by the public to natural and man-made hazards.

- **Conservation / Open Space Policies, Section IV**

(21) Levees, when needed for the protection of urban development from 100-year floods, shall be constructed with mitigation measures for the biological and visual impact of these structures. In no way shall construction of a levee interfere with the preservation of fish passage, wildlife corridors, or riparian vegetation.

(22) Whenever feasible, levees shall incorporate recreation amenities, such as bikeways and bridle paths.

**A.6 LEAD AND PARTICIPATING AGENCIES NAMES AND ADDRESSES**

The SC-2 Levee is operated and maintained by the VCWPD, which is a branch of the Ventura County Public Works Department. The VCWPD is the CEQA Lead Agency for the proposed project. VCWPD would work in coordination with the U.S. Army Corps of Engineers (Corps) and the Federal Emergency Management Agency (FEMA) to implement the proposed project. The VCWPD would finalize the design and construct the proposed levee improvements. Provided below is the contact information for the lead and participating agencies.

Ventura County Watershed Protection District  
800 South Victoria Avenue  
Ventura, California 93009-1610

U.S. Army Corps of Engineers  
Los Angeles District Office  
P.O. Box 532711  
Los Angeles, CA 90053-2325

## A.7 OTHER AGENCY APPROVALS THAT MAY BE REQUIRED

Based on the results of the jurisdictional delineation, the following agency approvals/permits may be required:

- U.S. Army Corps of Engineers Section 404 Permit (Clean Water Act);
- California Department of Fish and Game Section 1600 Streambed Alteration Agreement (California Fish and Game Code);
- Los Angeles Regional Water Quality Control Board Section 401 Water Quality Certification (Clean Water Act); and

**Ventura County Environmental Health Division.** The Ventura County Environmental Health Division is responsible for ensuring conformance with State laws and County ordinances pertaining to the protection of public health, including programs related to food protection, hazardous materials, hazardous waste, individual sewage disposal systems, land use, medical waste, ocean water quality monitoring, recreational health, solid waste, underground fuel tanks, and vector control. Prior to the start of construction the VCWPD would contact the Ventura County Environmental Health Division to establish if any type of permit or approval is required, and would acquire the permit if needed.

**Ventura County Transportation Department.** Approval may be required from the Ventura County Public Works Agency, Transportation Department, if project activities require any temporary lane or road closures, or other temporary traffic diversions, on County roads. Prior to the start of construction the VCWPD would coordinate with the Ventura County Transportation Department to determine if a permit is required, and would acquire the permit if needed.

**B. INITIAL STUDY CHECKLIST**

	ISSUE (Responsible Department)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	PS -M	PS	N	LS	PS -M	PS
<b>RESOURCES:</b>	<b>1. Air Quality (APCD)</b>			X				X	
	<b>2. Water Resources (PWA):</b>								
	A. Groundwater Quantity		X			X			
	B. Groundwater Quality	X				X			
	C. Surface Water Quantity	X				X			
	D. Surface Water Quality		X				X		
	<b>3. Mineral Resources (PIng.):</b>								
	A. Aggregate			X		X			
	B. Petroleum		X			X			
	<b>4. Biological Resources</b>			X			X		
	<b>5. Agricultural Resources:</b>								
	A. Soils (PIng.)	X				X			
	B. Land Use Incompatibility (Ag. Dept.)		X				X		
	<b>6. Scenic Resources (PIng.)</b>		X			X			
	<b>7. Paleontological Resources</b>	X				X			
	<b>8. Cultural Resources:</b>								
	A. Archaeological			X			X		
	B. Historical (PIng.)	X				X			
<b>9. Coastal Beaches and Sand Dunes</b>	X				X				
<b>HAZARDS:</b>	<b>10. Fault Rupture (PWA)</b>	X				X			
	<b>11. Ground Shaking (PWA)</b>		X				X		
	<b>12. Liquefaction (PWA)</b>		X				X		
	<b>13. Seiche &amp; Tsunami Hazards (PWA)</b>	X				X			
	<b>14. Landslide/Mudflow (PWA)</b>		X			X			
	<b>15. Expansive Soils (PWA)</b>	X				X			
	<b>16. Subsidence (PWA)</b>		X			X			
	<b>17. Hydraulic Hazards:</b>								
	A. Non-FEMA (PWA)		X			X			
	B. FEMA (WPD)	X				X			
<b>18. Fire Hazards (Fire)</b>	X				X				

	ISSUE (Responsible Department)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*				
		N	LS	PS -M	PS	N	LS	PS -M	PS	
HAZARDS (CONT.)	19. Aviation Hazards (Airports)	X				X				
	<b>20. Hazardous Materials/Waste:</b>									
	A. Hazardous Materials (EH / Fire)		X				X			
	B. Hazardous Waste (EH)		X				X			
	21. Noise and Vibration			X		X				
	22. Daytime Glare		X				X			
	23. Public Health (EH)		X				X			
24. Greenhouse Gases (APCD)		X				X				
PUBLIC FACILITIES/ SERVICES:	25. Community Character (Plng.)		X				X			
	26. Housing (Plng.)	X				X				
	<b>27. Transportation/Circulation:</b>									
	A. Roads and Highways:									
	(1) Level of Service (PWA)		X				X			
	(2) Safety / Design of Public Roads (PWA)		X				X			
	(3) Safety / Design of Private Access Roads (Fire)	X				X				
	(4) Tactical Access (Fire)	X				X				
	B. Pedestrian / Bicycle Facilities (PWA / Plng.)		X			X				
	C. Bus Transit	X				X				
	D. Railroads	X				X				
	E. Airports (Airports)	X				X				
	F. Harbors (Harbors)	X				X				
	G. Pipelines	X				X				
	<b>28. Water Supply:</b>									
	A. Quality (EH)	X				X				
	B. Quantity (PWA)	X				X				
	C. Fire Flow (Fire)	X				X				
	<b>29. Waste Treatment / Disposal:</b>									
	A. Individual Sewage Disposal Systems (EH)	X				X				
B. Sewage Collection / Treatment Facilities (EH)	X				X					
C. Solid Waste Management (PWA)		X				X				
D. Solid Waste Facilities (EH)		X				X				
30. Utilities		X				X				

	<b>ISSUE (Responsible Department)</b>	<b>PROJECT IMPACT DEGREE OF EFFECT*</b>				<b>CUMULATIVE IMPACT DEGREE OF EFFECT*</b>			
		<b>N</b>	<b>LS</b>	<b>PS -M</b>	<b>PS</b>	<b>N</b>	<b>LS</b>	<b>PS -M</b>	<b>PS</b>
<b>PUBLIC FACILITIES/ SERVICES (CONT.):</b>	<b>31. Flood Control / Drainage:</b>								
	A. WPD Facilities / Watercourses (WPD)	X				X			
	B. Other Facilities / Watercourses (PWA)	X				X			
	<b>32. Law Enforcement/Emergency Svs. (Sheriff)</b>	X				X			
	<b>33. Fire Protection (Fire):</b>								
	A. Distance/Response Time	X				X			
	B. Personnel/Equipment/Facilities	X				X			
	<b>34. Education:</b>								
	A. Schools	X				X			
	B. Libraries (Lib. Agency)	X				X			
	<b>35. Recreation (GSA)</b>		X			X			

**DEGREE OF EFFECT:**

N = No Impact

LS = Less Than Significant

PS-M = Potentially Significant Impact Unless Mitigation Incorporated

PS = Potentially Significant Impact

**AGENCIES:**

- APCD - Air Pollution Control District
- GSA - General Services Agency
- Harbors - Harbor Department
- Lib. Agency - Library Services Agency
- Airports - Department Of Airports
- Fire – Fire Protection District
- PWA - Public Works Agency
- Plng. - Planning Division
- FCD - Flood Control District
- Sheriff - Sheriff's Department
- EH - Environmental Health Division
- Ag. Dept. - Agricultural Department

## C. ENVIRONMENTAL ANALYSIS AND DISCUSSION OF IMPACTS

This section evaluates the potential environmental impacts of the proposed project. The analysis of potential impacts is consistent with methodology and impact threshold criteria presented in the Ventura County *Initial Study Assessment Guidelines* (Ventura County, 2011). Impact analysis is organized by environmental topic (e.g., air quality, water resources, etc.). Cumulative impacts have been assessed to determine if the project’s incremental contribution would be considerable, such that an environmental impact report would be required. Cumulative impacts were considered significant if project-specific impacts would be significant. The determinations of significance for project-level and cumulative impacts are summarized in the Initial Study Checklist provided in Section B.

Appendix 1 of this Initial Study provides a list and description of pending and recently approved projects within Ventura County, as identified by the Ventura County Resource Management Agency, Planning Division, as well as a map of these projects. Table C-1, below, provides a summary of the 16 projects located within approximately five miles of the proposed levee improvements, in order of proximity from nearest to farthest.

**Table C-1. County of Ventura Cumulative Projects Located within Five Miles of the Project**

Permit Number	Permit Type/Status	Location	Description
N/A	N/A	Adjacent to the east of Project; 355 D St, Fillmore	Faith Community Church is currently in the planning stages of expanding their facilities to include a new structure that would be used as a classroom area to support the Church’s preschool program, or potentially as a new sanctuary space. Based on preliminary plans, the structure would be single-story, approximately 3,000 square feet, located in the southwest portion of the existing Church property. This project would not be constructed at the same time as the proposed SC-2 Levee Improvements Project. Environmental stewardship is of high priority to the Church, and the Church is actively coordinating with the County to avoid conflict with the proposed SC-2 Levee Improvements Project.
2011-051 (prev. 2007-015)	Conditional Use Permit	Fillmore Area; Sespe Creek, east branch	Upland Rock sediment removal / mining of Sespe Creek bottom and terrace. The Conditional Use Permit (4185) is valid through 2015, which allows for sand, gravel, and rock extraction, storage, processing, and transporting. The mining and excavation area covers approximately 98.8 acres in the East Branch of Sespe Creek. See detailed description in the text below.
LU11-0040	Conditional Use Permit; pending	2600 Old Telegraph Road, Fillmore; Parcel 0410300100	Construction and operation of a new tall faux pine tree Wireless Communication Facility
SD08-0029	Large Lot Subdivision; pending / incomplete	2793 Old Telegraph Road; Parcel 0410300280	Large Lot Subdivision PMW-LLS to legalize one 42-acre parcel. Companion to LCA contract submitted June 3, 2008.
SD11-0020	Approved	1613 West Muir Street and 1131 Cliff Ave	Two-lot lot line adjustment.
SD08-0028	Large Lot Subdivision – pending / process	Fillmore Area, Parcel 0410240180	PMW-LLS to legalize one 59-acre parcel.

**Sespe Creek Levee Improvements Project**

Permit Number	Permit Type/Status	Location	Description
LC11-0003	Land Conservation Act – approved 11/22/2011	Fillmore Area, Parcel 0460205015	New agricultural FSZA/LCA (20-year) contract for a 9+ acre parcel.
SD08-0027	Large Lot Subdivision – pending / process	190 Sycamore Road, Fillmore Area; Parcel 0410230120	PMW LLS to legalize one 48-acre parcel.
SD08-0026	Large Lot Subdivision – pending / process	Fillmore Area, Parcel 0410230130	PMW LLS to legalize one 50-acre parcel.
SD11-0002	Lot Line Adjustment – pending / process	Fillmore Area, Parcel 0430020320	A four-lot line adjustment to clean up a setback violation, four legal non-conforming parcels, two with dwellings
SD08-0025	Conditional Certificate of Compliance – pending / process	Fillmore Area, Parcel 0460142065	CCC-PM 5787 to legalize one 38 acre non-conforming lot, AE 40 acre zoning.
LU-4874	Conditional Use Permit – pending / process	On Grimes Grade, SR-23 four miles S of Fillmore; Las Posas Valley, Parcel 5000050135	Grimes Rock aggregate mine – application for a time extension from 2013 to 2025, increase in truck traffic from 300 to 460 average daily trips, elimination of truck route limitations.
LU-4171	Conditional Use Permit – pending / process (EIR currently in process)	Las Posas Valley, Parcel 5000090195	Sand and gravel quarry – application for a time extension from 2000 to 2025, increase in truck traffic from 460 to 656 average daily trips, and the combination of CUP 4171 with CUP 3451 (an adjacent, small decorative rock quarry) into one permit.
LU11-0030	Conditional Use Permit – pending / process	8643 Shekell Road in the Moorpark Area / Las Posas Valley, Parcel 5000090235	Outdoor Periodic Sporting Events for a paintball and air-soft sports center to be constructed on an existing agricultural facility. Includes removal of 267,073 sq. ft. of concrete and 74,593 sq. ft. of asphalt, and installation of dirt fields and 24,000 sq. ft. of un-engineered artificial turf in place of the removed material.
LU11-0111	Conditional Use Permit – pending / incomplete	9035 Roseland Ave, Las Posas Valley, Parcel 5000160255	Install a utility grade wind turbine generator on a 1,236.33-acre property within the permitted quarry located to improve CEMEX's overall energy efficiency by supplementing existing electricity delivered through the grid by Southern California Edison (SCE) with an onsite renewable energy source.
LU11-0136	Conditional Use permit – pending / process	~10 miles north of Santa Paula, close to Los Padres National Forest boundary; Ojai Valley Area, Parcel 0400070085	Radio Communication Facility located on a 40-acre property with an Open Space General Plan land use designation and an Open Space Min. 160-acre Zone Designation approximately. The proposed facility consists of a 105-foot tall triangular lattice tower with four FM Radio antenna arrays.

See Appendix 1 for additional information and location map. N/A=Not Available

**Upland Rock Sediment Removal/Mining of Sespe Creek.** Upland Rock has a Conditional Use Permit (CUP-4185) valid through November 14, 2015, which allows for sand, gravel, and rock excavation, storage, processing, and transport. The processing plant is located immediately south of SR 126, immediately west and adjacent to Sespe Creek, with a dedicated access road immediately to the north, off of eastbound Highway 126 (see project map in Appendix 1). Upland Rock's sand and gravel mining operations include the periodic removal of sand, gravel and rock from the East Branch of Sespe Creek, followed by processing of the materials at a processing plant. Operation of the processing plant, which

includes crushers and/or screens and their associated equipment, is limited to 120 days per year per the Ventura County Air Pollution Control District (VCAPCD) Permit to Operate (VCAPCD, 2012). The mining and excavation area covers approximately 98.8 acres in the East Branch of Sespe Creek, extending from Old Telegraph Road to approximately 2,000 feet south of SR 126 (see project map in Appendix 1). Excavation activities are dependent on the amount and location of material deposited each year by high flow events in Sespe Creek. As such, the exact location of excavation activities is determined on an annual basis. Upland Rock activities occur in compliance with existing permits, including California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS) permits, which prohibit work within wetted portions of the channel. It is anticipated that Upland Rock will continue to perform sediment removal activities in Sespe Creek in 2014; however, the location of these activities within the overall 98.8-acre mining and excavation area is unknown. As such, it is possible that these activities could occur within the same timeframe and physical proximity as the proposed project, with Upland Rock activities potentially occurring within approximately 300 to 500 feet of the proposed levee improvement activities.

Sediment, gravel, and rock removal activities would include use of front-end loaders, excavators, and dozers. The hours of excavation, per the CUP-4185, are Monday through Friday, 7:00 a.m. to 8:00 p.m., and Saturday and Sunday, 9:00 a.m. to 6:00 p.m. Shipping and receiving of materials at the processing site occurs 24 hours per day, and the processing plant operates seven days per week from 7:00 a.m. to 10:00 p.m. (VCRMA, 1985b). Per the Mitigated Negative Declaration completed in 1985, all impacts of this project have been reduced to a less-than-significant level with implementation of mitigation measures (VCRMA, 1985a), which have been incorporated as conditions in CUP-4185.

## **C.1 AIR QUALITY**

### **Air Quality Standards**

Ambient air quality is determined by comparing contaminant levels in ambient air samples to national and State standards. These standards are set by the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) at levels determined to be protective of public health and welfare with an adequate margin of safety. National Ambient Air Quality Standards (NAAQS) were first established by the federal Clean Air Act of 1970. California Ambient Air Quality Standards (CAAQS) were established in 1967. An area with air quality continuously below or equal to these standards is designated as being in attainment. California standards are generally more stringent than national standards.

Air quality standards specify the upper limits of concentrations and duration in the ambient air consistent with the management goal of preventing specific harmful effects. There are federal and State standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), airborne particulate matter with an aerodynamic diameter of less than ten and two and one-half microns (PM<sub>10</sub> and PM<sub>2.5</sub>, respectively), and sulfur dioxide (SO<sub>2</sub>). These are considered “criteria pollutants”. The federal and State Ambient Air Quality Standards for these pollutants are shown in Table C.1-1.

**Table C.1-1. National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards*	National Standards*
Ozone	1 hour	0.09 ppm	--
	8 hours	0.07 ppm	0.075 ppm
Respirable Particulate Matter (PM10)	24 hours Annual Mean	50 µg/m <sup>3</sup> 20 µg/m <sup>3</sup>	150 µg/m <sup>3</sup> —
Fine Particulate Matter (PM2.5)	24 hours Annual Mean	— 12 µg/m <sup>3</sup>	35 µg/m <sup>3</sup> 15 µg/m <sup>3</sup>
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hours	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO <sub>2</sub> )	1 hour	0.18 ppm	0.100 ppm
	Annual Mean	0.03 ppm	0.053 ppm
Sulfur Dioxide (SO <sub>2</sub> )	1 hour	0.25 ppm	0.075 ppm
	24 hours	0.04 ppm	0.14 ppm
	Annual Mean	—	0.03 ppm

\* ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; “—” = no standard.  
Source: CARB, 2012a

**Attainment Status**

Ventura County is designated by the USEPA and CARB as a nonattainment area for ozone; it is also designated as nonattainment by CARB for PM10 and PM2.5. Table C.1-2 provides the attainment status for all criteria pollutants in Ventura County.

**Table C.1-2. Attainment Status for Ventura County**

Pollutant	Federal Designation	State Designation
Ozone – 1 hour	N/A	Severe Nonattainment
Ozone – 8 hour	Serious Nonattainment	
PM10	Attainment	Nonattainment
PM2.5	Attainment	Nonattainment
CO	Unclassified/Attainment	Attainment
NO <sub>2</sub>	Unclassified/Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment

Source: CARB, 2012b; USEPA, 2012a

**Air Quality Plans, Policies, and Regulations**

The Ventura County Air Pollution Control District (APCD) implements, and periodically updates, the Ventura County *Air Quality Management Plan* (AQMP). The AQMP uses projections of population growth and trends in energy and transportation demand to predict future emissions and determine control strategies to eventually achieve attainment with the ambient air quality standards. The control strategies are then either codified into the Ventura County APCD’s rules and regulations, or otherwise set forth as formal Ventura County APCD recommendations to other agencies.

The Ventura County *General Plan* includes policies that require consistency with the AQMP, and specifies review according to the recommendations contained in the Ventura County APCD’s *Air Quality Assessment Guidelines*. Other policies are aimed at reducing emissions from transportation demand and major stationary sources. This air quality analysis has been prepared in accordance with the recommendations of the Ventura County APCD’s *Air Quality Assessment Guidelines*; consequently, its consistency with the air quality policies of the Ventura County *General Plan* is assured.

The City of Fillmore Zoning ordinances also contain standards for air quality control (City of Fillmore, 1994). The zoning ordinances include standards for the control of dust and dirt; fumes, vapor, gases, and other forms of air pollution; and odors. Compliance with Ventura County APCD's rules and regulations would ensure compliance with these standards.

The Ventura County APCD's rules and regulations include requirements for equipment and for fugitive dust control. These regulations contain both requirements and exemptions for certain types of equipment that may be used during implementation of the proposed project. Equipment with small internal combustion engines (under 50 horsepower) would be exempt from permitting through Ventura County APCD Rule 23-D. Similarly, dust emissions from mobile equipment that may occur would be exempt under Ventura County APCD Rule 23-B. Ventura County APCD Rule 74-9 contains limitations for larger, stationary internal combustion engines (greater than 50 horsepower) if they are operated for more than one year. However, within the context of the proposed project, use of these types of engines are not expected to occur; thus, these Ventura County APCD limitations would not be applicable. Nuisances from either dust or emissions of other contaminants are distinctly prohibited by Ventura County APCD's Rule 51, and fugitive dust control requirements are specified in Rules 55 and 55.1.

**Significance Criteria.** The Ventura County Air Pollution Control Board adopted the Ventura County APCD's *Air Quality Assessment Guidelines* with technical revisions in 2003 (VCAPCD, 2003). Using these *Guidelines* and the *CEQA Guidelines*, an air quality impact would be significant if it would:

- Conflict with or obstruct implementation of the Ventura County *AQMP*;
- Violate any air quality standard or contribute to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria nonattainment pollutant;
- Expose the public (especially schools, day care centers, hospitals, retirement homes, convalescent facilities, and residences) to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people; or,
- Create a significant San Joaquin Valley Fever impact.

In addition to the above, within the County a net increase of ozone precursors (a nonattainment pollutant) of 25 pounds per day of reactive organic compounds or gases (ROCs or ROGs) or oxides of nitrogen (NOx) is considered substantial. However, this Ventura County APCD significance threshold is specifically defined not to be applicable to construction emissions since such emissions are temporary in nature. However, the implementation of additional emission mitigation measures, as noted in Section 7.4.3 of the VCAPCD's *Air Quality Assessment Guidelines*, are recommended if construction emission do exceed this threshold.

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever most commonly affects people who live in hot dry areas with alkaline soil and varies with the season. This disease, which affects both humans and animals, is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, which grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie

dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who work outdoors and who are exposed to wind and dust are more likely to contract Valley Fever. Children and adults whose hobbies or sports activities expose them to wind and dust are also more likely to contract Valley Fever.

**C.1A Regional**

**Proposed Project Impacts:** Implementation of the proposed project would result in short-term construction exhaust emissions and fugitive dust generated by on-road supply truck and personnel trips and off-road diesel- and gasoline-powered equipment such as excavators, forklifts, dozers, chainsaws, wood chippers, loaders, graders, rollers, and generators.

Construction of the proposed project is expected to begin in April 2014 and be completed in September 2014, over an estimated five to six-month period; however, as a worst-case scenario it is assumed construction would be completed within three months, as presented in Table A-2. Normal working hours would be Monday through Friday from 7:00 a.m. to 7:00 p.m. Construction would consist of 15 phases, with several overlapping phase periods. Please refer to the Project Description information presented in Section A.4.5 and Appendix 2 (Air Quality Calculations) for a complete description of the project construction and the construction schedule timeline.

For the purposes of this analysis, on-road vehicle emissions were estimated using CARB’s EMFAC 2011 model (CARB, 2011a), off-road equipment emission were estimated using CARB’s updated OFFROAD model (CARB, 2011b), and fugitive dust emissions were estimated using USEPA’s *Compilation Air Pollutant Emissions Factors* (Volume 1, Stationary Sources, Section 13.2) (USEPA, 2012b). This air quality impact analysis is based on the construction schedule and equipment list provided by the County (VCWPD, 2012a; VCWPD, 2012b, VCWPD, 2013) and additional assumptions were based on Aspen’s professional experience.

**Construction**

Emission estimates for the proposed project’s different construction emissions sources are shown in Table C.1-3. The proposed project would have the worst case emissions for all criteria pollutants when the wall backfill, access ramps and turnout, and levee fill and compaction construction phases would overlap. During this period, approximately 20 employees would work on the project site and dump trucks, three loaders, one grader, one excavator and two rollers would be used. Specific equipment activity assumptions are provided in Appendix 2.

**Table C.1-3. Summary of Maximum Daily Construction Emission Estimates  
(Pounds per Day)**

	VOC/ROG	CO	NOx	SOx	PM10	PM2.5
On-road	2.31	12.35	47.57	0.08	1.89	1.48
Off-road	3.10	6.03	28.42	0.02	2.42	2.22
Fugitive Dust	---	---	---	---	133.87	15.04
Total Emissions	5.41	18.38	75.99	0.10	138.18	18.75

Source: Appendix 2 (Air Quality Calculations).

The proposed project’s construction VOC/ROG and NOx emissions would temporarily contribute to existing violations of the State and federal ozone standards, while PM10 and PM2.5 generated by travel on paved and unpaved roads would contribute to existing violations of the State’s PM10 and PM2.5

standards on a temporary basis. Short-term NO<sub>x</sub> emissions would exceed the 25 pound per day significance threshold established by the Ventura County APCD. However, construction-related emissions of ROC and NO<sub>x</sub> are not counted towards the significance thresholds since these emissions are temporary (VCAPCD, 2003).

Fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions would only be considered significant if the Ventura County APCD's Rule 51 is violated, meaning that a nuisance would occur. Additionally, uncontrolled (e.g., unmitigated) construction activity would not be consistent with the region-wide control strategies recommended by the Ventura County APCD. These strategies require that dust control measures, when feasible, be applied to a project to make its implementation (e.g., construction) consistent with the Ventura County APCD's recommendations and minimize its direct temporary impacts, or contribution, to regional air pollution.

Incorporating mitigation measures listed in Sections 7.4.1 and 7.4.3 of the Ventura County APCD's *Air Quality Assessment Guidelines* for NO<sub>x</sub> and fugitive dust emissions as they relate to the construction equipment activities conducted for this project would ensure that the project complies with VCAPCD AQMP and ensure that the impacts of the proposed project remain less than significant. Therefore, the following mitigation measures to reduce fugitive dust and equipment engine emissions are recommended:

**MM AQ-1** All equipment shall be turned off when not in use. Engine idling shall not exceed five (5) minutes unless required for proper operation.

**MM AQ-2** All equipment engines shall be maintained in good operating condition and in tune per manufacturers' specification.

**MM AQ-3** All off-road construction diesel engines not registered under California Air Resources Board's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower or more, shall meet, at a minimum, the Tier 3 California Emission Standards for Off-road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Section 2423(b)(1). If a Tier 3 or Tier 3-equivalent engine is not available for a particular item of equipment, Tier 2 compliant engines shall be allowed on a case by case basis, as determined by the VCWPD.

**MM AQ-4** All project 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 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. Install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.
3. Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road.

4. Use properly secured tarps or covering that covers the entire surface area of the earthen fill, or other fine bulk material, loads.
5. Water or use environmentally safe chemical stabilization to treat the earthen fill storage piles to create stabilized surfaces that will minimize wind erosion emissions.
6. Limit vehicle speeds on the project site unpaved roads to 10 mph.
7. Discontinue work activities including all grading activities, but not 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).

**MM AQ-5** The construction contractor shall coordinate with representatives of the Faith Community Church, consistent with Mitigation Measures N-1, and representatives of Shiells Park to conduct tree removal or other project activities at these locations during periods when they are not specifically scheduled for use. Additionally, the construction contractor shall coordinate with representatives of the Upland Rock Sediment Removal/Mining of Sespe Creek project to identify if concurrent sediment removal and proposed project activities will occur in proximity to one another, and will schedule the proposed project activities, as feasible, to minimize such concurrent activities.

These mitigation measures would reduce the off-road equipment NOx emissions, as shown in Table C.1-3, by up to 40 percent; and would reduce the fugitive dust emissions by as much as 50 percent.

Project construction would be expected to generally occur April through September 2014, and therefore would occur during the peak ozone season, or “smog season” as referenced in the Ventura County APCD’s *Air Quality Assessment Guidelines*; the “smog season” extends from May through October (VCAPCD, 2003). However, as addressed above, the magnitude of the project’s construction activities would be relatively small and their duration would not be expected to exceed six months total. As such, with implementation of MM AQ-1 through MM AQ-4, associated impacts during the “smog season” would be considered less than significant.

The project site is not underlain by the type of sediments that are known to contain Valley Fever spores. In addition, the project area was graded previously; therefore, the risk of contracting Valley Fever in connection with the proposed project is considered to be low. Additionally, the implementation of MM AQ-4 would further reduce fugitive dust emissions and the risk of contracting Valley Fever by construction workers and area residents so that this potential impact is determined to be less than significant.

### **Operation**

The proposed project does not change, increase or decrease, the operations/maintenance requirements for this section of the Sespe Creek Levee, so there are no new operations emissions that would occur due to this project. Please refer to the Project Description information presented in Section A.4.5 for a complete description of the existing operations/maintenance requirements for the Sespe Creek Levee. In addition, the proposed project would reduce the potential for future flooding events, which would reduce any criteria pollutants emissions associated with potential future flood damage clean-up and repair actions.

### C.1B Local

The proposed project is located along lower Sespe Creek through the City of Fillmore, just before the confluence of Sespe Creek with the Santa Clara River. Flood control improvements included under the proposed project would occur along the SC-2 Levee, between Old Telegraph Road to the north and SR 126 to the south. The active channel of Sespe Creek comprises the area west of the SC-2 Levee, and agricultural areas are located west of the active channel. Agricultural areas are also located to the south of SR 126, which comprises the southern limit of the project area. Sespe Creek Bike Trail runs the length of the proposed project, aligned adjacent to the levee. Shiells Park is located adjacent to the south of Old Telegraph Road and east of the SC-2 Levee. Residential developments in the City of Fillmore are located to the east and south of the levee, and north of Old Telegraph Road, which comprises the northern limit of the project area.

**Proposed Project Impacts:** Localized project impacts may be experienced by receptors sensitive to air pollution. Such receptors include certain types of residents, such as the very young, the elderly, and those suffering from respiratory illnesses or disabilities. Examples of land uses where significant numbers of sensitive individuals are often found include schools, parks, medical and retirement facilities and residential homes. In the proposed project area there are residents located immediately adjacent to the primary project work areas, as well as the potential for recreationists, including young children, in Shiells Park where tree removal activities would occur, and along the Sespe Creek Bike Trail.

#### Construction

Fugitive dust and equipment emissions generated during the construction, if unmitigated, could create temporary nuisance impacts. It should be noted that other recent Sespe Creek maintenance activities have caused complaints to be received regarding fugitive dust emissions. Nearby sensitive receptors, such as the adjacent residents and users of Sespe Creek Bike Trail or Shiells Park, would experience increased concentrations of fugitive dust and combustion-related pollutants during construction. However, the impacts associated with these activities would be temporary in nature, and implementation of MM AQ-1 through MM AQ-4, as outlined above in Section C.1A, would ensure that these emissions would be managed in a manner consistent with Ventura County APCD's guidelines. The recommended mitigation measures were developed giving specific consideration to the proximity of residential receptors and resulting potential for localized impacts, which is why these measures include the required use of soil stabilizers for the unpaved road site access and Tier 3 emission standard compliant off-road equipment engines which are targeted to reduce the major emissions sources that would occur near the residences. With the implementation of these stringent control measures, impacts are determined to be less than significant.

Construction equipment and construction operations may create mildly objectionable odors. These odors would be temporary, are not overly offensive, are the types of odors regularly experienced by the public, and would not significantly affect a substantial number of people. Therefore, the odor impacts from the proposed project's construction would be less than significant.

As noted in Section C.1A, the proposed project construction is expected to result in less than significant localized San Joaquin Valley Fever impacts.

## **Operation**

As noted in Section C.1A (Regional), the Sespe Creek maintenance requirements would not change as a result of the proposed project, and no new operation emissions would result. As such, the project's operation would result in less than significant localized air quality impacts.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. There are sixteen recently approved and pending development projects within a 5-mile radius of the project site area. Most of these projects are not major development projects that would have significant air emissions, which could create cumulative air quality impacts. Furthermore, because the proposed project would not result in a change in operations from existing conditions, cumulative impacts would be limited to the construction period. During the proposed project's construction timeframe, activities associated with the Upland Rock Sediment Removal/Mining of Sespe Creek project may occur within Sespe Creek in close proximity to the proposed project. As such, the Upland Rock Sediment Removal/Mining of Sespe Creek project would have the potential to contribute to air quality cumulative impacts.

The sediment removal activities would include the use of front-end loaders, excavators, and dozers to perform sediment, gravel and rock removal activities; where the sediments will be sent to the nearby Upland Rock processing facility located south of SR 126 and west of Sespe Creek. The sediment removal activities would include both off-road and on-road diesel engine emissions and fugitive dust emissions. Per Upland Rock's CUP-4185 (VCRMA, 1985b) conditions of approval, sediment removal activities would occur Monday through Friday 7:00 a.m. to 8:00 p.m. and Saturday and Sunday 9:00 a.m. to 6:00 p.m. No sediment removal would occur within 100 feet of any dwelling not accessory to the project, or within 200 feet of any building used as a place of public assembly, institution or school. While the Mitigated Negative Declaration completed for the project does not include any specific air quality mitigation measures (VCMRA, 1985a), and the operating Upland Rock processing facility's air quality permit does not include any specific emissions control requirements outside of that processing facility's boundary (VCAPCD 2012); the CUP does include a requirement that "the project site, including stockpiles, hauling routes and hauling trucks, [will be] sprayed with water as necessary to prevent the emanation of dust", as well as requirements related to compliance with VCAPCD rules and regulations. VCAPCD's fugitive dust control regulation, Rule 55, will require adequate fugitive dust emissions controls so that the sediment removal activities will not create a public nuisance.

While the concurrent activity location, duration, and quantity of air pollutant emissions for the sediment removal activities are not currently known, to avoid significant cumulative impacts, MM AQ-5 includes a requirement that the proposed project's construction contractor coordinate with the sediment removal project representatives to reduce the occurrence of nearby concurrent activities. Considering this additional recommended project coordination requirement, the proposed project's recommended air quality mitigation measures, and the fugitive dust control requirements for the sediment removal per the Upland Rock CUP and VCAPCD Rule 55, it is determined that the mitigated cumulative air pollutant emissions would have less than significant cumulative air quality impacts.

## **C.2 WATER RESOURCES**

The following sections address potential effects of the proposed project to water resources, including as related to groundwater quantity (C.2A), groundwater quality (C.2B), surface water quantity (C.2C), and surface water quality (C.2D). For each issue area, a discussion of the existing environmental setting, or

baseline conditions, is provided, followed by a discussion of significance criteria that are used to characterize potential impacts of the project. Common to all issue areas, any project that is inconsistent with applicable policies or development standards of the Ventura County *General Plan Goals, Policies and Programs* or applicable Area Plan may result in an environmental impact. Cumulative impacts are also discussed for each issue area.

The proposed project is located in the Sespe Creek watershed in the western portion of the Santa Clara River Watershed. This area is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (RWQCB), and is subject to the management direction of the Water Quality Control Plan (Basin Plan) for the Los Angeles Region, and specifically to the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. The Basin Plan is discussed in the following sections, as applicable to water quantity and quality management.

### **C.2A Groundwater Quantity**

Groundwater is water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation within which it is situated. The proposed project area is underlain by the Fillmore Subbasin of the Santa Clara River Valley Basin, or the Fillmore Basin. This basin is bounded to the north by impervious rocks of the Topatopa Mountains and the San Cayetano fault, to the south by impervious rocks of Oak Ridge and the Oak Ridge fault, and to the east and west by bedrock constrictions that cause rising groundwater. Recharge to the Fillmore Basin occurs through infiltration of surface water flows in the Santa Clara River, Sespe Creek, and minor tributary streams. A portion of flow in the Santa Clara River is provided as release from Lake Piru, which is supplied by precipitation, runoff, and imported State Water Project (SWP) water. Some recharge to the Fillmore Basin also occurs as subsurface flow from the adjacent Piru Subbasin and percolation of irrigation waters (DWR, 2006; VCWPD, 2010).

Water-bearing formations in the Fillmore Basin are comprised of recent and Pleistocene alluvium. The principle aquifer is present in permeable sediments, and the condition of groundwater occurrence is unconfined. This groundwater basin is currently understood to be in a balanced state, meaning it is not affected by overdraft conditions (VCWPD, 2011a).

Safe yield of the Fillmore Basin is estimated to be at least 75,000 acre-feet per year (afy). The basin is monitored annually by the water users and United Water Conservation District (UWCD) through the Assembly Bill (AB) 3030 Ground Water Management Council; as such, if overdraft conditions were to occur they would be detected and could be controlled. Groundwater pumping from the Fillmore Basin is approximately 46,000 afy, an estimated 44,000 afy of which is pumped for agricultural purposes and the rest of which is pumped by the City of Fillmore for municipal purposes (2,000 afy). Pumping rates fluctuate each year depending upon precipitation, with less water required for agricultural purposes during heavy rainfall years, and more water required during dry years. The City of Fillmore's Urban Water Management Plan (UWMP) reports that over the last 50 years, the Fillmore Basin has been full for 16 years and within eight feet of full (99.5 percent) for 29 years, about 60 percent of the time (City of Fillmore, 2000).

When the Fillmore Basin is at maximum storage capacity, the depth to groundwater is about 30 feet, although depth to groundwater has been recorded at 52.8 to 75.5 feet below ground surface, depending upon the year (City of Fillmore, 2000).

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the criteria listed below could result in a significant impact to groundwater quantity (County of Ventura, 2011).

- Directly or indirectly decrease, either individually or cumulatively, the net quantity of groundwater in a groundwater basin that is overdrafted or creates overdraft conditions.
- In groundwater basins that are not overdrafted, or are not in hydrologic continuity with an overdrafted basin, net groundwater extraction that will individually or cumulatively cause overdrafted conditions.
- Any net increase in groundwater extraction from a groundwater basin and/or hydrologic unit which is not well known or documented but where there is evidence of overdraft based upon declining water levels in a well or wells.

Regardless of the criteria above, any land use or project which would result in one acre-foot or less of net annual increase in groundwater extraction is not considered to have a significant or cumulative impact on groundwater quantity (County of Ventura, 2011). In addition, any project that is inconsistent with any of the policies or development standards relating to groundwater quantity of the Ventura County *General Plan Goals, Policies and Programs* or applicable Area Plan, may result in a significant environmental impact (County of Ventura, 2011).

**Proposed Project Impacts:** As described in Section A.4.5 (see “Materials and Waste”), construction of the proposed project would include use of a water tank truck for dust abatement, and the construction water supply would be provided by the City of Fillmore, via a water meter placed on a fire hydrant near SR 126 and E Street. It is assumed that dust abatement would require the application of 1/16 inch of water per acre per day, and that dust abatement activities would occur along the length of the SC-2 Levee. Using the highly conservative assumption that construction of the proposed project would occur over the duration of the maximum anticipated timeframe of six months, and that dust abatement activities would occur along the entire length of the levee (from Old Telegraph Road to SR 126) on each active construction day, the total anticipated water requirement associated with dust abatement would be approximately 1.2 acre-feet. As mentioned, this estimate is highly conservative; actual water usage associated with dust abatement would realistically be far less. No water supply would be required during operation and maintenance of the proposed project.

As described above, the Fillmore Basin is not currently affected by overdraft conditions, and existing pumping rates of approximately 46,000 afy are within the estimated safe yield for this basin of approximately 75,000 afy. Water use associated with the proposed project would be temporary, limited to the construction period, and would not cause or contribute to overdraft conditions. Potential impacts associated with groundwater quantity would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project would require a temporary water supply during the construction period, and water would be obtained from the City of Fillmore, which relies upon groundwater supplies in the Fillmore Basin. The proposed project’s water requirements are short-term and minimal, and would not cause or contribute to adverse effects to groundwater quantity. Therefore, the proposed project would not result in a cumulatively considerable impact to groundwater quantity. No cumulative impacts to groundwater quantity would occur.

## C.2B Groundwater Quality

The Fillmore Basin has a total aquifer thickness of almost 8,000 feet in some places, and water quality can vary greatly depending on depth; shallow groundwater is generally younger and recharged by river flows with varying chemistry, while deeper groundwater is older and has acquired its chemistry through dissolution of constituents from the surrounding sediments (VCWPD, 2010). Water is generally calcium sulfate in character, although some groundwater in the Sespe Uplands area is calcium bicarbonate in character (DWR, 2006). In 2010, groundwater samples from ten monitoring wells were above the secondary maximum contaminant level (MCL) for sulfate ( $\text{SO}_4^{2-}$ ), and average total dissolved solids (TDS) concentrations well above the MCL for drinking water (VCWPD, 2010). All inorganic constituents were measured below the MCL for drinking water (VCWPD, 2010).

Existing designated beneficial uses for this area, as defined in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, include the following: MUN (Municipal and Domestic Supply), IND (Industrial Service Supply), PROC (Industrial Process Supply), AGR (Agricultural Supply), and AQUA (Aquaculture) (Los Angeles RWQCB, 1994a).

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the criteria listed below could result in a significant impact to groundwater quality (County of Ventura, 2011).

- Individually or cumulatively degrade the quality of groundwater and cause groundwater to exceed groundwater quality objectives set by the [Los Angeles Regional Water Quality Control Board (RWQCB)] Basin Plan.
- Cause the quality of groundwater to fail to meet the groundwater quality objectives set by the Los Angeles RWQCB.
- Propose the use of groundwater in any capacity within two miles of the boundary of a former or current test site for rocket engines.

**Proposed Project Impacts:** Groundwater contamination may occur through direct contact with groundwater resources or through infiltration of potentially hazardous materials to underlying groundwater. The potential for each of these situations to occur under the proposed project is discussed below.

- *Direct Contamination.* As described in Section C.2A, depth to groundwater in the Fillmore Basin is about 30 feet during a good water year. The proposed project does not include digging, trenching, or excavation activities that would have the potential to directly encounter groundwater resources at this depth. No groundwater quality degradation associated with direct contamination would occur.
- *Infiltration of Hazardous Materials.* Construction of the proposed project would include the use of motorized vehicles and equipment that require potentially hazardous materials such as motor oil, transmission fluid, and antifreeze; if such materials were to accidentally leak or spill during construction activities and were allowed to remain on the ground surface such that they could infiltrate to underlying groundwater resources, water quality degradation could occur. However, compliance with existing standards and regulations for the handling of hazardous and potentially hazardous materials would minimize the potential for an accidental spill or leak, and would ensure that if such a spill or leak occurs, it will be addressed appropriately to avoid groundwater

contamination. No groundwater quality degradation associated with the infiltration of hazardous materials would occur.

The nearest former or current test site for rocket engines to the proposed project site is the Santa Susana Field Laboratory, which is located in southeastern Ventura County, approximately 30 miles north of Los Angeles, and not within a two-mile radius of the proposed project (DTSC, 2007). Construction and operation of the proposed project would not result in groundwater quality degradation or result in violation of a Los Angeles RWQCB groundwater quality objective. No impact associated with groundwater quality would occur as a result of the proposed project.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. Other projects in the cumulative scenario may be situated within the delineated boundaries of the Fillmore Basin and/or hydrologically connected groundwater basins. However, as described above, the proposed project is not anticipated to result in adverse effects to groundwater quality in the Fillmore Basin; therefore, the project would not contribute to the cumulative scenario. No cumulative impacts to groundwater quality would occur.

### C.2C Surface Water Quantity

As described in Section A.4 (Project Location and Assessor's Parcel Numbers), the proposed project is located in the Sespe Creek Watershed, which encompasses 270 square miles of the western portion of the Santa Clara River Watershed.

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the criteria listed below would result in a significant impact to surface water quantity (County of Ventura, 2011).

- Increase surface water consumptive use, either individually or cumulatively, in a fully appropriated stream reach as designated by the State Water Resources Control Board (SWRCB), or where non-appropriated surface water is unavailable.
- Increase surface water consumptive use including but not limited to diversion or dewatering downstream reaches, either individually or cumulatively, resulting in an adverse impact to one or more of the beneficial uses listed in the Basin Plan.

**Proposed Project Impacts:** Water supply requirements associated with construction of the proposed project would be met using groundwater pumped from the Fillmore Basin and metered by the City of Fillmore. The proposed project would not include any consumptive use of surface water resources, and would not divert or dewater downstream reaches of Sespe Creek or the Santa Clara River. Therefore, the proposed project would result in no impacts to surface water quantity.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present, and reasonably foreseeable projects associated with the proposed project area. The proposed project would not increase the net use of surface water in the proposed project area, and would not have potential to result a cumulative surface water quantity impact.

### C.2D Surface Water Quality

The Clean Water Act (§303) requires states to develop water quality standards for all waters and to submit to the U.S. Environmental Protection Agency (USEPA) for approval all new or revised water

quality standards. In California, the SWRCB delegates this authority to the nine RWQCBs; as previously discussed, the proposed project area is located in the Sespe Creek Watershed, within the jurisdiction of the Los Angeles RWQCB and subject to the management direction of the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. California Water Code (§13241) defines water quality objectives as the maximum allowable concentrations of water quality constituents to ensure the reasonable protection of beneficial uses and the prevention of nuisance related to water quality degradation within a specific area. Water quality objectives are achieved through Waste Discharge Requirements (WDRs) and other programs outlined in the Basin Plan. (Los Angeles RWQCB, 1994b)

Water quality objectives for surface waters in the proposed project area, as defined in Chapter 3 of the Basin Plan, are provided below in Table C.2-1.

**Table C.2-1. Designated Surface Water Quality Objectives for the Proposed Project Area**

Santa Clara River Watershed (Reaches in Upstream to Downstream Order)	Los Angeles RWQCB Water Quality Objective (TMDL) <sup>1</sup>					
	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron (mg/L)	Nitrogen (mg/L)	SAR (mg/L)
Sespe Creek above gaging station, 500' downstream from Little Sespe Creek (Reach 10)	800	320	60	1.5	5	5
Between A Street, Fillmore, and Freeman Diversion "Dam" near Saticoy (Reach 3)	1,300	650	80	1.5	5	5
Between Freeman Diversion "Dam" near Saticoy and Highway 101 Bridge (Reach 2)	1,200	600	150	1.5	-	-
Between Highway 101 Bridge and Santa Clara River Estuary (Reach 1) <sup>2</sup>	-	-	-	-	-	-

Source: Los Angeles RWQCB, 1994b.

Notes: (1) TMDL: Total Maximum Daily Load; TDS: Total Dissolved Solids; SAR: Sodium adsorption ratio, which predicts the degree to which irrigation water tends to enter into cation-exchange reactions in soil ( $SAR = Na+ / ((Ca++ + Mg++) / 2)^{1/2}$ )  
 (2) Site-specific objectives have not been determined for this reach at this time. Such areas are often impaired by high levels of minerals and there is not sufficient historic data to designate objectives based on natural background conditions.

As authorized by the federal Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge into waters of the U.S. (USEPA, 2009). In California, dischargers whose projects disturb more than one acre of land are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ), which requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (SWRCB, 2012).

The Los Angeles RWQCB has issued an NPDES Municipal Separate Storm Sewer System (MS4) Order (NPDES Permit CAS004002) for stormwater (wet weather) and non-stormwater (dry weather) discharges from the MS4 within the Ventura County Watershed Protection District, the County of Ventura, and the incorporated cities within the county (Los Angeles RWQCB, 2010). In order to fulfill requirements of NPDES Permit CAS004002, the County of Ventura has implemented the Ventura Countywide Stormwater Quality Management Program and Ventura Countywide Post Construction Stormwater Management Plan (PCSMP) for the Ventura County Watershed Protection District, the County of Ventura, and the Cities of Ventura County (VCWPD, 2011b).

Best Management Practices (BMPs) to minimize or avoid potential water quality impacts are identified in the Ventura Countywide PCSMP, as well as the County's "Technical Guidance Manual for Stormwater Quality Control Measures," which was updated in 2011 (VCWPD, 2011c). These BMPs include but are not limited to the following: General Site Design Control Measures (Conserve Natural Areas / Protect

Slopes and Channels / Control Peak Stormwater Runoff Discharge Rates / Minimize Impervious Area); Site-Specific Source Control Measures (Storm Drain Message and Signage / Outdoor Material Storage Area Design / Outdoor Trash Storage Area Design / Fueling Area Design); and Treatment Control Measures (Grass Strip Filter / Grass Swale Filter / Detention Basin / Porous Landscape Detention / Infiltration Trench) (VCWPD, 2011c).

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the criteria listed below would result in a significant impact to surface water quality (County of Ventura, 2011).

- Individually or cumulatively degrade the quality of surface water and cause it to exceed water quality objectives contained in Chapter 3 of the three Basin Plans.
- Directly or indirectly cause stormwater quality to exceed water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits.

**Proposed Project Impacts:** Surface water quality degradation could occur through direct release of sediment and/or pollutants into surface waters, or through the transport and delivery of sediments and/or pollutants via surface water runoff. Construction of the proposed project would include soil-disturbing activities to implement the proposed levee improvements, including installation of fill slope and the retaining wall, removal of encroaching vegetation, and construction of levee features. These activities would also include the use of motorized equipment and vehicles that require the use of hazardous and potentially hazardous materials such as vehicle fuels and oils. If an accidental spill or leak of such materials occurs, an impact to surface water quality could result.

As described in Section A.4.5 (Proposed Project: Construction) and portrayed in Table A-1 (Construction Schedule), construction of the proposed project is anticipated to occur over an approximately five- to six-month period, between April and September of 2014; however, it is possible that construction could be completed within three months, under an accelerated schedule, between April and June of 2014. Either construction schedule would avoid the rainy season, as most precipitation in the project area tends to occur between January and March (City-Data.com, 2012). However, precipitation events outside of the rainy season could occur during construction of the project, which includes ground-disturbing activities with the potential for sediment transport and delivery to Sespe Creek, if flow is present. Such an impact could result in localized and short-term water quality degradation; however, the proposed project would be implemented in accordance with all conditions and requirements of the Ventura Countywide Stormwater Quality Management Program and NPDES Permit Number CAS004002, including BMPs to minimize or avoid the potential for water quality impacts to occur. Therefore, potential water quality effects associated with sediment transport and delivery would be less than significant. As mentioned, water quality impacts could also occur due to leaking vehicles and equipment; permit compliance and BMP implementation would also minimize or avoid the potential for water quality impacts to occur due to hazardous materials contamination, and water quality effects during construction would be less than significant.

Section A.4.5 (Proposed Project: Operations and Maintenance) describes activities that would or could occur during the operation and maintenance period; of these activities, those that may introduce ground-disturbing activities include the as-needed repair of bank protection damaged from flood flows, and maintenance of the Corps-required 15-foot vegetation free zone (VFZ). As noted, such operational activities would occur on an as-needed basis; such activities would not be required on a regular or frequent basis, and the potential to result in erosion and sedimentation would be less than significant.

County vehicles would be periodically used along the SC-2 Levee during the operational period, in order to conduct periodic inspections and implement repairs and other operational activities as needed. It is reasonably anticipated that County vehicles are well maintained, such that the potential for water quality degradation to occur as a result of leaking fuel or other fluids would be less than significant. Furthermore, these operational activities are consistent with current operations, and therefore, do not reflect a change in baseline conditions.

Construction and operation of the proposed project would be in compliance with all existing water quality objectives and TMDL requirements of the Los Angeles RWQCB, as listed in Table C.2-1. Neither construction nor operation and maintenance activities associated with the proposed project are expected to result in the violation of any water quality objectives designated by the Los Angeles RWQCB. Potential impacts to surface water quality resulting from the proposed project would be less than significant.

**Cumulative Impacts:** The introduction to Chapter C, as supported by Appendix 1, provides a discussion of the past, present, and reasonably foreseeable projects associated with the proposed project area. It is reasonably assumed that other projects in the cumulative scenario would include the use of some of the same types of equipment and vehicles as the proposed project, and would have the potential to result in similar impacts to surface water quality as the proposed project. However, as described above, potential surface water quality impacts of the proposed project would be localized and of short duration. Potential cumulative impacts to surface water quality would be less than significant.

### C.3 MINERAL RESOURCES

The assessment of mineral resource presents an analysis of the impacts associated with aggregate and petroleum resources. Aggregate resources include construction grade sand, rock and gravel; and petroleum resources include oil and gas deposits. Impacts associated with these mineral resources involves hampering or precluding extraction of, or access to, these mineral resources.

#### C.3A Aggregate

The County's aggregate resources are classified by the State as one of the following Mineral Resource Zone categories:

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or there is a high likelihood for their presence.
- **MRZ-3:** Areas where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-3(a):** Areas, judged on the basis of the limited available geologic data and fieldwork, to have higher potential as sources of aggregate material suitable for Portland cement concrete than other deposits classified MRZ-3.
- **MRZ-4:** A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would have a significant impact on aggregate resources if it is proposed to be located on or immediately adjacent to land zoned Mineral Resource Protection (MRP) overlay zone, or adjacent to a principal access road to an existing aggregate Conditional Use Permit (CUP), and has the potential to hamper or preclude extraction of or access to the aggregate resources (County of Ventura, 2011a).

**Proposed Project Impacts:** According to the Mineral Resources Mining Permits Map from the Resources Appendix of the County's *General Plan*, the proposed project site and surrounding areas are within or adjacent to the MRZ-3(a) designation and an existing mining conditional use permit (CUP-4185) (County of Ventura, 2011b).

Upland Rock's CUP-4185 is valid through November 14, 2015, which allows for sand, gravel, and rock excavation, storage, processing, and transport. The processing plant is located immediately south of SR 126, immediately west and adjacent to Sespe Creek, with a dedicated access road immediately to the north off of eastbound SR 126. Upland Rock's sand and gravel mining operations include the periodic removal of sand, gravel and rock from the East Branch of Sespe Creek, followed by processing of the materials at the processing plant. Operation of the processing plant, which includes crushers and/or screens and their associated equipment, is limited to 120 days per year per the VCAPCD Permit to Operate. Excavation activities are dependent on the amount and location of material deposited each year by high flow events in Sespe Creek. As such, the exact location of excavation activities is determined on an annual basis. During the proposed project's construction timeframe, activities associated with the Upland Rock Sediment Removal/Mining of Sespe Creek project may occur within Sespe Creek in close proximity to the proposed project.

As stated above, the Upland Rock processing plant is located immediately south of SR 126, and construction access for the proposed project would be at both ends of the SC-2 Levee, using Old Telegraph Road at the north end and SR 126 at the south end. Therefore, access to the Upland Rock plant site may be hampered due to construction activities occurring simultaneously at the southern end of the project site causing a potentially significant impact to aggregate resources. In order to avoid interference with the mining activities associated with Upland Rock, the following mitigation measure is recommended:

**MM MR-1** The VCWPD shall coordinate with Upland Rock thirty (30) days prior to the start of construction to avoid disruptions to the sediment removal and mining activities associated with CUP-4185.

With implementation of MM MR-1, impacts to existing aggregate resources would be less than significant.

**Cumulative Impacts:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would have a cumulative impact on aggregate resources if, when considered with other pending and recently approved projects in the area, it hampers or precludes extraction or access to identified resources. The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As addressed above, the proposed project is adjacent to CUP-4185. In addition, there are currently two pending CUPs for the Grimes Rock aggregate mine and sand and gravel quarry located approximately 3.5 miles southeast of the project site. With implementation of MM MR-1, the proposed project would result in less than significant impacts associated with aggregate resources. Consequently, it would not incrementally contribute to aggregate resources impacts that would be cumulatively considerable. Therefore, no cumulative impacts related to aggregate resources would occur.

### C.3B Petroleum

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any land use that is proposed to be located on or immediately adjacent to any known petroleum resource area, or

adjacent to a principal access road to an existing petroleum CUP, has the potential to hamper or preclude access to petroleum resources (County of Ventura, 2011a).

**Proposed Project Impacts:** As identified in Figure 1.4.7 of the *Ventura County General Plan – Resource Appendix*, the proposed project site is located within a designated petroleum field (County of Ventura, 2011b). This 20-acre field, also known as the Fillmore Oil Field, has relatively low reserves based on estimates made in 1987. Figure 1.4.7 is a map of the County, which is not to scale, and therefore, the exact location of the petroleum field is not clearly distinguishable. As such, it appears that the area designated as a petroleum field traverses land that is currently either residential development or active agricultural fields, and possibly includes recreation sites and a school (Mountain Vista Elementary School). There are no active petroleum extraction activities associated with this designated petroleum field and impacts to the designated petroleum field would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As addressed above, the proposed project would not impact the designated petroleum field, and thus would not incrementally contribute to cumulatively significant impacts related to petroleum resources. No cumulative impacts would occur.

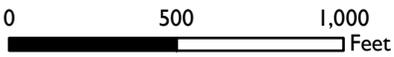
## C.4 BIOLOGICAL RESOURCES

As outlined in the *Ventura County Initial Study Assessment Guidelines*, this section contains a description of plant and wildlife communities, special status species, and the specific criteria unique to Ventura County, followed by an assessment of potential impacts to these resources and mitigation measures designed to offset potential impacts to these resources where possible (County of Ventura, 2011a).

Information used in preparing this section was derived from the following data sources:

- Draft Biological Technical Report for the Sespe Creek Levee Improvement Project (VCWPD, 2012);
- California Department of Fish and Wildlife Natural Diversity Database (CNDDDB) (CDFG, 2011a);
- Special Animals List (CDFG, 2011b);
- State and federally listed endangered and threatened animals of California (CDFG, 2011c);
- California Wildlife Habitat Relationships (CDFG, 2008);
- Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2011);
- List of Ventura County Locally Important Animals (County of Ventura, 2008a); and,
- List of Ventura County Locally Important Plants (County of Ventura, 2008b).

The proposed project includes raising the existing levee height by one to six feet along approximately 1,543 feet of the levee and adding a 321-foot-long retaining wall along a portion of the landward side of the levee (Project Area). Additional project components include the removal of three turnouts from the existing levee design, addition of one new turnout (incorporated into the levee improvements), removal of up to 23 trees at Shiells Park and one tree at the location of the new turnout, construction of a new pedestrian access ramp over the improved levee, and the installation of two new access ramps (one to the north near Shiells Park and one to the south at the VCWPD stockpile yard just north of SR 126). For the purposes of the analysis and discussion of impacts pertaining to biological resources, the specific Project Area is defined as portions of an approximately a 1.1-mile section of the Sespe Creek SC-2 Levee system (see Figure C.4-1). However, in order to better characterize the biological resources that may occur in the general vicinity of the proposed



- Study Area
- Vegetation Survey Area

**Figure C.4-1**

**Study Area and Vegetation Survey Area**

project, surveys were conducted within a much larger footprint than the Project Area. The surveyed area (Study Area) is bounded by the Project Area to the east, the SR 126 Bridge to the south, Old Telegraph Road Bridge to the north, and the western top of bank of Sespe Creek to the west. Wildlife surveys were conducted in the entirety of the Study Area in order to assess potential impacts to wide ranging species and to detect wildlife in areas that could be subject to indirect project effects (i.e., noise). Botanical surveys and vegetation mapping were conducted in a subset of the Study Area extending westward from the Project Area and terminating at or before the active channel of Sespe Creek (Vegetation Study Area). Refer to Figure C.4-1 for a graphical depiction of the Project Area, Study Area, and Vegetation Study Area.

### **Regional Setting**

Sespe Creek is located near the City of Fillmore in Ventura County, California. The creek is the largest free-flowing tributary to the Santa Clara River. The majority of the 260 square mile watershed is contained within the boundary of the Los Padres National Forest. Elevations in the watershed range from greater than 7,000 feet in the upper reaches to less than 400 feet above sea level in the vicinity of the City of Fillmore (RBF, 2010). In total, Sespe Creek flows 60 miles from its headwaters at the western edge of Ventura County downstream to its confluence with Santa Clara River near the City of Fillmore. The creek is fed by thirty named stream tributaries as it flows generally eastward in the upper reaches—within a wide alluvial and bedrock valley bounded by the Pine Mountains to the north and the Topatopa Mountains to the south—before eventually turning southward through the narrow, bedrock confined Sespe Creek gorge and then out onto a broad, alluvial fan towards the City of Fillmore and the Santa Clara River. The upper and middle portions of the stream flow through a narrow, v-shaped canyon with rugged mountain ridges separating the watershed from adjacent watersheds. In the vicinity of Fillmore, the stream leaves the steep canyons and flows over a broad alluvial fan. The stream gradient in this area is about 40 feet per mile (RBF, 2010).

Various geologic rock units are present, including shales, sandstones, and granites, which together have been uplifted by the relatively active tectonic processes associated with the Transverse Mountain Ranges. The topographic relief in this mountainous watershed varies from steep upland areas with rugged ridges to a broad, low-gradient valley bottom bordering much of the mainstem creek. Overall, elevations range from approximately 350 to 7,500 feet above sea level. Sespe Creek is the second largest sub-watershed in the Santa Clara River watershed, accounting for approximately 16 percent of the total area. (RBF, 2010).

The climatic and hydrologic characteristics of the watershed produce a perennial flow regime along the majority of the mainstem, while most tributaries and the mainstem throughout the upper subwatershed experience intermittent flows. Coastal watersheds of southern California function according to a semi-arid, two-season Mediterranean-type climate, with wet cool winters and dry warm-to-hot summers. Rainfall and air moisture both tend to decrease with increasing distance from the coast. Within the Sespe Creek watershed, proximity to the Pacific Ocean moderates both seasonal and diurnal temperatures. Most precipitation occurs between November and March, with precipitation varying significantly throughout the watershed due to complex topographic features. Typical of semi-arid to arid watersheds, flood flows in Sespe Creek typically increase, peak, and subside rapidly in response to high intensity rainfall (RBF, 2010).

### **Local Setting**

The Study Area is located north of Highway 126 near the City of Fillmore in Ventura County, California (Refer to Section A, Figure A-1). The Project Area (a component of the overall Study Area) is approximately 2.56 acres in size and is comprised of both developed and disturbed lands (see Figure C.4-1). This includes the existing levee structure, a recreational bike trail and a barren area located between the

existing levee and residential brick garden walls. The brick walls and Project Area are contiguous with single family homes, a local church (Faith Community Church), and Shiells Park. The Study Area is bordered to the north by a mix of residential development, portions of Sespe Creek, Old Telegraph Road Bridge, and a Union Pacific Railroad Bridge. The eastern portion of the Study Area abuts residential development, Shiells Park, Faith Community Church, and a vacant lot (VCWPD stockpile area at Highway 126). The Highway 126 Bridge acts as the southern boundary of the Study Area and the western bank of Sespe Creek is the western limit of the Survey Area.

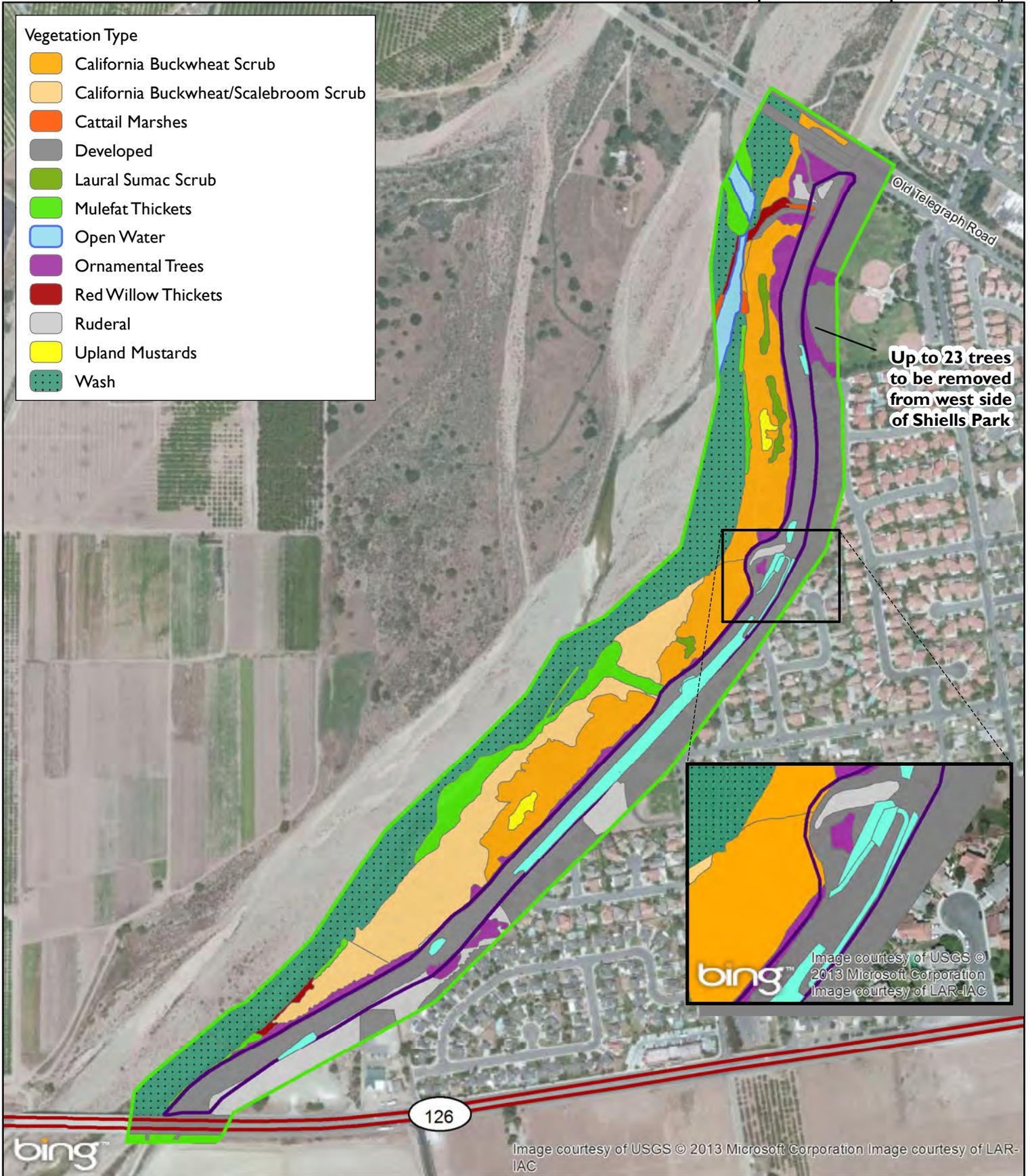
As noted above, the Project Area consists almost entirely of disturbed and developed lands occupied by the existing levee structure, a recreational bike trail, and a barren area located between the levee and the residential community east of the site. This area is generally barren and is subject to routine herbicide application as part of ongoing operation and maintenance activities. Vegetation located immediately west of the Project Area is comprised almost entirely of intact native scrub communities. This includes dense monotypic stands of California buckwheat scrub, California buckwheat/scalebroom scrub and isolated patches of laural sumac scrub. A variety of native and non-native ornamental trees have been planted along the western edge of the bike trail. Some of the trees observed in this area include western sycamore (*Platanus racemosa*), Peruvian peppertree (*Schinus molle*), coast live oak (*Quercus agrifolia*), cottonwood (*Populus fremontii*), and laurel sumac. In some areas patches of mulefat (*Baccharis salicifolia*) and salt cedar (*Tamarix* sp.) also occur.

Near the north end of the levee area a large windrow of native and non-native trees occur east of the existing levee structure in Shiells Park. These trees are located near the toe of the levee and reach heights in excess of forty feet in some locations. Some of the trees observed in this area included Fremont cottonwood, western sycamore, pine (*Pinus* spp.), and crepe myrtle (*Lagerstroemia indica*). Large, sycamore, Chinese elm (*Ulmus parvifolia*), American sweet gum (*Liquidambar styraciflua*), and Japanese yew (*Podocarpus macrophylla*) are also present.

### **Vegetation and Habitat Value**

Vegetation communities were mapped during reconnaissance-level surveys conducted by Aspen Environmental Group (Aspen) in July 2011 and confirmed in March 2012. Vegetation maps were prepared by drawing tentative vegetation type boundaries onto high-resolution aerial images while in the field, then digitizing these polygons into GIS. The maps were then ground-truthed in the field to verify vegetation community types and clarify any mapping irregularities. Mapping was done electronically using ArcGIS (version 10) and a 22-inch diagonal flat screen monitor. Aerial photography used to support the vegetation mapping were accurate to three feet; however, boundaries between some vegetation types are less precise due to difficulties interpreting aerial imagery and accessing stands of vegetation in the field (see Figure C.4-2).

According to Sawyer et al. (2009), seven types of vegetation communities were mapped within the Vegetation Study Area. Table C.4-1 lists these community types including acres and percentage of total acreage within the Vegetation Study Area. Full descriptions of the vegetation community types are provided below. Figure C.4-2 illustrates the vegetation communities occurring in the Vegetation Study Area.



- Veg Survey Boundary
- Existing Levee Boundary
- Project Boundary

**Figure C.4-2**

**Vegetation/Cover Types**

**Table C.4-1. Vegetation Community Types and Acreage within the Vegetation Study Area**

Vegetation Community		Type	Total Acres		Percentage of Total Acreage	
<i>Holland (1986) Vegetation Classification</i>	<i>Sawyer, Keeler-Wolf, and Evens (2009) Vegetation Classification</i>		Vegetation Study Area	Project Area	Vegetation Study Area	Project Area
Southern cottonwood-willow riparian	<b>Red Willow Thickets</b>	Riparian	0.48	--	0.6%	--
Mulefat scrub	Mulefat Thickets	Transition	3.77	--	5.0%	--
Coastal and Valley Freshwater Marsh	Cattail Marshes	Riparian	0.18	--	0.2%	--
Riversidean Sage Scrub	California Buckwheat Scrub	Upland	11.21	--	15.0%	--
	<b>California Buckwheat/Scalebroom Scrub</b>	Upland	8.53	--	11.4%	--
	Laurel Sumac Scrub	Upland	0.61	--	0.8%	--
Ornamental Trees*	Ornamental Trees*	Upland	4.85	0.01	6.5%	0.40%
Non-Native Grassland	Upland Mustards	Upland	0.38	--	0.5%	
Ruderal*	Ruderal*	Upland	4.02	0.09	5.4%	3.59%
Wash*	Wash*	--	16.46	--	22.0%	--
Open Water*	Open Water*	--	1.02	--	1.4%	--
Developed*	Developed*	--	23.15	2.41	31.2%	96.0%
<b>Total</b>		<b>--</b>	<b>74.65</b>	<b>2.51</b>		

\* These communities/land covers are not defined in Sawyer et al. (2009) and Holland (1986) but are included in this table for acreage calculation purposes.  
 Communities names appearing in **bold** type are considered sensitive by the CDFW.  
 Note: Installation of a flap gate near Shiells Park, which is included as part of the project analyzed in the Preliminary Jurisdictional Waters/ Wetlands Delineation Report (Appendix 3), is no longer an element of the proposed project. Therefore, the acreages presented herein for the Project Area do not include the flap gate (30x30 foot) impact area.

**Riparian Vegetation Types**

Much of the natural riparian vegetation in California has been lost or degraded due to a variety of factors, including land use conversions to agricultural, urban, and recreational uses; channelization for flood control; sand and gravel mining; groundwater pumping; water impoundments; and various other alterations. Faber et al. (1989) estimated that as much as 95 to 97 percent of riparian habitats have been lost in southwestern California.

Riparian habitats are biologically productive and diverse, and are the exclusive habitat for several special-status wildlife species. Many of these species are wholly dependent on riparian habitats throughout the entirety of their life cycles, while others may utilize these habitats during certain seasons or life history phases. For example, numerous amphibian species breed in aquatic habitats but spend most of their lives in upland areas.

Riparian habitats are also areas of high primary productivity in an otherwise arid landscape, largely due to year-round soil moisture. High plant productivity leads to increased habitat structural diversity and increased food availability for herbivorous animals, and in turn, predatory animals (reviewed by Faber et al., 1989). Insect productivity is also exhibited at relatively higher levels in riparian systems. During warmer months, large numbers of insects provide a prey base for a diverse breeding bird fauna. Structural diversity is also

much more evident in riparian systems than those of most regional uplands. Riparian woodlands tend to have multiple-layered herb, shrub, and tree canopies, whereas most upland communities are relatively simple-structured. This diverse vertical habitat structure supports a greater diversity of nesting and foraging sites for birds. Similarly, riparian communities support a broader diversity of mammals due to higher biological productivity, denning site availability, thermal cover, and greater access to water.

### **Red Willow Thickets**

Red willow thickets are dense, broadleaved, winter deciduous riparian woodlands dominated by red willow, arroyo willow and Fremont cottonwood. In the Vegetation Study Area, red willow thickets occur sparsely along the perennially wet portions of Sespe Creek. Understory species include mulefat (*Baccharis salicifolia*), cattails (*Typha* spp.) and other herbaceous wetland species. Within the Vegetation Study Area this vegetation tends to intergrade with mulefat thickets and cattail marshes. Red willow thickets are most similar to the “valley foothill riparian” described by Grenfell (1988) and “southern cottonwood-willow riparian forest” as described by Holland (1986). This community generally meets the habitat requirements of southern riparian scrub which is considered sensitive by the California Department of Fish and Wildlife (CDFW).

### **Red Willow Thickets Value**

Riparian communities support some of the most diverse assemblages of wildlife and provide access to water, shade, and protection from predation. These areas also provide foraging habitat and are used for nesting and breeding by a number of species. The red willow thickets in the Vegetation Study Area provide habitat for a range of birds, small mammals, and herpetofauna. This community type may potentially support the State and federally endangered least Bell’s vireo (*Vireo bellii pusillus*). This species, although not observed in the Vegetation Study Area, is known from the Santa Clara River. Red willow thickets are considered to have a high habitat value for wildlife.

### **Mulefat Thickets**

Mulefat thickets are dominated by mulefat, often in association with scattered willow species, mugwort (*Artemisia douglasiana*), and blue elderberry (*Sambucus mexicana*). Mulefat thickets tend to occur along intermittent stream channels and on broad floodplains which receive water during periods of high flows. Within the Vegetation Study Area mulefat thickets occur throughout the flood plain in areas that are more isolated from the creeks perennial flow due to distance or elevation from the water surface. This community is most similar to the “valley foothill riparian” described by Grenfell (1988) and “mulefat scrub” as described by Holland (1986). This community generally meets the habitat requirements of southern riparian scrub which is considered sensitive by the CDFW.

### **Mulefat Thickets Value**

This community is typically of low plant diversity, but this can be variable depending on a variety of factors, including proximity of nearby water resources, and exposure to temperature and wind. Mulefat thickets typically provides moderate habitat value for wildlife, because it supports some nesting and foraging for birds, and can support herpetofauna such as lizards and frogs. However, mulefat thickets are known to be used by the least Bell’s vireo in some locations. Generally, more mature mulefat thickets provide higher habitat value than younger mulefat thickets, which generally occur in the Vegetation Study Area, due to greater cover and vegetative structure.

### **Cattail Marshes**

Cattail marshes are a type of wetland vegetation that typically occurs either in or directly adjacent to standing water. Within the Vegetation Study Area this vegetation is dominated by common cattails (*Typha latifolia*) along with bulrush (*Scirpus maritimus*) and tule (*Scirpus acutus var. occidentalis*). This community occurs primarily in standing water associated with the storm drain outlet in the north portion of the survey area as well as along the banks of the slower moving portions of Sespe Creek. This vegetation community is most similar to “fresh emergent wetland” as described by Kramer (1988) and “coastal and valley freshwater marsh” as described by Holland (1986).

### **Cattail Marshes Value**

This community type is typically of high resource value to wildlife. In areas where large stands develop this community provides dense cover for nesting, breeding, and foraging. However, within the Vegetation Study Area this community type is of a relatively low value to wildlife, primarily because it occurs in such narrow bands. These narrow strips of vegetation provide little cover or habitat for small animals and is unlikely to be regularly used by larger animals such as nesting birds. However, how a species utilizes any given community type is a function of the size, location and proximity to other vegetation types. Narrow stands of cattail marsh may ultimately function as a subcomponent of another riparian community type.

### **Upland Vegetation Types**

Upland plant communities include vegetation dominated by plant species that do not require a permanent source of water, as opposed to plant species that are adapted to areas that are either seasonally flooded or have saturated soils for at least a portion of the growing season. Generally, upland plant communities consist of plant species that are adapted to dryer conditions and typically require only seasonal precipitation to obtain adequate water resources for growth and reproduction. In the Vegetation Study Area most of the upland plant communities occur on elevated terraces in the floodplain or immediately adjacent to the creek edge.

### **California Buckwheat Scrub**

This community is characterized by the presence of dense stands of California buckwheat (*Eriogonum fasciculatum*) and is the dominant upland vegetation type that occurs in the Vegetation Study Area. Other species occurring within this community within the Vegetation Study Area include California bush sunflower (*Encelia californica*) and yerba santa (*Eriodictyon crassifolium*). Within the Vegetation Study Area this vegetation community occurs in the upland areas on the alluvial terraces to the east of the active channel of Sespe Creek and west of the Project Area. Ground cover between shrubs consists of a low cover of non-native grasses. This vegetation best matches “coastal scrub” as described by De Becker (1988) and “Riversidean sage scrub” as described by Holland (1986).

### **California Buckwheat Scrub Value**

This community provides moderate to high value habitat for plant species that are adapted to xeric soils and more stable levels of succession. Even under drier conditions, this habitat type appears to support numbers of vertebrate species roughly equivalent to those in surrounding habitats (Stebbins, 2003). As such, California buckwheat/scalebroom scrub has a moderate to high habitat value because it supports important nesting and foraging habitat for a variety of birds and can support an assortment of herpetofauna and small rodents.

### California Buckwheat/Scale Broom Scrub

This vegetation community is characterized by the presence of both scale broom (*Lepidospartum squamatum*) and California buckwheat, along with species such as yerba santa and white sage (*Salvia apiana*). Within the Vegetation Study Area this vegetation tends to intergrade with and functions very much like California buckwheat scrub. This community occurs in the southern portion of the Vegetation Study Area located on the high alluvial terraces on the east side of the active channel of Sespe Creek. This vegetation community appears to be well established based on the size and condition of the shrubs. In addition, dense mats of moss are present on many of the rocks in this area and dense formations of lichens were observed growing on many of the shrubs.

California Buckwheat/Scale Broom Scrub best matches “coastal scrub” as described by De Becker (1988) and “Riversidean sage scrub” as described by Holland (1986). In addition, these shrublands partially correspond to the scalebroom-dominated shrublands described by Magney (1992) as well as descriptions of alluvial fan sage scrub (Smith, 1980; Hanes et al., 1988).

### California Buckwheat/Scale Broom Scrub Value

This community provides moderate to high value habitat for plant species that are adapted to xeric soils and more stable levels of succession. Even under drier conditions, this habitat type appears to support numbers of vertebrate species roughly equivalent to those in surrounding habitats (Stebbins, 2003). As such, California buckwheat/scalebroom scrub has a moderate to high habitat value because it supports important nesting and foraging habitat for a variety birds and can support an assortment of herpetofauna and small rodents.

### Laurel Sumac Scrub

This vegetation community is dominated by laurel sumac (*Malosma laurina*). Species associated with this community include blue elderberry (*Sambucus mexicana*) and California buckwheat. In the Vegetation Study Area this community occurs within larger expanses of California buckwheat scrub and is distinguished by the presence of the taller shrubs that stand above the buckwheat. This vegetation community best matches “coastal scrub” as described by De Becker (1988) and “Riversidean sage scrub” as described by Holland (1986).

### Laurel Sumac Scrub Value

This community provides moderate to high value habitat for plant species that are adapted to xeric soils and more stable levels of succession. Even under drier conditions, this habitat type appears to support numbers of vertebrate species roughly equivalent to those in surrounding habitats (Stebbins, 2003). As such, laurel sumac scrub has a moderate to high habitat value because it supports important nesting and foraging habitat for a variety birds and can support an assortment of herpetofauna and small rodents.

### Ornamental Trees

This vegetation community is characterized by the presence of both native and non-native ornamental trees that have been planted along the existing recreational bike trail, neighboring park and in open space areas adjacent to the levee. Tree species observed in this area included, but were not limited to, Fremont cottonwood, western sycamore, unidentified pine trees, and crepe myrtle. Sycamore, Chinese elm, American sweet gum, and Japanese yew were also observed.

### **Ornamental Trees Value**

Although planted as ornamental trees, the mixture of native and non-native species that occur within or adjacent to the Vegetation Study Area, provide a moderate to high habitat value for a variety of species. These trees intergrade with native plant communities that occur along the stream terrace and have the potential to support nesting and foraging habitat for a variety of passerine songbirds and raptors (within the larger trees).

### **Upland Mustards**

This vegetation community is characterized by dense monotypic stands of short-pod mustard (*Hirschfeldia incana*). This invasive nonnative species tends to invade previously disturbed areas. This vegetation community was mapped within two portions of the Vegetation Study Area.

### **Upland Mustards Value**

In general, upland mustard habitat provides low habitat value for native vegetation and wildlife, although dense stands may provide limited cover for herpetofauna and small rodents.

### **Wash**

Portions of the Vegetation Study Area are comprised of a large, mostly unvegetated wash that shows signs of recent scour. The soil in this habitat type ranges from a mixture of fine sands to large cobbles (>12"). Native vegetation observed within the wash areas included California croton (*Croton californicus*), telegraphweed (*Heterotheca grandiflora*), southern California locoweed (*Astragalus trichopodus*), and golden aster (*Heterotheca sessiliflora*).

### **Wash Value**

These habitat areas, although dry for most of the year, are of a high value habitat. During high flow events these areas may contain water and can support a range of aquatic species such as invertebrates, fish, ducks and other waterfowl and acts as foraging grounds for a variety of songbirds and swallows. During periods of low water, these areas provide important foraging habitat for a suite of small rodents, birds, and herpetofauna.

### **Open Water**

This habitat type is used to describe the portions of Sespe Creek that contained surface water during the July 2011 surveys.

### **Open Water Value**

These areas are comprised of active flow or ponded water. These reaches are typically sparsely vegetated however vegetation is present on the margins of the channel supporting occasional stands of mulefat and cattails. Open water is considered a high value habitat that supports a range of aquatic species such as invertebrates, fish, ducks and other waterfowl. Open water also acts as foraging grounds for a variety of passerine songbirds, swallows, and bats and provides a water source for various mammals. Sespe Creek is known to support southern steelhead (southern California DPS) trout (*Oncorhynchus mykiss irideus*), and this species is assumed to be present within active flows of Sespe Creek within the Study Area.

## **Disturbed/Developed**

Disturbed/developed is a cover type used to describe areas that either have existing structures (i.e. houses and roads) or areas that are devoid of vegetation due to continual disturbance by horses, vehicles, or other human causes. Disturbed and developed areas include the residential properties, roadways and physical structures (i.e., levees and bike trail) that occur in the Vegetation Study Area. Culverts and bridges are also present at various locations in the Vegetation Study Area.

## **Disturbed/Developed Value**

In general, disturbed/developed habitat provides low habitat value for native vegetation and wildlife, aside from those species adapted to disturbance or species characterized as generalists including small lizards, snakes, and a few small song birds.

## **Ruderal**

Ruderal vegetation communities are dominated by herbaceous, introduced, pioneering plant species that readily colonize open disturbed soil and thrive as a result of human impacts. Ruderal communities may provide a certain degree of erosion control for recently disturbed or graded areas, but such communities are also a threat to the natural biodiversity of an area. Invasive species continually distribute highly competitive propagules into otherwise native vegetation; however, if ruderal grassland stands remain undisturbed for more than five years they can sometimes undergo succession towards more stable and less weedy plant communities (Zedler et al., 1997). Ruderal areas within the Vegetation Study Area were limited to disturbed areas east of the existing levee structure and areas north of the storm drain outlet near Shiells Park.

## **Ruderal Value**

Generally ruderal habitat provides low habitat value for native vegetation and wildlife, aside from those species adapted to disturbance or species characterized as generalists.

## **Wildlife**

The vegetation community types that exist in the Study Area can support a variety of resident and migratory wildlife species. Wildlife identified in the Study Area, either through direct observation or indirect signs of occurrence, during the 2011 and 2012 reconnaissance surveys included various fish, reptiles, amphibians, birds, and small to mid-size mammals.

***Invertebrates and Gastropods.*** The range of vegetation community types that occur in the Study Area provides a suite of microhabitat conditions for a wide variety of terrestrial and aquatic insects, crustaceans, and other invertebrates. This includes swift running portions of the stream with cobble and rocks, thick leaf litter, and pools of slow-moving or still water. Like in all ecological systems, invertebrates in the Study Area play a crucial role in a number of biological processes. They serve as the primary or secondary food source for a variety of fish, bird, reptile, and mammal predators; they provide important pollination vectors for numerous plant species; they act as efficient components in controlling pest populations; and they support the naturally occurring maintenance of an area by consuming detritus and contributing to necessary soil nutrients. General surveys of the Study Area detected a wide variety of common and nonnative invertebrates. Some of the orders identified in the Study Area included Odonata (dragonflies, damselflies), Hemiptera (true bugs), Coleoptera (beetles), Diptera (flies), Plecoptera (stone flies), Lepidoptera (moths and butterflies), Hymenoptera (wasps, bees and ants), and Trichoptera (caddis flies).

Both non-native Argentine ants (*Linepithema humile*, formerly *Iridomyrmex humile*) and native harvester ants (*Pogonomyrmex californicus*) were detected in the Study Area. Harvester ants were commonly observed in upland habitats adjacent to Sespe Creek, particularly in areas supporting large associations of California buckwheat.

Stream invertebrates were common and included a variety of aquatic larvae such as damselflies, dragonfly larvae, and water bugs (i.e., toe biters [family Belostomatidae]). These aggressive insects prey on insects, small fish, and amphibians.

Several species of gastropod were also observed in the Study Area. These included native and non-native snails, such as the introduced garden snail (*Helix aspersa*), and decollate snails (*Rumina decollate*), an introduced predatory gastropod sold in local garden stores as a biocontrol for the garden snail. In addition, three shoulderband snails (*Helminthoglypta* spp.) were detected during focused surveys for gastropods. Several locally important shoulderband snails are known to occur in the region and include sage shoulderband (*Helminthoglypta salvia*), Matilija shoulderband snail (*Helminthoglypta willetti*), and Ventura shoulderband (*Helminthoglypta venturensis*). One rare species (CDFW Special Animal and Ventura County Locally Important Species), the Trask shoulderband snail (*Helminthoglypta traskii traskii*), has the potential to occur in the Study Area.

**Amphibians.** Amphibians often require a source of standing or flowing water to complete their life cycle. However, some terrestrial species can survive in drier areas by remaining in moist environments found beneath leaf litter and fallen logs, or by burrowing into the soil. Sespe Creek generally provides year-round habitat for a variety of amphibian species. Small pools, shallow rills and runs, and deep wide slow-moving water supports several native and nonnative species. Adjacent upland habitat and riparian vegetation provide ample foraging opportunities. Amphibians that were observed during surveys include the Pacific treefrog [chorus frog] (*Pseudacris regilla*), western toad (*Anaxyrus boreas*), and the nonnative bullfrog (*Lithobates catesbeiana*). An African clawed frog (*Xenopus laevis*) was observed within the active channel of Sespe Creek with a black bullhead lodged in its mouth. Although not detected in the Study Area, both newts and salamanders are well documented in the region. These species are highly cryptic and often difficult to detect. Downed logs, bark, and other woody material in various stages of decay (often referred to as coarse woody debris) provide shelter and feeding sites for a variety of wildlife, including amphibians and reptiles (Maser and Trappe, 1984; Aubry et al., 1988). However, most of the Study Area lacks these features and many amphibians are often excluded by exotic fish and amphibian species which are common the Sespe Creek watershed.

**Reptiles.** Reptiles were commonly observed during the surveys of the Study Area, in both disturbed and natural areas. Western fence lizard (*Sceloporus occidentalis*) and sideblotch lizard (*Uta stansburiana*) were observed whenever weather conditions were favorable and were broadly distributed across the site. Coastal whiptail (*Aspidoscelis tigris*) were periodically observed and were often associated with human refuse such as boards and debris piles. The Study Area also supports a variety of snakes. Gopher snake (*Pituophis melanoleucus*), common kingsnake (*Lampropeltis getula*), and Southern pacific rattlesnake (*Crotalus helleri*) were observed within the Study Area.

Although not observed, several other common reptiles likely occur in the Study Area. Most reptile species, even if present in an area, are difficult to detect because they are cryptic and their life history characteristics (i.e., foraging and thermoregulatory behavior) limit their ability to be observed during most surveys. Further, many species are only active within relatively narrow thermal limits, avoiding both cold and hot conditions, and most take refuge in microhabitats that are not directly visible to the casual observer, such as

rodent burrows, in crevices, under rocks and boards, and in dense vegetation where they are protected from unsuitable environmental conditions and predators (Corps and CDFG, 2010). In some cases they are only observed when flushed from their refugia. Although not detected in the Study Area habitat conditions are suitable for a number of common reptiles including western skink (*Plestiodon skiltonianus*), California whipsnake (*Masticophis lateralis*), coachwhip (*Masticophis flagellum*), western rattlesnake (*Crotalus viridis*), California black-headed snake (*Tantilla planiceps*), and California western blindsnake (*Leptotyphlops humilis*).

**Fish.** Sespe Creek is primarily a perennial stream, portions of which provide year-round habitat for several species of fish. Habitat conditions in the stream within the Study Area include overhanging vegetation, deep pools, and sections with short runs and riffles. Substrate conditions vary by location but the stream contains areas supporting silty sands, gravel, cobble and boulder-dominated zones. Macroalgae communities are present within localized areas and include duck and pond weed and mat-forming algae (*Charra* sp.). Stream temperatures vary by season and are a function of depth, location, and snow pack in the upper watershed.

Extensive seining and dip netting were conducted as part of the surveys within the Study Area. Four species of native fish were detected during these surveys. These included the arroyo chub (*Gila orcutti*), a State Species of Special Concern; Owens sucker (*Catostomas fumeiventris*) a State Species of Special Concern; Santa Ana sucker (*Catostomus santaanae*) a State Species of Special Concern (federally threatened in other watersheds); and partially armored stickleback (*Gasterosteus aculeatus microcephalus*) a CDFW Special Animal and Ventura County Locally Important Species. Although not detected during the surveys, southern steelhead (southern California DPS), the anadromous form of rainbow trout, is known to occur in Sespe Creek and its major tributaries.

As with many streams in California, nonnative invasive fish were routinely detected during the surveys. Mosquito fish (*Gambusia affinis*) and black bullhead (*Ameiurus melas*) were the most common non-native species detected and occurred throughout the Study Area. Although not detected during the surveys the watershed is known to support other exotic species including green sunfish (*Lepomis cyanellus*) and largemouth bass (*Micropterus salmoides*). Other exotics including common carp (*Cyprinus carpio*) and bluegill (*Lepomis macrochirus*) likely also occur.

**Birds.** Fifty-two species of common and sensitive birds were identified in the Study Area during surveys completed between July and November 2011 (County of Ventura, 2012). In addition it is likely that many other birds use the site either as wintering habitat, for seasonal breeding, or as occasional migrants.

Birds were identified by sight and sound and were observed in every section of the site. The diversity of birds at this location is a function of the large size of the site, the presence of perennial water, and the wide variation in plant communities that provide habitat for a number of different groups of birds. For example, a large number of birds are closely associated or dependent on the riparian vegetation that borders portions of Sespe Creek. Riparian systems are frequently considered one of the most productive forms of wildlife habitat in North America. Many bird species are wholly, or at least partially, dependent on riparian plant communities for breeding and foraging (Warner et.al., 1984).

Shore birds and other more aquatic species were commonly detected on Sespe Creek. In a few locations the presence of small rock weirs has resulted in the formation of large pools where shore birds and ducks prey on the many small fish that occur in these areas. Mallard duck (*Anas platyrhynchos*), great blue heron (*Ardea Herodias*), Virginia rail (*Rallus limicola*), green heron (*Butoroides virescens*), great egret (*Ardea alba*), and snowy egret (*Egretta thula*) were commonly observed feeding in the shallow waters of the creek. Black-crowned night heron (*Nycticorax nycticorax*) and green heron (*Butoroides virescens*) were also

observed, but in limited numbers. This may be due to the marginal riparian canopy that occurs in the Study Area.

Various common song birds were detected in the creek, often associated with the thin ribbon of riparian vegetation that borders the small pool located in the northern portion of the Study Area. Some of these included the common yellow throat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), and lesser goldfinch (*Carduelis psaltria*). House sparrow (*Passer domesticus*), spotted towhee (*Pipilo maculatus*), and Brewer's blackbird (*Euphagus cyanocephalus*) were also commonly observed.

Several exotic species including the brown-headed cow bird (*Molothrus ater*), feral pigeon or rock dove (*Columba livia*), and European starling (*Sturnus vulgaris*) were also observed.

Bird use of the stream terrace was moderate and included a variety of song birds, raptors, vultures, and game birds. Western king bird (*Tyrannus verticalis*), spotted towhee, bushtit (*Psaltriparus minimus*), mourning dove (*Zenaidura macroura*), and California quail (*Callipepla californica*), were fairly common. Mourning dove, western meadowlark (*Sturnella neglecta*), and northern mockingbird (*Mimus polyglottos*), were found within the buckwheat scrub and along the edge of the riparian vegetation. Common raven (*Corvus corax*), American crow (*C. brachyrhynchus*), and greater roadrunner (*Geococcyx californianus*) were also observed near the bike trail and existing rock riprap.

Several pairs of lesser nighthawk (*Chordeiles acutipennis*) were also detected in the large field of California buckwheat that dominates most of the upland stream terrace. In addition, red-tailed hawk (*Buteo jamicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), and American kestrel (*Falco sparverius*) were observed either soaring over the site (red-tailed hawks) or foraging for small birds in the Study Area (Coopers Hawk and kestrel). The carcass of a barn owl (*Tyto alba*) was located on one of the stream terraces.

**Mammals.** The Study Area is approximately 105 acres in size and is largely confined between developed areas and agricultural lands. However, the large width of the flood plain does allow for connectivity to natural lands in areas up and downstream from the Study Area. Generally the distribution of mammals in the Study Area is associated with the presence of such factors as access to perennial water, topographical and structural components (i.e., rock piles, vegetation, and stream terraces) that provide for cover and support prey base, and the presence of suitable soils for fossorial mammals (i.e., sandy areas on the large stream terrace). Both common and sensitive mammals were detected in the Study Area.

The detection of mammals in the Study Area during surveys included direct observation and evidence of use, including tracks, scat, burrows, or other signs. Small mammals or their sign were commonly observed during most of the surveys primarily in the margins of the riparian vegetation, the various rock flood control structures, and in some of the upper stream terraces. These included black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*). Evidence of California vole (*Microtus californicus*) and deer mouse (*Peromyscus maniculatus*) were also observed.

Mid-size mammals including raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and bobcat (*Felis rufus*) were detected. Most of these species were detected on the margins of Sespe Creek or near the small outlet structures that abut the developed areas on the east side of the Study Area. Because Sespe Creek provides a large continuous corridor between the Sierra Madre Mountains and the Los Padres National Forest, far-ranging species like mule deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), and possibly mountain lion (*Puma concolor*) may be infrequent visitors within the

Study Area. Because of the large citrus and avocado farms in the region black bear has been recorded in the Sespe Creek watershed near the City of Fillmore.

Bats were commonly detected in the Study Area and forage over most of the Study Area where prey species such as small insects, moths, and other invertebrates occur. However, many bats tend to concentrate foraging activities in riparian and wetland habitats where insect abundance is high (CDFG, 2000). Common bats detected in the Study Area using both visual searches and a Sonobat system included the canyon bat (*Parastrellus hesperus*), greater bonneted bat (*Eumops perotis*), Mexican free-tailed bat (*Tadarida brasiliensis*), Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), and big brown bat (*Eptesicus fuscus*). Although not detected, it is possible that bats occasionally roost within the large road bridge or at the rail road trestle that occur at the northern boundary of the site.

Because of the close proximity to urban development, the Study Area is also frequented by domestic animals including house cat (*Felis catus*) and domestic dog (*Canis familiaris*). It is also likely that invasive or urban associated mammals such as house rats (*Rattus* sp.), Virginia opossum (*Didelphis virginiana*), and common house mice (*Mus musculus*) occur in the urban wilderness interface to some degree.

#### C.4A Endangered, Threatened, or Rare Species

Special-status taxa include plant and wildlife species listed as threatened or endangered under the federal or California Endangered Species Acts, taxa proposed for listing, Species of Special Concern, plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California and beyond, and other taxa which have been identified by the United States Fish and Wildlife Service (USFWS), CDFW, or local jurisdictions (i.e., Ventura County) as unique or rare and which have the potential to occur within the Study Area. The Ventura County *General Plan* and *Initial Study Assessment Guidelines* (County of Ventura, 2011b; County of Ventura, 2011a) have also identified Significant Biological Resources to include any of the following:

- Habitats of endangered, threatened or rare species
- Wetland habitats
- Coastal habitats
- Migration corridors for fish or wildlife, or
- Locally important species/communities.

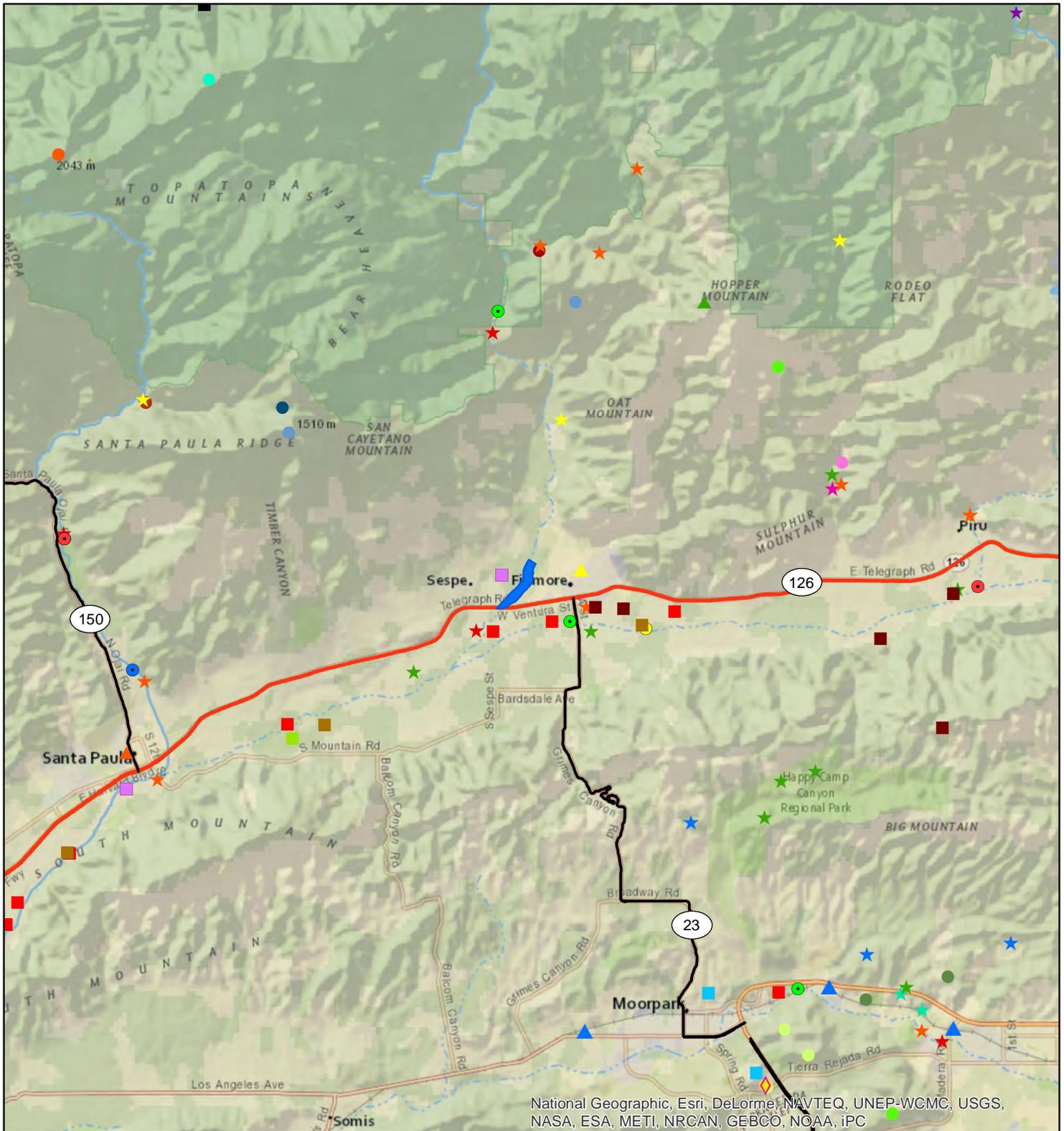
**Special-Status Plant Species.** Although special status plants were not observed within the Project Area, one special-status plant, southern California black walnut (*Juglans californica* var. *californica*), was detected within the Vegetation Study Area during botanical surveys conducted in July 2011. Due to due to relatively dry conditions during the surveys and the timing (July), it is possible that some plants were not in bloom or had previously flowered and desiccated prior to the surveys. Therefore, it is possible that some species were not detectable during the botanical surveys. It is important to note that the Project Area is subject to routine herbicide application as part of operation and maintenance activities and is generally devoid of vegetation. This operation and maintenance activity severely limits the ability of special-status plants to recruit/occur within the Project Area.

Table C.4-2 lists special-status plants, including federally and State listed, California Rare Plant Rank (CRPR) 1 – 4, and County of Ventura locally important species that may occur in or near the Study Area. A record search using the CNDDDB, the CNPS Online Inventory, and the Consortium of California

Herbaria (CCH) was performed for special-status plant taxa and botanical surveys were conducted within the Study Area. Figure C.4-3 illustrates the known locations of special-status plants occurring in or near the Study Area (CDFG, 2011a). The record search and consultation with local experts identified a total of 206 special-status taxa that have been documented within the general region of the Study Area. Of this total, 185 taxa were determined to have limited or no potential to occur due to a variety of factors and are not discussed further in this document. Each of the remaining 21 taxa was assessed for its potential to occur within the study area based on the following criteria:

- Present: Taxa were observed within the Study Area during recent botanical surveys or population has been acknowledged by CDFW, USFWS, or local experts.
- High: Both a documented recent record (within 10 years) exists of the taxa within the Study Area or immediate vicinity (approximately 5 miles) and the environmental conditions (including soil type) associated with the taxa occur within the Study Area.
- Moderate: Both a documented recent record (within 10 years) exists of the taxa within the Study Area or the immediate vicinity (approximately 5 miles) and the environmental conditions associated with the taxa are marginal and/or limited within the Study Area or the Study Area is located within the known current distribution of the taxa and the environmental conditions (including soil type) associated with taxa presence occur within the Study Area.
- Low: A historical record (over 10 years) exists of the taxa within the Study Area or general vicinity (approximately 10 miles) and the environmental conditions (including soil type) associated with taxa presence are marginal and/or limited within the Study Area.

Based on an assessment of current habitat conditions and the results of surveys in the Vegetation Study Area, it was determined that the remaining 21 taxa listed in Table C.4-2 have a low or moderate potential to occur. However, it is important to note that the vast majority of the proposed work area consists of disturbed or developed lands including the existing levee, bike trail, and the ruderal area located east of the levee and is subject to routine herbicide applications. Current conditions in these areas provide suboptimal habitat for rare plants at best.



National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, IPC

- |                             |                                  |                             |                                |
|-----------------------------|----------------------------------|-----------------------------|--------------------------------|
| Study Area                  | <b>Fish</b>                      | <b>Herps</b>                | <b>Birds</b>                   |
| <b>Plants</b>               | Arroyo chub                      | Arroyo toad                 | Burrowing owl                  |
| Abrams' oxytheca            | Santa Ana sucker                 | Coast horned lizard         | California condor              |
| California Orcutt grass     | Southern steelhead               | Coast patch-nosed snake     | Coastal California gnatcatcher |
| Great's aster               | Unarmored threespine stickleback | Coastal whiptail            | Least Bell's vireo             |
| Late-flowered mariposa-lily | <b>Mammals</b>                   | Foothill yellow-legged frog | Southwestern willow flycatcher |
| Lyon's pentachaeta          | American badger                  | Two-striped garter snake    | Western yellow-billed cuckoo   |
| Ojai fritillary             | Hoary bat                        | Western pond turtle         | White-tailed kite              |
| Plummer's mariposa-lily     | Pallid bat                       | Western spadefoot           | <b>Invertebrates</b>           |
| Rock Creek broomrape        | San Diego desert woodrat         |                             | Riverside fairy shrimp         |
| Ross' pitcher sage          |                                  |                             |                                |
| Round-leaved filaree        |                                  |                             |                                |
| Umbrella larkspur           |                                  |                             |                                |

**Figure C.4-3**

**CNDDDB Special-Status Species Locations**



**Table C.4-2. Known and Potential Occurrence of Special-Status Plant Taxa  
Within the Project Area**

Taxa		Status	Blooming Period	Habitat Association and Elevation Limits	Potential to Occur in the Vegetation Study Area
Scientific Name	Common Name				
<i>Alisma plantago-aquaticum</i> ( <i>A. triviale</i> )	Common water-plantain	Fed: none CA: none CRPR: none VC: Yes	Apr – Oct	Aquatic perennial herb; ponds below about 5200 ft. elev.; much of western Calif., N. America, Eurasia; local occurrence at Mirror Lake.	<b>Low.</b> Vegetation Study Area supports limited habitat; not detected during surveys.
<i>Allium praecox</i>	Early onion	Fed: none CA: none CRPR: none VC: Yes	Mar – Apr	Bulb; grasslands, shrublands, woodlands; generally in shade or on north-facing slopes; SW Calif., Santa Barbara to San Diego Cos., N. Baja; below about 2600 ft. elev.	<b>Low.</b> Vegetation Study Area supports poor quality habitat for this species; not detected during surveys.
<i>Amaranthus californicus</i>	California amaranth	Fed: none CA: none CRPR: none VC: Yes	Jul – Oct	Spreading annual; mud flats, lake shores; much of Calif. and western N. America; about sea level to 9200 ft. elev.	<b>Low.</b> Vegetation Study Area supports poor quality habitat for this species; not detected during surveys.
<i>Ammannia coccinea</i>	Purple ammannia	Fed: none CA: none CRPR: none VC: Yes	May – Oct	Annual; margins and shores of ponds, lakes, streams, etc.; much of central and southern Calif.; N. America to C. America; sea level to about 1000 ft. elev.	<b>Moderate.</b> Vegetation Study Area supports marginal habitat for this species; not detected during surveys.
<i>Baccharis emoryi</i>	Emory's baccharis	Fed: none CA: none CRPR: none VC: Yes	Apr – Dec	Shrub; coastal sage scrub and riparian habitats; much of southern California. About sea level to about 3000 ft. elev. One record in Ventura County.	<b>Low.</b> Vegetation Study Area supports marginal habitat for this species; not detected during surveys.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	Fed: none CA: S3.2 CRPR: 1B.2 VC: Yes	May – Jul	Bulb; shrublands, woodlands, lower pine forests; mountains, foothills, and valleys; Ventura to Orange Cos., inland to Riverside and San Bernardino Cos.; about 300-5600 ft. elev.	<b>Moderate.</b> Vegetation Study Area supports suitable habitat; not detected during surveys.
<i>Chorizanthe procumbens</i>	Prostrate spineflower	Fed: none CA: none CRPR: none VC: Yes	Mar – Jun	Annual; shrublands; Coast Ranges and southwestern Calif., Santa Barbara Co. south to San Diego Co.; below about 3000 ft. elev.	<b>Moderate.</b> Vegetation Study Area supports suitable habitat; not detected during surveys.
<i>Cryptantha corollata</i>	Coast Range cryptantha	Fed: none CA: none CRPR: none VC: Yes	Mar – Jun	Annual; grasslands, shrublands, woodlands; Coast Ranges and southwestern Calif., San Benito Co. south to Riverside Co.; below about 4500 ft. elev.	<b>Low.</b> Not detected during surveys, suitable habitat does occur in the Vegetation Study Area.
<i>Elodea canadensis</i>	Common waterweed	Fed: none CA: none CRPR: none VC: Yes	Jun – Jul	Aquatic perennial herb; ponds or slow-flowing streams, valleys and foothills to high mountains; much of Calif. and N. America; about 1000-8500 ft. elev.	<b>Low.</b> Suitable habitat present, Not detected during surveys.

Taxa		Status	Blooming Period	Habitat Association and Elevation Limits	Potential to Occur in the Vegetation Study Area
Scientific Name	Common Name				
<i>Horkelia cuneata</i> <i>ssp. puberula</i>	Mesa horkelia	Fed: none CA: S2.1 CRPR: 1B.1 VC: Yes	Apr – Sep	Perennial herb; shrublands, woodlands; sandy soils, away from immediate coast; San Luis Obispo to San Diego Co., rarely inland to San Bernardino Co.; about 200-2700 ft. elev.	<b>Moderate.</b> Suitable habitat present, not detected during surveys.
<i>Juglans californica</i> <i>var. californica</i>	Southern California black walnut	Fed: none CA: S3.2 CRPR: 4.2 VC: No	Mar – Aug	Tree; woodlands, coastal sage scrub, chaparral; Santa Barbara Co. to San Diego Co., inland to western San Bernardino and Riverside Cos.; about 150-3000 ft. elev.	<b>Present.</b> One individual observed in the Vegetation Study Area.
<i>Lepechinia rossii</i>	Ross' pitcher sage	Fed: none CA: S1.2 CRPR: 1B.2 VC: No	May – Sep	Shrub; shrublands and woodlands; Ventura Co. and Los Angeles Co. about 1000-3000 ft. elev.	<b>Low.</b> Low quality habitat, could establish on-site as wash down from upper watershed, not detected during survey.
<i>Mentzelia affinis</i>	Yellow blazing star	Fed: none CA: none CRPR: none VC: Yes	Mar – May	Annual; grasslands, woodlands, desert shrublands; sandy sites; much of southern and central Calif. to Arizona and Baja Calif.; near sea level to about 4000 ft. elev.	<b>Moderate.</b> Low quality habitat present, not detected during surveys.
<i>Mucronea californica</i> ( <i>Chorizanthe californica</i> )	California spineflower	Fed: none CA: S3 CRPR: 3.1 VC: Yes	Apr – Jul	Annual; many habitats; sandy soils; San Luis Obispo to San Diego Cos., inland to San Bernardino and Kern Cos.; near sea level to about 4600 ft. elev.	<b>Low.</b> Not detected during surveys, poor quality habitat is present in the Vegetation Study Area.
<i>Navarretia ojaiensis</i>	Ojai navarretia	Fed: none CA: S1 CRPR: 1B.1 VC: No	May – Jul	Annual; open places in chaparral, coastal scrub, grasslands; western Transverse Ranges, LA and Ventura Cos.; about 900-2000 ft. elev.	<b>Low.</b> Low quality habitat present; not detected during surveys.
<i>Pseudognaphalim leucocephalum</i> ( <i>Gnaphalium leucocephalum</i> )	White rabbit tobacco	Fed: none CA: S2S3.2 CRPR: 2.2 VC: No	Jul – Dec	Perennial herb; shrublands, sea level to about 7000 ft. elev.; open sand, usually on alluvium; San Luis Obispo through San Diego Cos, inland to Riverside and San Bernardino Cos; disjunct (and may be a different species) from occurrences in Arizona, Texas, Sonora	<b>Moderate.</b> Suitable habitat occurs in the Vegetation Study Area, not detected during surveys.
<i>Ribes aureum</i> var. <i>gracillimum</i>	Slender golden currant	Fed: none CA: none CRPR: none VC: Yes	Dec – Jun	Shrub; shrublands and woodlands, coastal California from about 100-3000 ft. elev.	<b>Low.</b> Suitable habitat present, not detected during surveys.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Fed: none CA: S3.2 CRPR: 1B.2 VC: Yes	May – Aug	Perennial herb; shallow freshwater ponds, marshes, ditches, etc.; northern Calif. coast, Central Valley; historically from Orange and Ventura Cos., but evidently now extirpated; sea level to about 2100 ft elev.	<b>Low.</b> Low quality habitat present; not detected during surveys.

Taxa		Status	Blooming Period	Habitat Association and Elevation Limits	Potential to Occur in the Vegetation Study Area
Scientific Name	Common Name				
<i>Stillingia linearifolia</i>	Narrow-leaved stillingia	Fed: none CA: none CRPR: none VC: Yes	Mar – May	Subshrub; open shrublands; arid sites; interior southwestern Calif. through deserts to Ariz. and New Mexico; near sea level to about 5000 ft. elev.	<b>Moderate.</b> Suitable habitat does occur in the Vegetation Study Area, not detected during surveys.
<p><b>Federal Rankings:</b>                      FE – Federally Endangered                      FT – Federally Threatened  <b>State Rankings:</b>                      S1 – Less than 6 existing occurrences OR less than 100 individuals                      S2 – Between 6-20 existing occurrences OR between 1000-3000 individuals                      S3 – Between 21-100 existing occurrences OR between 3000-10,000 individuals                          .1 – Very threatened                          .2 – Threatened                          .3 – No current threats known                      (Rank may be expressed as a range of values; hence S2S3 means the rank is somewhere between the two; adding ? to the rank, such as in S2?, represents more certainty than S2S3, but less than S2)</p> <p><b>CRPR Rankings:</b>                      CRPR 1A – Presumed extinct in California                      CRPR 1B – Rare or endangered in California and elsewhere                      CRPR 2 – Rare or endangered in California, more common elsewhere                      CRPR 3 – More information needed                      CRPR 4 – Limited distribution (Watch List)                          0.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)                          0.2 = Fairly endangered in California (20-80% occurrences threatened)                          0.3 = Not very endangered in California (&lt;20% of occurrences threatened or no current threats known)</p> <p><b>County Rankings:</b>                      VC – Ventura County Locally Important Species</p> <p>Sources: CDFG 2011a, CNPS, 2011, County of Ventura 2008b and 2012.</p>					

**Special-Status Wildlife.** A total of twelve special-status taxa were either observed or assumed to be present within, or immediately adjacent to the Study Area, based on recent surveys conducted by Aspen from July to November 2011, and/or consultation with local experts. Sensitive fish include Santa Ana sucker (*Catostomus santaanae*), Owen’s sucker (*Catostomus fumeiventris*), partially armored threespine stickleback (*Gasterosteus aculeatus williamsoni*), Arroyo chub (*Gila orcuttii*), and southern steelhead-southern California DPS (*Oncorhynchus mykiss irideus*). Reptiles include coastal whiptail (*Aspidoscelis tigris stejnegeri*) and western pond turtle (*Emys marmorata*). Sensitive raptors and songbirds with the potential to occur in the Project Area include Cooper’s hawk (*Accipiter cooperii*), great blue heron (*Ardea herodias*), yellow warbler (*Dendroica petechial brewsteri*), and loggerhead shrike (*Lanius ludovicianus*). The only sensitive mammal with detected was the western mastiff bat (*Eumops perotis californicus*). Although not observed during the surveys, habitat for least Bell’s vireo, a State and federal endangered species, occurs adjacent to portions of the Project Area. Sespe Creek is also known to support southern steelhead-southern California DPS, a federal endangered species and California Species of Special Concern. The remaining 60 taxa were determined to have a low, moderate or high potential to occur in the Study Area based on existing recorded occurrences, known geographic range, and/or the presence of suitable habitat. Table C.4-3 summarizes the special-status wildlife taxa known to regionally occur and their potential for occurrence in the Study Area. During the surveys conducted in 2011 and 2012 it was noted that rodenticide, as part of routine operation and maintenance activities of the existing levee structure, was placed in various locations throughout the Project Area. The use of this product can effectively reduce small mammal populations with can reduce forage value for some special-status mammals and birds.

**Table C.4-3. Known and Potential Occurrence of Special Status Wildlife Species Within and Adjacent to the Proposed Project Area**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<b>INVERTEBRATES</b>					
<i>Haplotrema caelatum</i>	Slotted lancetooth snail	VC	Terrestrial; southern California endemic known from Santa Barbara, Ventura, Los Angeles, and San Diego Cos.	There are no known recent records for this species in the Study Area; The Study Area is located within the known geographic distribution for this species (Magney, 2005); suitable habitat is limited throughout the Study Area.	Moderate
<i>Helminthoglypta phlyctaena</i>	Zaca shoulderband snail	VC	Terrestrial; endemic known only from Santa Barbara and Ventura Counties.	There are no known recent records for this species in the Study Area; The Study Area is located within the known geographic distribution for this species (Magney, 2005); suitable habitat is limited throughout the Study Area.	Moderate
<i>Helminthoglypta salviae</i>	Sage shoulderband snail	VC	Terrestrial; endemic to Ventura County.	There are no known recent records for this species in the Study Area; The Study Area is located within the known geographic distribution for this species (Magney, 2005); suitable habitat is limited throughout the Study Area.	Moderate
<i>Helminthoglypta traskii</i>	Trask shoulderband snail	SA, VC	Terrestrial; southern California endemic known from Ventura, Los Angeles, Orange, and San Diego Counties; prefers coastal sage scrub and chaparral.	There are no known recent records for this species in the Study Area; the nearest record of this species is in the Conejo Valley near Thousand Oaks and at Malibu Lagoon State Park (Magney, 2005); the Study Area is located within the known geographic distribution for this species (Magney, 2005); suitable habitat is limited within the Study Area.	Moderate
<i>Helminthoglypta venturensis</i>	Ventura shoulderband snail	VC	Terrestrial; endemic to Ventura County.	There are no known recent records for this species in the Study Area; the nearest record of this species is in the western end of Simi Valley (Magney, 2005); the Study Area is located within the known geographical distribution for this species (Magney, 2005); suitable habitat is limited within the Study Area.	Moderate
<i>Helminthoglypta willetii</i>	Matilija shoulderband snail	VC	Terrestrial; endemic to Ventura County; chaparral, coast live oak woodlands, riparian woodlands; mountainous areas.	There are no known recent records for this species in the Study Area; the nearest record of this species is in Ventura (Lake Canyon), the Ojai area, and Sisar Canyon (Magney 2005 and Hunt et al. 1993); the Study Area is located within the known geographic distribution for this species (Magney, 2005); suitable habitat occurs throughout the Study Area.	Moderate
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	Vernal pools.	There are no known records for this species in the Study area or surrounding areas; nearest CNDDB record for this species occurs more than 12 miles to the southeast in the Tierra Rejada Valley; the Study Area is located within the known geographic distribution for this species however no indication of vernal pools or other suitable seasonal pools were identified in the Study Area.	Low
<i>Timema monikensis</i>	Santa Monica Mountains timema	VC	Terrestrial; endemic to the Transverse Ranges in scrub habitats.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic distribution for this widespread species; suitable habitat occurs throughout the Study Area.	Moderate

Sespe Creek Levee Improvements Project

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<b>FISH</b>					
<i>Catostomus santaanae</i>	Santa Ana sucker	FT, CSC	Typically inhabits small, shallow streams and rivers less than 23 feet (7 meters) wide where water temperature is generally below 72 ° F (22 ° C), and where currents range from swift to sluggish (USFWS, 2000)	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when flowing water is present). Currently the USFWS does not include the Santa Clara River Watershed population in the threatened listing.	Present
<i>Catostomus fumeiventris</i>	Owens sucker	CSC	Generally found soft-bottomed cool-run streams, lakes or reservoirs.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when flowing water is present).	Present
<i>Cottus asper</i>	Prickly sculpin	VC	Occurs in coastal and inland streams; typically inhabits pools and slowly flowing waters; prefers bottoms of fine materials, sands.	This species is known to occur along portions of the Santa Clara River (United Water, 2007); the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when flowing water is present).	Moderate
<i>Gasterosteus aculeatus microcephalus</i>	Partially armored threespine stickleback	SA, VC	Subspecies occurs in freshwater habitats exclusively; prefers relatively shallow inshore waters in lakes and streams.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when flowing water is present).	Present
<i>Gasterosteus aculeatus williamsoni</i>	Unarmored threespine stickleback	FE, SE, CFP	Slow-moving and backwater areas of coastal and inland streams.	Although not documented from Sespe Creek this species has been recorded within upper Santa Clara River watershed; the Study Area is located outside of the known geographic distribution for this species; suitable habitat occurs within portions of the Study Area.	Low
<i>Gila orcuttii</i>	Arroyo chub	CSC	Los Angeles Basin southern coastal streams; slow water stream sections with mud or sand bottoms; feeds heavily on aquatic vegetation and associated invertebrates.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when flowing water is present).	Present
<i>Oncorhynchus mykiss irideus</i>	Southern steelhead – southern California DPS	FE, CSC	Clear-flowing streams and rivers; typically inhabit deep pools with overhanging banks; anadromous; adults spawn in runs and riffles in gravel and small cobble substrates.	Steelhead, the anadromous form of this rainbow trout, is known to occur in Sespe Creek and its major tributaries.	Present
<b>AMPHIBIANS</b>					
<i>Aneides lugubris</i>	Arboreal salamander	VC	Coastal live-oak woodlands, yellow pine and black oak forests in foothills; typically found on ground under leaf litter, rocks, logs; also climbs trees; not dependent on water.	This species is known to occur throughout the Coast Ranges from Humboldt County to Baja Calif.; there are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species.	Moderate

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Anaxyrus californicus</i>	Arroyo toad	FE, CSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash; rivers with sandy banks, willows, cottonwoods, and/or sycamores.	Although not documented from the Sespe Creek watershed, this species has been recorded within the nearby Piru Creek watershed; the Study Area is located outside of the known current geographic distribution for this species; suitable habitat occurs within portions of the Study Area.	Low
<i>Rana boylei</i>	Foothill yellow-legged frog	CSC	Prefers partly shaded, shallow streams with a rocky substrate; requires a minimum of 15 weeks of permanent water for metamorphosis.	Although not documented from the Study Area or surrounding areas, this species has historically been recorded within the upper Sespe Creek Watershed (occurrence was in 1921); the Study Area is located within the historic geographic distribution for this species; suitable habitat occurs within portions of the Study Area.	Low
<i>Rana draytonii</i>	California red-legged frog	FT, CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation; requires 11-20 weeks of permanent water for larval development; must have access to aestivation habitat.	Although not documented from the Study Area, this species has been recorded within the headwaters of Piru Creek and in the upper Santa Clara River watershed. The Study Area is located within of the known geographic distribution for this species; suitable but limited habitat occurs within portions of the Study Area.	Low
<i>Spea hammondi</i>	Western spadefoot	CSC	Occurs in numerous habitat types, primarily in grasslands but can be found in valley-foothill hardwood woodlands, sage scrubs, chaparral where pooled/ponded water, supporting typically clay-rich soils, remains through early spring (April/May); in some areas, vernal pools, stock ponds, and road pools are essential for breeding, egg-laying, and larval development.	There are no known records for this species in the Study area or surrounding areas; nearest CNDDB record for this species occurs approximately 6 miles to the southeast in the vicinity of Happy Camp Canyon Regional Park; the Study Area is located within the known geographic distribution for this species; suitable habitat does occur within the Study Area.	Moderate
<i>Taricha torosa torosa</i>	Coast Range newt	CSC	Breeds in ponds, reservoirs, streams; terrestrial individuals occupy various adjacent upland habitats, including grasslands, woodlands, and forests.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic distribution for this widespread species; suitable habitat occurs throughout the Study Area.	Low
<b>REPTILES</b>					
<i>Anniella pulchra pulchra</i>	Silvery legless lizard	CSC	Sandy or loose loamy soils under sparse vegetation; soil moisture is essential; prefer soils with high moisture content.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic distribution for this widespread species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Aspidoscelis tigris stejnegeri</i>	Coastal whiptail	SA	Found in deserts and semi-arid areas with sparse vegetation and open areas; also found in woodland and riparian habitats; substrates may be firm soil, sandy, or rocky.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Present

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Coluber flagellum piceus</i>	Red racer	VC	Occurs in open terrain; most abundant in grasslands, desert, scrub, chaparral, and pasture habitats.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Diadophis punctatus</i>	Ring-necked snake	VC	Occurs in woodlands, forests, grasslands, chaparral, and riparian corridors in arid regions; prefers seasonally moist habitats.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Emys marmorata</i>	Western pond turtle	CSC	Inhabits permanent or nearly permanent bodies of water in various habitat types; requires basking sites such as partially submerged logs, vegetation mats, or open mud banks.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout Sespe Creek (during periods when ponded/flowing water is present).	Present
<i>Hypsiglena ochrorhyncha</i>	Coast night snake	VC	Found in a variety of valley-foothill habitats, chaparral, and desert scrub.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Lampropeltis zonata</i>	California mountain kingsnake	CSC, VC	Occurs in a variety of habitats, including valley-foothill hardwood, hardwood-conifer, chaparral, riparian, meadows; most common in vicinity of boulders, rocks near streams or lakes; very secretive.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this secretive species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Leptotyphlops humilis</i>	Western blind snake	VC	Habitats range from deserts and desert grasslands to brush-covered mountain slopes, including rocky hillsides, canyon bottoms or washes near streams, riparian corridors.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this secretive species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Phrynosoma blainvillii</i>	Coast horned lizard	CSC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate zones; prefers friable, rocky, or shallow sandy soils; requires native ant food source.	There are no known records for this species in the Study Area or surrounding areas; nearest CNDDB record for this species occurs approximately 1.5 miles to the southeast just east of Highway 23; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within the Study Area.	Moderate
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	CSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, rocky areas; broad generalist.	There are no known records for this species in the Study Area; nearest CNDDB record for this species occurs approximately 6.5 miles to the east in the vicinity of Sulphur Mountain; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within the Study Area.	Moderate
<i>Tantilla planiceps</i>	Western black-headed snake	VC	Inhabits grasslands, coastal scrub, chaparral, oak woodlands; often found in rocky areas along streams.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Moderate

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Thamnophis hammondi</i>	Two-striped garter snake	CSC	Highly aquatic; found in or near permanent fresh water; often along streams with rocky beds and riparian growth.	There are no known records for this species in the Study Area; nearest CNDDB record for this species occurs approximately 1.5 miles to the southeast just south of Highway 126; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within the Study Area.	High
<i>Thamnophis sirtalis ssp.</i>	South coast garter snake	CSC	Inhabits scrub, chaparral, annual and native grassland, freshwater marsh and agriculture (Corps and CDFG, 2010).	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Trimorphodon biscutatus</i>	Western lyre snake	VC	Primarily occurs in rocky areas of lowlands, canyons, mesas, and lower mountain slopes.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this secretive species; moderately suitable habitat occurs within the Study Area.	Moderate
<b>BIRDS</b>					
<i>Accipiter cooperii</i> (nesting)	Cooper's hawk	WL	Woodland, chiefly of open, interrupted, or marginal type; nest sites mainly in riparian growths of deciduous trees.	This species was documented within the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable rookery habitat occurs within the northeastern portions of the Study Area, suitable foraging habitat occurs throughout the Study Area; the Study Area is located within the known geographic year-round distribution for this species; suitable nesting habitat occurs within the northern portions of the Study Area; suitable foraging habitat occurs throughout the Study Area.	Present
<i>Accipiter striatus</i> (nesting)	Sharp-shinned hawk	WL	Prefers, but not restricted to riparian habitats; breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats; requires north-facing slopes with perches.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic year-round distribution for this species; suitable breeding habitat does not occur, however, suitable foraging habitat occurs throughout the Study Area.	High
<i>Agelaius tricolor</i> (nesting colony)	Tricolored blackbird	CSC, BCC	Highly colonial species; requires open water, protected nesting substrate, and foraging areas with insect prey within a few kilometers of colony.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding and foraging habitat occurs throughout the Study Area.	High
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	WL	Resident in southern California coastal sage scrub and sparse mixed chaparral; frequents relatively steep, often rocky hillsides with grass and forb patches.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding and foraging habitat occurs throughout the Study Area.	High
<i>Ardea herodias</i> (rookery sites)	Great blue heron	SA	Rookery sites typically occur in groves of large trees within proximity to aquatic foraging areas of streams, wetlands, and grasslands.	This species was documented in the Study Area during surveys conducted in 2011. The Study Area is located within the known geographic distribution for this species; suitable rookery habitat occurs within the northeastern portions of the Study Area, suitable foraging habitat occurs throughout the Study Area.	Present (No rookery observed)

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Asio flammeus</i> (nesting)	Short-eared owl	CSC	Usually occurs in open areas with few trees, such as grasslands, prairies, dunes, meadows, agricultural fields, emergent wetlands; requires dense vegetation for cover.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic year-round distribution, however, is outside of the known breeding range for this species; suitable foraging habitat occurs throughout the Study Area.	Low
<i>Athene cunicularia</i> (burrowing sites & some wintering sites)	Burrowing owl	BCC, CSC	Open, dry perennial or annual grasslands, deserts, and scrublands characterized by low-growing vegetation; subterranean nester, dependent upon burrowing mammals, particularly California ground squirrels.	There are no known records for this species in the Study Area; nearest CNDDDB record for this species occurs approximately 1.5 miles to the southeast just south of Highway 126; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within limited portions of the Study Area.	Moderate
<i>Calypte costae</i>	Costa's hummingbird	SA	Primarily occurs in desert wash, edges of desert riparian and valley-foothill riparian, coastal scrub, desert scrub, low-elevation chaparral.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding and foraging habitat occurs throughout the Study Area.	Moderate
<i>Carduelis lawrencei</i> (nesting)	Lawrence's goldfinch	BCC, SA	Nests in open oak or other arid woodland and chaparral near water; nearby herbaceous habitats used for foraging; closely associated with oaks.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding does not occur within but may be present in areas adjacent to the Study Area; foraging habitat occurs throughout the Study Area.	Moderate
<i>Chaetura vauxi vauxi</i> (nesting)	Vaux's swift	CSC	Breeds in coniferous and mixed coniferous forests; requires large-diameter, hollow trees for breeding and roosting; forages in areas of open water where insect prey congregates.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding habitat does not occur within but may be present in areas adjacent to the Study Area; foraging habitat occurs throughout the Study Area.	Moderate
<i>Circus cyaneus</i> (nesting)	Northern harrier	CSC	Prefer open country, grasslands, steppes, wetlands, meadows, agriculture fields; roost and nest on ground in shrubby vegetation often at edge of marshes.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding and foraging habitat occurs throughout the Study Area.	Moderate
<i>Coccyzus americanus occidentalis</i> (nesting)	Western yellow-billed cuckoo	FC, SE	Nests along the broad, lower flood-bottoms of larger river systems; also nests in riparian forests and riparian jungles of willow often mixed with cottonwoods, with an understory of blackberry, nettles, or wild grape (Corps and CDFG, 2010).	There are no known records for this species in the Study Area; the nearest CNDDDB record for this species occurs approximately 0.5 miles to the west of the Study Area; the Study Area is located within the known geographic distribution for this species; breeding and foraging habitat does not occur in the Study Area.	Low
<i>Dendroica petechia brewsteri</i> (nesting)	Yellow warbler	CSC	Riparian plant associations; prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging.	This species was documented within the Study Area during surveys conducted in 2011 and was noted as a potential breeding resident; the Study Area is located within the known geographic distribution for this species; limited breeding and foraging habitat occurs in the Study Area.	Present

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Elanus leucurus</i> (nesting)	White-tailed kite	CFP	Typically nests at lower elevations in riparian trees, including oaks, willows, and cottonwoods; forages over open country.	There are no known records for this species in the Study Area or surrounding areas; nearest CNDDDB record for this species occurs approximately 5.5 miles to the west along the Santa Clara River near Santa Paula; the Study Area is located within the known geographic distribution for this species; limited breeding and foraging habitat occurs in the Study Area.	High
<i>Empidonax traillii extimus</i> (nesting)	Southwestern willow flycatcher	FE, SE	Riparian woodlands in southern California.	There are no known records for this species in the Study Area or surrounding areas; nearest CNDDDB record for this species occurs approximately 3.0 miles to the southeast along the Santa Clara River; the Study Area is located within the known geographic distribution for this species; suitable breeding habitat is not present within the Study Area; suitable foraging habitat occurs throughout the Study Area.	Moderate (Migrants)
<i>Falco columbarius</i> (non-breeding/ wintering)	Merlin	WL	Wide-variety of habitats including marshes, deserts, seacoasts, open woodlands, fields.	There are no known records for this species in the Study Area or surrounding areas; This species is a winter resident that does not breed in California; the Study Area is located within the known geographic winter distribution for this species; suitable foraging habitat occurs throughout the Study Area.	Moderate
<i>Falco mexicanus</i> (nesting)	Prairie falcon	BCC, WL	Rare in southern California; nests along cliff faces or rocky outcrops; forages over open spaces, agricultural fields.	There are no known records for this species in the Study Area or surrounding areas; this species has been documented west of the Study Area in the Matilija Creek riparian corridor above Matilija Dam (Hunt and Associates, 2009); the Study Area is located within the known geographic year-round distribution for this species; suitable nesting habitat does not occur; suitable foraging habitat occurs throughout the Study Area.	Low
<i>Falco peregrinus anatum</i>	American peregrine falcon	BCC, CFP	Occurs in various open habitats, especially where suitable nesting cliffs present.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable breeding habitat does not occur within but may be present in areas adjacent to the Study Area; foraging habitat occurs throughout the Study Area.	Low
<i>Gymnogyps californianus</i>	California condor	FE, SE, CFP	Nests in caves, crevices, behind rock slabs, or on large ledges on high sandstone cliffs; requires vast expanses of open savannah, grasslands, and foothill chaparral with cliffs, large trees and snags for roosting and nesting.	This species is known from the upper Sespe Creek watershed; suitable nesting habitat does not occur; limited foraging habitat occurs throughout the Study Area.	Moderate
<i>Icteria virens</i> (nesting)	Yellow-breasted chat	CSC	Inhabits riparian thickets of willow and other brushy tangles near water courses; nests in low, dense riparian vegetation; nests and forages within 10 feet of ground.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; limited breeding and foraging habitat occurs in the Study Area.	Moderate

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Lanius ludovicianus</i> (nesting)	Loggerhead shrike	BCC, CSC	Broken woodland, savannah, pinyon-juniper woodland, Joshua tree woodland, riparian woodland, desert oases, scrub, and washes; prefers open country for hunting with perches for scanning and fairly dense shrubs and brush for nesting.	This species was documented within the Study Area during surveys conducted in 2011 and was noted as potentially breeding; the Study Area is located within the known geographic distribution for this species; suitable breeding and foraging habitat occurs throughout the Study Area.	Present
<i>Pandion haliaetus</i>	Osprey	WL	Forages and nests along rivers, lakes, and reservoirs.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable foraging habitat occurs throughout the Study Area.	Low
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT, CSC, BCC	Various sage scrub communities, often dominated by California sage and buckwheat; generally avoids nesting in areas with a slope of greater than 40%, and typically less than 820 feet in elevation (Corps and CDFG, 2010).	There are no known records for this species in the Study Area or surrounding areas; nearest CNDDDB record for this species occurs approximately 9.5 miles to the south near the City of Moorpark; the Study Area is located within the known geographic distribution for this species..	Moderate (Dispersing)
<i>Riparia riparia</i> (nesting)	Bank swallow	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert; requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, or the ocean to dig a nesting hole (Corps and CDFG, 2010).	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable habitat occurs within portions of the Study Area.	Moderate
<i>Selasphorus sasin</i>	Allen's hummingbird	SA	Most commonly breeds in coastal scrub, valley-foothill hardwood, and valley-foothill riparian habitats; occurs in a variety of woodland and scrub habitat as a migrant.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable habitat occurs throughout the Study Area.	Moderate
<i>Vireo bellii pusillus</i> (nesting)	Least Bell's vireo	FE, SE, BCC	Summer resident of southern California in low riparian habitats in vicinity of water or dry river bottoms; found below 2000 ft; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mesquite, baccharis.	This species was not detected during recent focused surveys; however, it has been recently documented along the Santa Clara River just south of the Study Area; the Study Area is located within the known geographic breeding distribution for this subspecies; suitable habitat occurs within portions of the Study Area.	Moderate (Dispersing)

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<b>MAMMALS</b>					
<i>Antrozous pallidus</i>	Pallid bat	CSC	Desert, grassland, shrubland, woodland, forest; most common in open, dry habitats with rocky areas for roosting; very sensitive to disturbance of roosting sites.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; potential breeding does not occur within the Study Area but may be present in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	High
<i>Bassariscus astutus</i>	Ringtail	CFP	Occurs in chaparral, coastal sage scrub, riparian scrub, oak woodlands, and riparian woodlands in proximity to permanent water.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable habitat occurs throughout the Study Area.	Low
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	CSC	Variety of habitats, including coastal scrub, chaparral, and grassland; attracted to grass-chaparral edges.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; suitable habitat occurs in discrete portions of the Study Area.	Moderate
<i>Euderma maculatum</i>	Spotted bat	CSC	Occupies a wide variety of habitats from arid deserts and grasslands, to mixed conifer forests; feeds over water and along washes; needs rock crevices in cliffs or caves for roosting (Corps and CDFG, 2010).	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; potential breeding habitat does not occur within the Study Area but may be present in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	Moderate
<i>Eumops perotis californicus</i>	Western mastiff bat	CSC	Many open, semi-arid to arid habitats, including coniferous and deciduous woodland, coastal scrub, grassland, chaparral; roosts in crevices in cliff faces, high buildings, trees, tunnels.	This species was documented within the Study Area during surveys conducted in 2011; the Study Area is located within the known geographic distribution for this species; suitable breeding habitat does not occur within the Study Area but may occur in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	Present
<i>Lasiurus cinereus</i>	Hoary bat	SA, VC	Prefers deciduous and coniferous woodlands; primarily roosts in tree foliage.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; potential breeding habitat does not occur within the Study Area but may be present in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	Moderate
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	CSC	Intermediate canopy stages of shrub habitats and shrub, tree, herbaceous edges; primarily coastal sage scrub habitats.	This species is known from the Santa Clara River Valley; the Study Area is located within the known geographic distribution for this subspecies; suitable habitat occurs throughout the Study Area.	High
<i>Macrotus californicus</i>	California leaf-nosed bat	CSC	Prefers caves, mines and rock shelters in Sonoran desert scrub.	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; potential breeding habitat does not occur within the Study Area but may be present in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	Moderate

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	Common Name				
<i>Myotis ciliolabrum</i>	Western small-footed myotis	SA	Occurs in a wide variety of arid upland habitats at elevations ranging from sea level to 2,700 meters (8,860 feet); day roosts include rock crevices, caves, tunnels and mines, and, sometimes, buildings and abandoned swallow nests. [Corps and CDFG, 2010]	There are no known recent records for this species in the Study Area; the Study Area is located within the known geographic range for this species; potential breeding habitat does not occur within the Study Area but may be present in adjacent areas; suitable foraging habitat occurs throughout the Study Area.	Moderate
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	CSC	Coastal scrub; prefers moderate to dense canopies; particularly abundant in rock outcrops, rocky cliffs, and slopes.	This species is known from the Santa Clara River Valley; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within portions of the Study Area.	High
<i>Taxidea taxus</i>	American badger	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils; require sufficient food source, friable soils, and open, uncultivated ground; prey on burrowing rodents.	There are no known records for this species in the Study Area; the Study Area is located within the known geographic distribution for this species; suitable habitat occurs within portions of the Study Area.	Low

**Federal Rankings:**

FE = Federally Endangered  
 FT = Federally Threatened  
 FC = Federal Candidate for Listing  
 BCC = USFWS Bird of Conservation Concern

**County Rankings:**

VC = Ventura County Locally Important Species

**State Rankings:**

SE= State Endangered  
 ST = State Threatened  
 CFP = California Fully Protected  
 CPF = California Protected Fur-bearer  
 SA = CDFW Special Animal  
 WL = CDFW Watch List  
 CSC = California Species of Special Concern

The CNDDDB was queried for occurrences of special-status wildlife taxa within the USGS topographical quadrangle in which the Study Area occurs and the eight surrounding quadrangles. The specific habitat requirements and the locations of known occurrences of each special-status wildlife taxa were the principal criteria used for inclusion in the list of taxa potentially occurring within the Study Area. There are currently 71 special-status wildlife taxa that have been documented within the general region of the Study Area. Each of the 71 taxa were assessed for its potential to occur within the Study Area based on the following criteria:

- Present:** Taxa (or sign) were observed in the Study Area or in the same watershed (aquatic taxa only) during the most recent surveys, or a population has been acknowledged by CDFW, USFWS, or local experts.
- High:** Habitat (including soils) for the taxa occurs on site and a known occurrence occurs within the Study Area or adjacent areas (within 5 miles of the site) within the past 20 years; however, these taxa were not detected during the most recent surveys.
- Moderate:** Habitat (including soils) for the taxa occurs on site and a known regional record occurs within the database search, but not within 5 miles of the site or within the past 20 years; or a known occurrence occurs within 5 miles of the site and within the past 20 years and marginal or limited amounts of habitat occurs on site; or the taxa's range includes the geographic area and suitable habitat exists.
- Low:** Limited habitat for the taxa occurs on site and no known occurrences were found within the database search and the taxa's range includes the geographic area.

**Significance Criteria:** Evaluating the significance of potential project-related impacts to biological resources depends on characterizing existing conditions at the proposed Project Area and determining the direct and indirect effects to target species and their habitats. An impact that results in the long-term loss or degradation of sensitive habitat, or that adversely affects the population of a special-status species is generally considered significant.

The level of significance of project-related impacts to biological resources is based on Appendix G of the State CEQA Guidelines, which states that a proposed project would have a significant impact on the environment if it exceeds one or more of the following thresholds:

- Conflicts with adopted environmental plans and goals of the community where it is located
- Substantially affects a rare or endangered species of animal, plant, or the habitat of a species
- Interferes substantially with the movement of any resident or migratory fish or wildlife species
- Substantially diminishes habitat for fish, wildlife, or plants.

Impacts are classified as unavoidable and significant, less than significant with mitigation incorporated, less than significant, or no impact, depending on the size, type, and timing of the impact and the biological resources involved. Disturbance of habitats and/or species is considered significant if it affects biological resources in the following ways:

- Substantially reduces or eliminates species diversity or abundance
- Substantially reduces or eliminates quantity or quality of nesting areas
- Substantially limits reproductive capacity through loss of individuals or habitat
- Substantially fragments, eliminates, or otherwise disrupts foraging areas and/or access to food sources
- Substantially limits or fragments the geographic range or dispersal routes of species

- Substantially interferes with natural processes, such as fire or flooding, upon which the habitat depends.

The Ventura County impact threshold criteria for Endangered, Threatened, or Rare species (County of Ventura, 2011a) further states that a significant impact to such species would occur if a project would directly or indirectly:

- Reduce species population
- Reduce species habitat
- Increase habitat fragmentation
- Restrict reproductive capacity

Additionally, the following types of impacts to plant and animal species or their habitats are considered potentially significant:

- Loss of one or more individuals, occupied habitat or Critical Habitat designated by the U.S. Fish and Wildlife Service of a species officially listed as Endangered, Threatened or Rare under the federal Endangered Species Act (Title 50, Code of Federal Regulations Sections 17.11 or 17.12) or California Endangered Species Act (Sections 670.2 or 670.5, Title 14, California Code of Regulations), a *Candidate Species*, or a *California Fully Protected Species*.
- Impacts that would eliminate or threaten to eliminate one or more *element occurrences* of a *special-status species* not otherwise listed under the federal Endangered Species Act or California Endangered Species Act, or as a *Candidate Species* or *California Fully Protected Species*.
- Impacts that would threaten the viability of a habitat that sustains a population of a special-status wildlife species.
- Impacts that would restrict the reproductive capacity of a special-status species.
- Take of birds protected under the California Fish and Game Code (Sections 3503.5, 3511, and 3513) and the federal Migratory Bird Treaty Act (MBTA), as take is defined in the Fish and Game Code and MBTA.
- Increases in noise and/or nighttime lighting to a level above ambient levels that would adversely affect a special status species.
- Increases in human access, predation or competition from domestic animals, pests or exotic species, or other indirect impacts, to levels that would adversely affect special status species.
- Impacts severe enough to substantially reduce the habitat of a wildlife species or cause a wildlife population to decline substantially or drop below self-sustaining levels, pursuant to Section 15065 of the CEQA Guidelines, Mandatory Findings of Significance.

Impacts to biological resources may be considered less than significant if there is little or no importance to a given habitat or if disturbance would not create a significant impact to habitats or species.

**Proposed Project Impacts:** The proposed project includes raising the existing levee height by one to six feet along approximately 1,543 feet of the levee and adding a 321-foot-long retaining wall along a portion of the landward side of the levee. Additional components to the proposed project would include the removal of three turnouts from the existing levee design, addition of one new turnout (incorporated into the levee improvements), removal of up to 23 trees at Shiells Park and one tree at the location of the

new turnout, construction of a new pedestrian access ramp over the improved levee, and the installation of two new access ramps (one to the north near Shiells Park and one to the south at the VCWPD stockpile yard just north of SR 126).

Construction of the proposed project is anticipated to occur over a five- to six-month period, from approximately April 2014 through September 2014. Construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. No construction is expected on weekends or holidays. No daytime or nighttime lighting would be required during construction of the project, including at the staging area(s).

## Vegetation

**Impact 1 – Permanent and Temporary Loss of Vegetation.** The improvements to the existing levee would largely be restricted to disturbed and developed areas. Vehicle access and staging would occur on existing levee roads, disturbed lands, or landscaped areas. Construction of the proposed project would permanently remove approximately 0.05 acres of ruderal vegetation that occurs near the eastern toe of the existing levee in the southern portion of the Project Area. This area has been mapped as ruderal vegetation but appears to be maintained in a primarily barren state due to routine herbicide application that occurs as part of existing operation and maintenance activities. Existing ruderal vegetation mapped within the Project Area is located in a vacant lot, immediately south of Faith Community Church. In addition, approximately 1.91 acres of previously developed areas (i.e., the existing levee and bike trail) would be subject to levee improvement activities. Based on the current project design, native vegetation communities would not be removed as part of the proposed project. However, 23 native and non-native trees would be removed from the northeastern portion of the Project Area within Shiells Park. These trees appear to have been planted as landscape elements and include natives such as Fremont cottonwood and western sycamore and various non-native trees including pines, sweet gum, crepe myrtle, and Chinese elm. The trees border the project and would be removed to comply with Corps requirements for a minimum 15-foot VFZ from the toe of any levee structure. In addition, one Fremont cottonwood tree would be removed from the new turnout area. The VCWPD has committed to replacing all trees removed as part of the project, with the exception of the trees located behind the Quail Court residence, with native trees at a 1:1 ratio. As part of maintenance of the levee structure this VFZ would likely be subject to herbicide application on a routine basis. The permanent and temporary disturbance of native vegetation communities resulting from project activities, potential long-term herbicide application and removal of native and non-native trees would result in less than significant impacts and no mitigation is required.

**Impact 2 – Dust Generation.** Dust generated by construction activities may result in the loss of plants or reduced photosynthetic capacity to vegetation that occurs adjacent to the proposed project footprint. Dust generation is considered a significant impact that can be feasibly mitigated by implementing the measures detailed in Section C.1 (Air Quality) of this document (i.e., mitigation measure MM AQ-4). Therefore, impacts from dust to native vegetation would be considered less than significant after mitigation.

**Impact 3 – Proliferation of Non-Native Vegetation.** Construction activities that result in ground disturbance have the potential to create conditions favorable for the introduction and spread of non-native vegetation. However, the improvements to the existing levee would largely be restricted to previously disturbed and developed areas that are routinely sprayed with herbicide as part of operation and maintenance activities. Ground disturbing activities would not be conducted in natural areas. Therefore the proliferation of non-native species resulting from levee repairs and modifications would be considered less than significant and no additional mitigation is required.

## Special-Status Plants

**Impact 4 – Loss of Special-Status Plants.** Special-status plants were not observed in the Project Area during reconnaissance surveys conducted in July 2011. One special-status plant, southern California black walnut (*Juglans californica* var. *californica*), was detected within the larger Vegetation Study Area outside and west of the Project Area. Due to relatively dry conditions during the surveys and the timing (July), it is possible that some plants were not in bloom or had previously flowered and desiccated prior to the surveys. Therefore it is possible that some species were not detectable during the botanical surveys.

Direct impacts to sensitive plant species are not expected to occur. The improvements to the existing levee would largely be restricted to disturbed and developed areas that are routinely sprayed with herbicide as part of existing operation and maintenance activities. Indirect impacts to native vegetation communities could include alterations in existing topography and hydrology regimes, the accumulation of fugitive dust, disruptions to native seed banks from ground disturbance, and the colonization of non-native, invasive plant species.

Operational impacts would be similar to those currently underway for the existing levee and could occur during routine inspection and maintenance of the levee. These impacts could include trampling or crushing of native vegetation by vehicular or foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence on foot or equipment.

Permanent and temporary impacts to special-status plants are not expected to occur from the placement of levee improvements and modifications. The Project Area does not support suitable habitat for sensitive plants identified as federally or State listed threatened or endangered, CRPR list 1 – 4, or recognized by the County of Ventura as locally important plant species. The improvements to the existing levee would largely be restricted to disturbed and developed areas that are routinely sprayed with herbicide as part of operation and maintenance activities. Therefore, impacts to special-status plant species would be considered less than significant and no mitigation is required. Potential indirect impacts to sensitive plants in off-site areas would be minimized through dust control (Mitigation Measure AQ-4) and through implementation of the conditions and requirements of the Ventura Countywide Stormwater Quality Management Program and NPDES Permit Number CAS004002.

## Special-Status Wildlife

**Impact 5 – Least Bell’s Vireo.** Least Bell’s vireo was not detected during recent focused surveys conducted in 2011. However, this subspecies has been recently documented in the Santa Clara River riparian corridor, approximately one mile downstream from the Study Area. The Study Area is located within the known geographic range for this species.

Direct impacts to least Bell’s vireo are not expected to occur. Construction of the proposed project is scheduled to occur within the known breeding period for most birds (March 15 through September 15), including least Bell’s vireo; however the improvements to the existing levee would largely be restricted to disturbed and developed areas. Although habitat for this species occurs in adjacent areas, the construction of the proposed project would not result in the loss of habitat for this species. Permanent loss of habitat related to levee improvement activities would be restricted to approximately 0.09 acres of ruderal vegetation that occurs near the eastern toe of the existing levee immediately adjacent to private residences. Because the project would not result in the removal of riparian or similar habitat, it is not expected that the proposed project activities would result in direct loss of habitat for special-status nesting

birds. However, because project activities would be conducted during the breeding season, the proposed project may result in direct impacts to this species from noise. Indirect impacts may include increased human presence and the loss of habitat through the colonization of noxious weeds.

Operational impacts would be limited to periodic inspection and maintenance of the levee. During inspections, least Bell's vireo could be affected from noise, human disturbance and possibly fugitive dust. However, this is expected to be minimal, of a short duration, and would not directly affect habitat. The Sespe Creek Bike Trail runs along the western toe of the levee adjacent to potentially suitable habitat for this species. This bike trail currently supports ongoing recreation usage and periodic inspection and/or maintenance activities, and therefore is not expected to result in adverse impacts to this species. If maintenance repairs to the levee are required, potential effects to wildlife would be the same as the proposed project, but likely of a smaller magnitude.

Impacts to least Bell's vireo are not expected to occur from construction of the proposed project. However, because project activities would be conducted during the breeding season there remains a moderate potential for this species to occur in the adjacent riparian habitat. This habitat occurs within 50 feet of the proposed access roads. Should this species be present, impacts would be considered significant absent mitigation. The VCWPD has designed the project to limit impacts to existing developed and ruderal areas. To further reduce impacts to listed species, the VCWPD would implement the following mitigation measures (MM B-1 through MM B-6). Implementation of these mitigation measures would reduce impacts to least Bell's vireo to less than significant levels.

**MM B-1:** The VCWPD shall not clear riparian vegetation during the migratory bird breeding season (March 15 through September 15). If construction activities extend into the breeding season (March 15 to September 15) the VCWPD shall conduct protocol surveys for least Bell's vireo in areas that support riparian habitat within 500 feet of the construction footprint. Work shall not occur within 500 feet of a nesting vireo unless authorized by the County, U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).

**MM B-2** Prior to construction activities, a qualified biologist shall inspect the construction site and adjacent areas to determine if any sensitive plants, fish, or wildlife species are present. If a sensitive fish or wildlife species is present at the construction site during the work period, the VCWPD shall schedule work to avoid the species, if possible. If avoidance of any listed species is not feasible, the VCWPD shall cease work and consult with the USFWS or National Marine Fisheries Service, as appropriate.

**MM B-3** All personnel, including contractors, and VCWPD staff, involved in project activities will receive environmental training on sensitive biological resources that may be encountered in the Project Area. Environmental training shall be implemented throughout the duration of construction of the proposed project. The environmental training shall include, at a minimum, the following items:

- 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 will include a discussion on microtrash and its potential harmful effects on California condors.
- Training materials and briefings shall include but not be limited to: a discussion of the Federal and State Endangered Species Acts 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 of the discovery of dead or injured wildlife; and a review of mitigation requirements.

- Protocols to be followed when road kill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor 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.
- Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species will be provided to all project contractors and heavy equipment operators.
- A weather protected bulletin board or binder shall be centrally placed or kept onsite (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This board or binder will provide key provisions of regulations or project conditions as they relate to biological resources or as they apply to grading activities. This information shall be easily accessible for personnel in all active work areas.

**MM B-4** Upon development of final construction plans and prior to site disturbance, the VCWPD shall clearly delineate the limits of construction on project plans. All construction, site disturbance, and vegetation removal shall be located within the delineated construction boundaries. The storage of equipment and materials, and temporary stockpiling of soil shall be located within designated areas only, and outside of natural habitat areas. The limits of construction shall be delineated in the field with temporary construction fencing, staking, or flagging.

**MM B-5** The VCWPD shall retain a qualified biologist(s) with demonstrated expertise with listed and/or special-status plants, invertebrates and gastropods, birds, amphibians, terrestrial mammals and reptiles to monitor, a minimum of once a week, 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 the listed or special-status species identified within the project boundaries. Any listed or special-status plants shall be flagged for avoidance. Any special-status non-listed terrestrial species found within a project impact area shall be relocated by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the qualified biologist, the qualified biologist shall direct the installation of the fence.

If, during construction, the biological monitor observes a dead or injured listed or special-status wildlife species on the construction site, a written report shall be sent within five calendar days to the appropriate agencies (e.g., VCWPD, USFWS, and/or CDFW, where CDFW reporting is a requirement of the local sponsor under the California Endangered Species Act and/or USFWS). The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). The biological monitor shall, immediately upon finding the remains, coordinate with the onsite construction foreman to discuss the events that caused the mortality, if known, and implement measures to prevent future incidents. Details of these measures shall be included with the report. If possible, species remains shall be collected and frozen as soon

as possible, and CDFW and/or USFWS shall be contacted regarding ultimate disposal of the remains.

**MM B-6**

Best Management Practices (BMPs) will be implemented as standard operating procedures during all construction-related activities to avoid or minimize impacts on biological resources. These BMPs will include but are not limited to the following:

- a. Vehicles and equipment shall be parked on designated staging or parking areas, pavement, existing roads, and previously disturbed areas to the extent practicable.
- b. 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 onsite 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.
- c. All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris scheduled to be removed weekly will be stored in animal-proof containers and/or removed from the site each day. No deliberate feeding of wildlife will be allowed.
- d. Use of chemicals, fuels, lubricants, or biocides will be in compliance with all local, state and federal regulations. 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. Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, will immediately report the incident to the onsite representative identified in the environmental training. The representative will contact the appropriate agency(ies) (e.g. USFWS, CDFW, and/or 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 will include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured will be turned over immediately to CDFW or USFWS, as appropriate, for care, analysis, or disposition.
- e. Avoidance and minimization of construction activities resulting in impacts to jurisdictional wetlands, streambeds, and banks of any jurisdictional ephemeral drainage, except as authorized by regulatory agencies.
- f. 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 will 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 will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume, or removed from the trench or hole by a qualified approved biologist holding the appropriate permits (if required).

**Impact 6 – Southern steelhead – southern California DPS.** Although not observed during 2011 surveys this species is known to occur in Sespe Creek. Critical habitat for the southern California steelhead distinct population segment (DPS) was designated by the National Marine Fisheries Service (NMFS) on September 2, 2005 (70 FR 52487-52627). The latest designation for the southern California steelhead critical habitat identifies 32 occupied watersheds within the freshwater and estuarine range of this DPS, including approximately 741 miles of stream habitat. A significant portion of this habitat occurs within the Sespe Creek Watershed. The portion of critical habitat occurring with the Study Area is defined as Unit MC-29. Unit MC-29, approximately 6 miles long, starts at the confluence with the Santa Clara River and travels in a northerly direction through the Study Area. The NMFS data identifies this unit as poor quality spawning and rearing habitat and ranks it as fair as a migratory pathway for southern California steelhead (CalFish, 2011). Direct impacts to this species are not expected to occur.

Based on the current design, all project activities would be conducted well outside of the bed and banks of Sespe Creek. However, during periods of extreme flow portions of the project site may support connectivity to the main channel of Sespe Creek. Construction activities conducted at these times could result in the potential mortality of individuals from incidental leaks or spills, or the alteration of hydrology/topography. Indirect impacts may include the introduction of noxious weeds or increased siltation. Operational impacts would be limited to periodic inspection of the levee. During inspections these species could be affected from noise, human disturbance and fugitive dust, and only if these activities are conducted in areas immediately adjacent to ponded or flowing water. However, inspections are expected to be minimal, of a short duration, and would not directly affect habitat.

Impacts to southern steelhead, if present in the work area, would be significant absent mitigation. However, implementation of MM B-2 through MM B-7 would reduce impacts to southern steelhead to less than significant levels.

**MM B-7** A Spill Prevention and Contingency Plan for work adjacent to the Sespe Creek is a key component of the Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall be implemented prior to and during site disturbance and construction activities. The SWPPP will include measures to prevent or avoid an incidental leak or spill, including identification of materials necessary for containment and clean-up and contact information for management and agency staff. The SWPPP and necessary containment and clean-up materials shall be kept within the construction area during all construction activities. Workers shall be educated on measures included in the SWPPP at the pre-construction meeting or prior to beginning work on the project. VCWPD staff shall contact appropriate authorities in the County or affected municipalities.

**Impact 7 – Other Special-Status Species.** Sixty-nine (69) other special-status species are considered to have a low to high potential to occur in the proposed Project Area, including invertebrates, reptiles, amphibians, birds, and small mammals. The loss of suitable habitat for these species would typically be considered a significant impact; however, the removal of native vegetation as a result of the proposed project would be limited to a small number of native trees along the margins of Shiells Park in the northeastern corner of the Study Area. Additionally, the implementation of standard environmental commitments routinely practiced by the VCWPD, such as seasonal timing of construction to avoid nesting birds, pre-construction surveys, and construction monitoring during initial site preparation would reduce wildlife mortality during construction to minimal levels.

***Invertebrates and Gastropods.*** Surveys of the Study Area detected three shoulderband snails (*Helminthoglypta* spp.) within the upland terraces adjacent to the Project Area. Several locally important (Ventura County Locally Important Species) shoulderband snails are known to occur in the region and include sage shoulderband, Matilija shoulderband snail, and Ventura shoulderband. One rare species (CDFW Special Animal and Ventura County Locally Important Species), the Trask shoulderband snail, has the potential to occur in the Study Area. These snails were found outside the proposed development footprint within upland vegetation associated with the stream terrace. The improvements to the existing levee would largely be restricted to disturbed and developed areas. However, it is possible that snails may occur within portions of the rock rip rap that support appropriate microclimates or in small pockets of leaf litter and/or debris piles.

Direct impacts to these species could include potential mortality of individuals. These small highly cryptic species are difficult to detect and likely occur in small numbers across the site. Indirect impacts may include the spread or establishment of noxious weeds. Operational impacts are not expected to occur. These activities would be of minimal duration and would not directly affect habitat for these species.

Impacts to these species are expected to be limited as the project is largely restricted to disturbed and developed areas. Nonetheless, if present impacts to these species would be considered significant absent mitigation. Implementation of MM B-2 through MM B-6 and MM B-7 would reduce impacts to special-status invertebrates and gastropods to less-than-significant levels.

***Amphibians.*** Special-status amphibians were not detected in the Study Area and the proposed levee improvement areas do not support habitat for sensitive amphibians. In addition, there are no recent data to suggest that State or federally listed species, such as the arroyo toad (Federally Endangered and California Species of Special Concern [CSC]), California red-legged frog (Federally Threatened and California Species of Special Concern) or western spadefoot toad (CSC), occur near the project site. Based on the current design, the improvements to the existing levee would largely be restricted to previously disturbed and developed areas that are routinely sprayed with herbicide as part of existing operation and maintenance activities. The compacted soils within and adjacent to the existing levee structure do not provide the friable characteristics required for aestivation by some special-status amphibians. Significant ground disturbing activities would not be conducted in natural areas. Therefore the proposed project is not expected to result in the loss of special-status amphibians or their habitat.

Direct impacts to these species, if present at this location, could include construction activities that result in mechanical crushing, fugitive dust, and human trampling. Indirect impacts to special-status amphibians may include increased noise and human presence while operational impacts would be limited to periodic inspection of the levee. During inspections these species could be affected from noise, human disturbance and fugitive dust. However, this is expected to be minimal, of a short duration, and would not directly affect habitat. Impacts to special-status amphibians, should they occur, would be significant absent mitigation. However, to reduce impacts the VCWPD would implement MM B-2 through MM B-7. With the implementation of the above mitigation measures, impacts to special-status amphibians would be reduced to less than significant levels.

***Reptiles.*** Two special-status reptiles, western pond turtle and coastal whiptail, both CSC, were observed in the Study Area during surveys conducted in 2011. Coastal whiptails were observed within the upland terraces west of levee and would be expected to occur as an irregular visitor to the Project Area. The pond turtle was found along the banks of the active channel of Sespe Creek in the southwestern corner of the Study Area. This species is known to travel a significant distance from water sources and utilize upland

areas for breeding and aestivation. The improvements to the existing levee would largely be restricted to disturbed and developed areas and does not support habitat for western pond turtles. Direct impacts to pond turtles are not expected to occur. It is possible that direct impacts to coastal whiptails could include mechanical crushing and human trampling. Indirect impacts may include increased noise and human presence. Operation and maintenance activities would be limited to periodic inspection of the levee. During inspections coastal whiptails could be affected from noise, human disturbance and road kill. However, impacts from operation and maintenance activities are expected to be minimal, of a short duration, and would not directly affect habitat.

Impacts to these species are expected to be limited as the project is largely restricted to disturbed and developed areas and the Project Area does not provide any vegetative cover. Nonetheless, if present impacts to these species would be considered significant absent mitigation. However, to reduce impacts the VCWPD will implement MM B-2 through MM B-6 and MM B-7. With the implementation of the above mitigation measures impacts to special-status reptiles would be reduced to less than significant levels.

***Fish.*** The Santa Ana sucker, Owens sucker and arroyo chub, all CSC, were observed in portions of Sespe Creek flowing through the Study Area. Based on the current design, all project activities would be conducted well outside of the bed and banks of Sespe Creek. However, during periods of extreme flow portions of the project site may support connectivity to the main channel of Sespe Creek. Construction activities conducted at these times could result in the potential mortality of individuals from incidental leaks or spills, or the alteration of hydrology/topography. Indirect impacts may include increased noise and human presence. Operation and maintenance activities would be limited to periodic inspection of the levee. During inspections these species could be affected from noise, human disturbance and fugitive dust; however, impacts from operation and maintenance activities are expected to be minimal, of a short duration, and would not directly affect habitat.

Impacts to these species are not expected to occur. However, if present in the work area during extreme storm events project impacts would be significant absent mitigation. However, implementation of MM B-2 through MM B-7 would reduce impacts to special-status fish to less than significant levels.

***Birds and Raptors.*** Four special-status birds and/or raptors have been observed within the Study Area. These include Cooper's hawk (CDFW Watch List), great blue heron (CDFW Special Animal), yellow warbler (CSC), and loggerhead shrike (CSC and USFWS Bird of Conservation Concern). Additionally, 21 other special-status birds have the potential to occur within the Study Area. The improvements to the existing levee would largely be restricted to disturbed and developed areas that contains limited nesting habitat for birds. Due to the presence of tightly placed rock and compacted soils it is not likely that cavity and/or ground nesters would be present within the existing rock rip rap that occurs on the levee. In addition, 23 native and non-native trees will be removed from the northeastern portion and a single native tree removed from the central portion of the Study Area to comply with the Corps requirements for a 15-foot VFZ from the levee toe. These trees currently provide potential nesting habitat for special-status birds and raptors. Some of the trees with dense foliage may act as daytime roosts for owls. Additionally, the ornamental native and non-native trees occurring within the California buckwheat scrub, just west of the bike trail, provide suitable nesting habitat for some special-status birds.

Direct impacts to nesting birds, with the exception of noise, are not expected to occur. Nests were not observed in any of the proposed trees; however, it is possible that small nests or cavities occur in some of the trees. Project activities would be conducted during the general bird breeding season; therefore, the

proposed project may result in direct impacts to nesting birds from noise and loss of habitat. Indirect impacts may include increased human presence and the loss of habitat through the colonization of noxious weeds.

During inspections these species could be affected from noise, human disturbance and fugitive dust. However, operational impacts are expected to be minimal, of a short duration, and would not directly affect habitat.

Impacts to nesting birds, should they occur, would be significant absent mitigation. However, implementation of MM B-1 through MM B-8 would reduce impacts to special-status birds and raptors to less-than-significant levels.

**MM B-8** Prior to any site disturbance within the recognized breeding season (March 15 to September 15) for nesting birds (i.e., mobilization, staging, grading or construction), the VCWPD shall retain a qualified biologist to conduct pre-construction surveys for nesting birds in all areas within 500 feet of project components. Surveys for raptors shall be conducted for all areas from February 1 to August 15. The required survey dates may be modified based on local conditions, as determined by a qualified biologist, with the approval of the USFWS and/or CDFW. Measures intended to exclude nesting birds shall not be implemented without prior consultation with the USFWS and/or CDFW and shall not exceed Ventura County noise standards.

If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300 foot buffer around each nest and a 500 foot buffer for raptors from ground-based construction activities 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 to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the CDFW and/or USFWS as appropriate. If for any reason an active bird nest must be removed during the nesting season, written documentation providing concurrence from the USFWS and CDFW authorizing the nest relocation must be obtained.

**Mammals.** Western mastiff bat, a CSC, was documented within the Study Area during surveys conducted in 2011. Although not observed within the Study Area an additional ten special-status mammals have a potential to occur in the Project Area. These species include but are not limited to, American badger, San Diego black-tailed jackrabbit, spotted bat and pallid bat. The improvements to the existing levee would largely be restricted to disturbed and developed areas and these species are not expected to occur within the Project Area. Badger burrows would not be detected in or adjacent to the Project Area. Shallow depressions used by jackrabbits and other brush rabbits are present in adjacent habitat but were not observed in the development footprint. Roosts for bats is not present on the project site however bats may use the large trees at Shiells Park trees as occasional day or night roosts and can be present within tree cavities and under exfoliating bark. Bats may also periodically roost near the storm drain outlet structure; however bats were not observed at this location.

During the surveys conducted in 2011 it was noted that rodenticide, as part of routine operation and maintenance activities of the existing levee structure, was placed in various locations throughout the Project Area. The use of rodenticide within the Project Area likely limits the potential occurrence of special-status mammals. Should they occur, direct impacts to these species could include mechanical crushing, loss of habitat, dust, and human trampling. Indirect impacts may include increased noise and

human presence. Operation and maintenance activities would be limited to periodic inspection of the levee. During inspections these species could be affected from noise, human disturbance and fugitive dust. However, impacts from operation and maintenance activities are expected to be minimal, of a short duration, and would not directly affect habitat.

Impacts to special-status mammals, should they occur, would be significant absent mitigation. However, implementation of MM B-2 through MM B-6, MM B-7, MM B-9.1, MM B-9.2, and MM B-9.3 would reduce impacts to special-status mammals to less-than-significant levels.

**MM B-9.1** No more than 15 days prior to grading near or the removal of trees or other structures, the Applicant shall retain a qualified biologist, to conduct pre-construction surveys for sensitive bats. Should construction activities extend into the known maternity season for bats (1 March to 31 July) additional surveys shall be conducted in all suitable habitat within 300 feet of project activities.

If active maternity roosts or hibernacula are found, the structure or tree occupied by the roost shall be avoided (i.e., not removed), if feasible. If avoidance of the maternity roost is not feasible, the biologist shall survey for nearby alternative maternity colony sites. If the biologist determines in consultation with the CDFW that there are alternative roost sites used by the maternity colony and young are not present then no further action is required, and it will not be necessary to provide alternate roosting habitat. (i.e., MM B-9.2 would not apply although MM B-9.3 would still apply). However, if there are no alternative roost sites used by the maternity colony, MM B-9.2 is required. If no active roosts are found, then no further action is required. If active maternity roosts are absent, but a hibernaculum (i.e., a non-maternity roost) is present, then MM B-9.2 is not necessary, but MM B-9.3 is required.

**MM B-9.2** 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 bats requirements in coordination with CDFW. By making the roosting habitat available prior to eviction (MM B-9.2), 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 also be notified of any hibernacula or active nurseries within the construction zone.

If construction of alternative roost sites is required, the biologist shall provide a written report, documenting the required coordination with CDFW as well as the location of roost sites.

**MM B-9.3** If non-breeding bat hibernacula are found in structures or 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).

If an active maternity roost is located in an area to be impacted by the project, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (i.e., prior to 1 March) or after young are flying (i.e., after 31 July) using the exclusion techniques described above.

### ***Cumulative Impacts***

**Vegetation.** The proposed project is not expected to result in significant impacts to native vegetation communities. However, construction would result in the removal of 23 native and non-native trees from Shiells Park and a single native tree at the location of the new turnout. The VCWPD has committed to replacing these trees, with all native species, at a 1:1 ratio. The pending projects summarized in the introduction to Section C indicate that only one major construction project could occur within three miles of the proposed project; a sand, gravel and rock excavation project (Upland Rock Project). This project would involve work in and adjacent to Sespe Creek and may result in permanent and temporary impacts to native riparian vegetation. As part of the mitigation requirements for impacts to native vegetation, the Upland Rock Project would restore and/or enhance native habitat within the bed and banks of Sespe Creek, and therefore would not result in significant cumulative impacts to vegetation. Impacts would be considered less than significant.

**Wildlife.** The proposed project is not expected to result in significant impacts to special-status wildlife. Under the proposed project, these impacts would be mitigated to less-than-significant levels through the implementation of MM B-1 through MM B-9.3. The pending projects summarized in the introduction to Section C indicate that only one major construction project may occur within the same timeframe and physical proximity as the proposed project; a sand, gravel and rock excavation project (Upland Rock Project). If both projects occur within the same timeframe and proximity, resulting cumulative impacts would be short term, limited in scope, and not expected to incrementally add to any adverse cumulative impacts to special-status wildlife. Cumulative impacts to wildlife would be less than significant.

## **C.4B Ecological Communities**

### ***Impact 8 – Sensitive Plant Communities***

The literature review determined that one sensitive vegetation community, southern riparian scrub, is known to occur within or in the vicinity of the Vegetation Study Area (CDFG, 2011). Subsequent field surveys determined that areas mapped within the Vegetation Study Area as red willow thickets and mulefat thickets (Figure C.4-2) generally meet the habitat requirements of southern riparian scrub, a community considered sensitive by the CDFW. Southern riparian scrub is generally characterized as occurring within the riparian zone and is comprised of a dense, broad-leafed, winter-deciduous association occupied by various species of willows (*Salix* sp.) and/or an herbaceous scrub dominated by mulefat.

California buckwheat/scale broom scrub, occurring within the southern portions of the Study Area, is also considered a sensitive vegetation community by the CDFW. This community is characterized by the presence of both scale broom and California buckwheat.

***Significance Criteria:*** The Ventura County *Initial Study Assessment Guidelines* impact threshold criteria for sensitive plant communities (County of Ventura, 2011a) states that the following impacts to sensitive plant communities are potentially significant:

- Construction, grading, clearing, or other activities that would temporarily or permanently remove sensitive plant communities. Temporary impacts to sensitive plant communities would be considered significant unless the sensitive plant community is restored once the temporary impact is complete.
- Indirect impacts resulting from project operation at levels that would degrade the health of a sensitive plant community.

***Proposed Project Impacts:*** Implementation of the proposed project could result in both temporary and permanent effects to sensitive riparian and upland vegetation and other habitat types within the Study Area. Table C.4-1 provides detail to the specific habitat or non-habitat elements including access roads, the existing levee, and disturbed areas that would be subject to both temporary and permanent disturbance.

Direct impacts to sensitive plant communities could occur as a result of the removal of vegetation during construction activities. These ground-disturbing construction activities include clearing and grading for construction preparation, the expansion or widening of new and existing access roads, and the installation of levee improvements. Indirect impacts to native vegetation communities could include alterations in existing topography and hydrology regimes, the accumulation of fugitive dust, disruptions to native seed banks from ground disturbance, and the colonization of non-native, invasive plant species.

Operational impacts would be similar to those currently underway for the existing levee and could occur during routine inspection and maintenance of the levee. These impacts could include trampling or crushing of native vegetation by vehicular or foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence on foot or equipment.

Although present within the larger Vegetation Study Area, the Project Area does not support suitable habitat for sensitive plant communities known from the region. The Project Area is routinely subjected to herbicide application thus providing suboptimal habitat for sensitive plant communities. Project construction is planned for areas east of and including the bike trail and are not expected to encroach in the any natural areas. As a result, impacts to sensitive plant communities would be considered less than significant. Should impacts to sensitive vegetation communities occur, implementation of MM B-2 through MM B-6 would reduce impacts to less than significant levels.

***Waters and Wetlands.*** A planning level preliminary wetlands/waters jurisdictional delineation was conducted in March 2012. Portions of the Study Area were identified as potentially jurisdictional wetlands/waters. The proposed project activities would avoid impacts to potentially jurisdictional wetlands/waters. Appendix 3 provides a full discussion of potentially jurisdictional wetlands/waters occurring within the Project Area. At the time of preparation, the proposed project included installation of a new flap gate in the northern portion of the Study Area just south of Old Telegraph Road near Shiells Park. This project element resulted in the only project impact to potentially jurisdictional wetlands/waters. This project element (new flap gate) is no longer required and has been removed from the proposed project. As such, the proposed project activities would not result in impacts to potentially jurisdictional wetlands/waters.

***Proposed Project Impacts:*** The Ventura County impact threshold criteria for impacts to waters and wetlands (County of Ventura, 2011a) states that the following impacts are potentially significant:

- Any of the following activities:

- removal of vegetation;
  - grading;
  - obstruction or diversion of water flow;
  - change in velocity, siltation, volume of flow, or runoff rate;
  - placement of fill;
  - placement of structures;
  - construction of a road crossing;
  - placement of culverts or other underground piping; and/or
  - any disturbance of the substratum.
- Disruptions to wetland or riparian plant communities that would isolate or substantially interrupt contiguous habitats, block seed dispersal routes, or increase vulnerability of wetland species to exotic weed invasion or local extirpation. An example would be disruption of adjacent upland vegetation to a level that would adversely affect the ecological function of the wetland, such as where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian habitat, which reduces erosion and sedimentation potential.
  - Interference with ongoing maintenance of hydrological conditions in a water or wetland. The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Adverse hydrological changes might include altered freshwater input; changes in the watershed area or run-off quantity, quality, or velocity; drawing down of the groundwater table to the detriment of groundwater-dependent habitat; substantial increases in sedimentation; introduction of toxic elements or alteration of ambient water temperature.
  - The project does not provide an adequate buffer for protecting the functions and values of existing waters or wetlands. The buffer is measured from the top-of-bank or edge of wetland or riparian habitat, whichever is greater. Ventura County General Plan Policy 1.5.2-4 requires a minimum buffer of 100 feet from significant wetland habitat. In accordance with this policy, buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100 foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area.

***Impact 9 – Permanent and Temporary Loss of Jurisdictional Waters/Wetlands.*** Construction activities would not impact potentially jurisdictional “waters of the U.S.” and/or wetlands. Direct effects to jurisdictional waters are not expected to occur from levee construction, the use of temporary work areas, grading, or construction of levee improvements. Indirect impacts to jurisdictional habitats could include alterations in existing topography and hydrology regimes and the colonization of non-native, invasive plant species. Operational impacts would be similar to those currently underway for the existing levee and could occur during routine inspection and maintenance of the levee. These impacts would be minimal and may include alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants if soil disturbance is required.

The proposed project is designed to avoid any significant ground disturbing activities within potentially jurisdictional wetlands/waters. As a result, impacts associated with potentially jurisdictional waters and/or wetland habitats are less than significant.

***Environmentally Sensitive Habitat Areas (ESHA)***

The Study Area does not occur with the Coastal Zone, as defined by the County's Coastal Area Plan, the State Coastal Act and Title 14, California Code of Regulations, Division 5.5 and therefore ESHAs are not applicable to this analysis.

***Cumulative Impacts***

***Sensitive Plant Communities.*** The proposed project is not expected to result in significant impacts to sensitive vegetation communities. The pending projects summarized in the introduction to Section C indicate that only one major construction project could occur within the same timeframe and physical proximity as the proposed project; a sand, gravel and rock excavation project (Upland Rock Project). This pending project would involve work in and adjacent to Sespe Creek and may result in permanent and temporary impacts to sensitive plant communities. However, as part of the mitigation requirements for impacts to sensitive vegetation communities, the Upland Rock Project would restore and/or enhance native habitat within the bed and banks of Sespe Creek. Therefore, the projects are not expected to result in cumulative impacts to vegetation and impacts would be considered less than significant.

***Waters and Wetlands.*** As discussed above, construction of the proposed project would result in a less-than-significant impact to potentially jurisdictional waters and wetlands. The pending projects summarized in the introduction to Section C indicate that only one major construction project could occur within the same timeframe and physical proximity as the proposed project; a sand, gravel and rock excavation project (Upland Rock Project). This pending project would involve work in and adjacent to Sespe Creek and would result in temporary impacts to potentially jurisdictional waters and wetlands. However, because the proposed project would not result in significant impacts to wetlands, its contribution would not be cumulatively significant. Therefore, the proposed project would not result in a cumulatively significant impact to, or loss of, federally or State potentially jurisdictional waters and/or wetlands. Impacts would be less than significant.

**C.4C Habitat Connectivity**

Aside from focused studies (e.g. steelhead migrations studies), there has been no known widespread analysis, conducted within the lower Sespe Creek watershed, as a corridor for wildlife movement. Connectivity studies in the upper watershed have found that the Sespe Creek riparian corridor, and its associated uplands, is recognized as a vital pathway for wildlife moving from the higher elevations of the surrounding Los Padres National Forest to desired lower elevation habitats. On a broad scale, Sespe Creek provides a crucial migration route to upstream spawning grounds for federally endangered anadromous steelhead. Several migratory songbirds utilize the riparian vegetation within the corridor for breeding, nesting, and foraging, or at a minimum, as transient rest sites during migration flights. Additionally, large, wide-ranging animals, such as black bear, mountain lion, and coyote have been extensively documented within the Sespe Creek watershed, utilizing the Sespe Creek corridor in search of prey opportunities, water resources, and cover.

Even considering smaller spatial scales or single habitat types, habitat fragmentation is no less important an issue. At these spatial scales, several studies have documented the negative effects on population structure, home range size, and genetic connectivity resulting from dirt roads, pipeline corridors, transmission line

corridors, and other seemingly innocuous features traversing formerly undisturbed habitat (Mader, 1984; Swihart and Slade, 1984; Dunning et al., 1992).

***Significance Criteria:*** The Ventura County *Initial Study Assessment Guidelines* (County of Ventura, 2011a) state that impacts to habitat connectivity could occur if the project would: (a) remove habitat within a wildlife movement corridor; (b) isolate habitat; (c) construct or create barriers that impede fish and/or wildlife movement, migration or long term connectivity; or (d) intimidate fish or wildlife via the introduction of noise, light, development or increased human presence.

Additionally, the Ventura County impact threshold criteria for impacts to habitat connectivity (County of Ventura, 2011a) states that following impacts are potentially significant:

- A habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be severed, substantially interfered with, or potentially blocked.
- Wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction would be prevented or substantially interfered with.
- Wildlife would be forced to use routes that endanger their survival. For example, constraining a corridor for mule deer or mountain lion to an area that is not well-vegetated or that runs along a road instead of through a stream corridor or along a ridgeline.
- Lighting, noise, domestic animals, or other indirect impacts that could hinder or discourage fish and/or wildlife movement within habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be introduced.
- The width of linkage, corridor or chokepoint would be reduced to less than the sufficient width for movement of the target species (the species relying upon the connectivity feature). The adequacy of the width shall be based on the biological information for the target species; the quality of the habitat within and adjacent to the linkage, corridor, or chokepoint; topography; and adjacent land uses.
- For wildlife relying on visual cues for movement, visual continuity (i.e., lines-of-sight) across highly constrained wildlife corridors, such as highway crossing structures or stepping stones, would not be maintained.

### ***Proposed Project Impacts***

***Impact 10 – Habitat Connectivity.*** No known anthropogenic barriers to dispersal for ground-dwelling wildlife and plants were observed within the Study Area. Ground-disturbing activity including grading and levee repairs are not likely to interfere with terrestrial wildlife movement during construction. At the completion of construction, the proposed levee improvements would not result in a new barrier to wildlife movement. While the levee would be slightly larger new barriers to movement would not be constructed. Large urban areas in the City of Fillmore, agricultural lands, and residential areas occur adjacent to the Project alignment. Due to the limited area of project related construction and the large channel area that occurs within Sespe Creek wildlife would not be physically prevented from moving up or downstream during Project construction. In addition, many of the species that utilize the Sespe Creek corridor are

nocturnal and would not be affected by project construction. Therefore, impacts associated with habitat connectivity would be considered less than significant.

The Proposed Action would not substantially interfere with the movement of any native resident or migratory fish species. Native and migratory fish occur in the Study Area and include the endangered southern steelhead trout. However, no construction activities are proposed within the active channel of Sespe Creek and levee improvements/repairs would not occur in areas supporting flowing or ponded water. Therefore, impacts associated with habitat connectivity would be considered less than significant.

***Cumulative Impacts:*** The proposed project would not result in a significant impact to, or disrupt linkages and wildlife movement corridors. Although construction, routine operation and maintenance of the proposed project would result in temporary impacts from noise and human presence, these activities would be short term in nature and would not result in a physical barrier to wildlife movement. The pending projects summarized in introduction to Section C indicate that only one major construction project could occur within the same timeframe and physical proximity as the proposed project; a sand, gravel and rock excavation project (Upland Rock Project). This pending project would involve work in and adjacent to Sespe Creek and may result in a temporary short term disruption to some wildlife movement. It is expected that the impacts from both the proposed project and the Upland Rock Project would be short term, limited in scope, and are not expected to incrementally add to any adverse cumulative impacts to habitat connectivity. Therefore the proposed project is not expected to result in the incremental contribution to cumulative impacts associated with habitat connectivity and impacts would be considered less than significant.

## C.5 AGRICULTURAL RESOURCES

The California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP) classifies lands that have agricultural value. This system classifies land based upon the productive capabilities of the land, rather than the sole presence of ideal soil conditions. Land is divided into several categories of diminishing agricultural importance, as follows:

**Prime Farmland and Farmland of Statewide Importance.** Areas considered to have the highest agricultural potential are classified as either Prime Farmland or Farmland of Statewide Importance. Prime Farmland is the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Farmland of Statewide importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

**Unique Farmland or Farmland of Local Importance.** Unique Farmland is considered lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date. Farmland of Local Importance consists of soils that are listed as Prime or Statewide that are not irrigated, and soils growing dryland crops—beans, grain, dryland walnuts, or dryland apricots.

**Grazing Land, Urban and Built-up Land, or Other Farmland.** Lands that have lesser agricultural potential are classified as Grazing, Urban and Built-up Land, or Other. Grazing land is land on which the existing vegetation is suited to the grazing of livestock; Urban and Built-up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel; and Other Land is land that is not included in any other mapping category, common examples include low density rural developments, vacant land, wetlands, and riparian areas not suitable for livestock grazing or agriculture.

The DOC's FMMP Ventura County Important Farmland 2010 map shows that the proposed project site is designated as Other Land and Urban and Built-up Land. (DOC, 2010)

### C.5A Soils

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that would result in the direct and/or indirect loss of soils designated Prime, Statewide Importance, Unique or Local Importance would result in a significant impact (County of Ventura, 2011).

**Proposed Project Impacts:** As noted above, the proposed project site involves land designated as Other Land and Urban and Built-Up Land by the FMMP, and would not permanently convert land that is used for agricultural use. Consequently, the proposed project would not result in a direct and/or indirect loss of agricultural soils. No impact to agricultural soils would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Development to the east of the project site is also designated as Urban and Built-up Land; and the land to the north, west and south of the project site primarily consists of lands within the Prime Farmland and Farmland of Statewide Importance designations. Consequently, there is potential for projects in the surrounding area to impact land designated by the DOC as Prime Farmland, Farmland of Statewide Importance, Unique Farmland or Farmland of Local Importance; however, the proposed project would not contribute to adverse impacts on agricultural soils. Therefore, no cumulative impacts to agricultural soils would occur.

### C.5B Land Use Incompatibility

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that is closer than the following distances will be considered to have a potentially significant environmental effect on agricultural resources: 300 feet, without vegetative screening, from a non-agricultural structure or use and common boundary line adjacent to classified farmland; or 150 feet, with vegetative screening, from a non-agricultural structure or use and common boundary line adjacent to classified farmland with vegetative screening (County of Ventura, 2011).

**Proposed Project Impacts:** As noted above, the project site is designated as Other Land and Urban and Built-up Land (DOC, 2010). Consequently, no agricultural activities occur within or adjacent to the project site. Active agricultural lands within Prime Farmland and Farmland of Statewide Importance designations parallel the length of the project site (on the west side of Sespe Creek), but are not within 300 feet of the Important Farmland designations. However, agricultural lands designated as Prime Farmland and Farmland of Statewide Importance are located south of SR 126 and are within 300 feet of the south end of the project site. The proposed project would not include vegetative screening at the south end of the project site, but SR 126 would be a barrier between the project site and the agricultural lands. Therefore, the proposed project would not be expected to conflict with existing agricultural land uses, and impacts to agricultural land uses would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, the proposed project would not substantially conflict with agricultural land uses. Therefore, its incremental contribution to conflicts with agricultural land uses would not be cumulatively considerable. Less-than-significant cumulative impacts would occur.

## C.6 SCENIC RESOURCES

The proposed project area is located along Sespe Creek near the City of Fillmore (City). The overall visual character of the proposed project area is typified as being semi-rural to rural. Access for the proposed project site would be at both ends of the SC-2 Levee, using Old Telegraph Road at the north end and SR 126 at the south end. SR 126 is considered a scenic resource since it is an Eligible Scenic Highway as designated by Caltrans. The City's General Plan identifies the nearby foothills, ridgelines, rugged and steep terrain, and Sespe Creek as significant visual resources in the City. Sespe Creek and the Santa Clara River provide a stretch of open space along the western and southern borders of the City.

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project has the potential to create a significant impact to scenic resources if it:

- Is located within an area that has a scenic resource that is visible from a public viewing location; and,
- Would physically alter the scenic resource either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects; or
- Would substantially obstruct, degrade, or obscure the scenic vista, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects.

In addition, a project would result in a potentially significant environmental impact if it is inconsistent with any of the applicable policies of the Ventura County *General Plan Goals, Policies and Programs*. (Ventura County, 2011)

**Proposed Project Impacts:** As described in Section A.4 (Project Location and Assessor's Parcel Numbers), the proposed project site is accessible via Old Telegraph Road to the north and SR 126 to the south. SR 126 is part of the California Freeway and Expressway System, and is eligible for the State Scenic Highway System, (Caltrans, 2012). Although SR 126 is not yet an official scenic highway, the following is a discussion of the impacts associated with this scenic resource. On the south side of the intersection of E Street and the SC-2 Levee, the levee road continues for roughly 1,800 feet to SR 126 providing access to the levee from the highway. The intersection of the levee road and SR 126 forms a triangular-shaped parcel between the levee and the highway. This undeveloped parcel is owned by the VCWPD and is currently utilized as a basin for local drainage and for stockpiling material used for maintenance activities. During the construction period, this parcel would be the location of the staging of construction vehicles, equipment, and materials; and this area may also serve as an access point to the project site. As such, construction activities would be visible from SR 126 over the five- to six-month period of construction. However, after construction, the improvements to the levee would not significantly alter the current view from SR 126. Therefore, since construction activities would be temporary, potential visual impacts to an Eligible State Scenic Highway would be less than significant.

In addition to travelers along SR 126, construction activities and staging equipment would be visible to recreational users of the Sespe Creek Bike Trail and Shiells Park, the residential uses to the east of the creek, and the parishioners of Faith Community Church. Construction activities would obstruct and/or degrade views of the open space to the west of the levee; however, views of construction activities would be short-term and would cease upon project completion.

Also, as a part of construction of the proposed project, all vegetation located within the Corps-required VFZ, or the 15-foot landward buffer from the toe of the levee, would be removed with implementation of the proposed project. This includes 23 existing medium to large mature trees located along the western border of Shiells Park, ornamental trees behind the Quail Court residence, trees located along the western side of the church parking lot, and one tree in the new turnout area. With the exception of the Quail Court trees, all trees removed as part of the project would be replaced at a 1:1 ratio with native trees. Replacement trees at the church would be provided in decorative pots. Tree removals at Shiells Park would temporarily degrade the natural setting of the park and eliminate existing vegetative screening of the levee; similar effects would occur for the residence and church. Replacement of the majority of the trees would mitigate this impact, although the replacement trees at Shiells Park would take several years to mature and restore visual character. Nonetheless, the tree removal and replacement activities would not present a significant impact to the scenic vistas; impacts associated with the proposed tree removals would be less than significant.

Upon completion of construction, the proposed project would result in improvements along approximately 1.1 miles (5,808 feet) of the SC-2 Levee, which would include raising the existing levee height by one to six feet along 1,521 feet of the levee and adding a 321-long retaining wall along the landward side of a portion of the levee near two residences on Robin Court (referred to as Residence #1 and Residence #2 – see Figure A-4). Figure C.6-1 presents the existing conditions (Photo A) and the visual simulation (Photo B) including levee improvements from Key Observation Point (KOP) 1. At KOP 1, the viewer is looking northeast from the Sespe Creek Bike Trail, and adjacent to Faith Community Church and Residence #4 (see Section A.4 for a description of Residence #4; see Figure A-4). The maximum increase in the levee height would be visible to recreational users of the bike trail, occupants of the homes along the east side of the SC-2 Levee in the immediate vicinity of levee improvements, and visitors at the Faith Community Church; however, this increase in height would not preclude the scenic views to Sespe Creek or distant mountains. In regard to the retaining wall, Figure C.6-2 presents the existing conditions of the site where the proposed retaining wall would be constructed (Photo A), and a visual simulation (Photo B) of the retaining wall from KOP 2. At KOP 2, the viewer is looking southwest at the levee, from a site adjacent to Residences #1 and #2 on Robin Court. The height of the retaining wall would be lower than the existing garden walls along Residences #1 and #2; however, the wall would include a cabled fence that would be visible from both residences (as shown in Figure C.6-2). The cabled fence does not present an opaque feature in the viewshed, and therefore would not block the scenic vista from these residences. Therefore, residents to the east and recreational users of the Sespe Creek Bike Trail would have altered views due to the raised levee and the levee improvements; however, these improvements would not affect scenic views to Sespe Creek or distant mountains. Permanent impacts to scenic vistas would be less than significant.

During the public meeting held on January 19, 2012, the public voiced concern regarding graffiti on the proposed retaining wall. As discussed above, the height of the retaining wall would be lower than the existing garden walls along Residences #1 and #2. Graffiti on the proposed retaining wall would not be visible from the bottom floor of these residences, but may be visible from the second floor of Residences #1 and #2. As discussed in Section A.4.5, during the operation and maintenance period, graffiti would be removed as a part of regular maintenance. The VCWPD promptly removes graffiti with obscene comments or scenes, while less offensive graffiti, such as tags, are removed as the VCWPD's budget allows.



**A. Existing Conditions from the Sespe Creek Bike Trail**



**B. Visual Simulation with the Proposed Improvements**



**A. Existing Conditions at the Location of the Proposed Retaining Wall**



**B. Visual Simulation with the Proposed Retaining Wall**

In addition to these maintenance efforts, the VCWPD also implements a Graffiti Abatement Program, which works with volunteers to locate and remove graffiti from property owned by VCWPD (VCWPD, 2012). Under this program, the Graffiti Abatement Coordinator works with non-profit organizations and neighbors to address graffiti throughout the County. Therefore, it is likely that graffiti would not immediately be removed and would present a visual impact to occupants of Residences #1 and #2. However, it can be seen in Figure C.6-2 that the existing garden wall (opposite the proposed retaining wall) has been painted to cover graffiti. Therefore, although graffiti on the proposed retaining wall would occur and may be visible to residents in the immediate vicinity of the wall, the VCWPD's maintenance efforts and Graffiti Abatement Program would remove the graffiti. In addition, the proposed retaining wall is 321 linear feet, which accounts for approximately 20 percent of the 1,543-foot levee, and therefore, would not present a visual impact to the majority of residences and recreation user in the immediate vicinity of the proposed project. As such, this impact would be less than significant.

The proposed project's consistency with the goals and policies applicable to scenic resources is as follows: construction and operational impacts to scenic views and highways would not be significant, and therefore the proposed project would not conflict with Goals 1.7.1-1 and -2; and the proposed project is not located within a designated Scenic Resource Area, so Policies 1.7.2-1 and -2 are not applicable and the proposed project would not conflict with the County's *General Plan* goals and policies for scenic resources.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. A cumulative impact to scenic highways would occur if impacts of the proposed project would combine with similar impacts of past, present, or reasonably foreseeable projects in the cumulative scenario. The closest cumulative project to the proposed project is the Upland Rock project located just south of SR 126; this project is not expected to result in significant long-term impacts to SR 126 or scenic vistas. Therefore, the proposed project would not contribute to cumulative impacts to scenic highways, and no cumulative impact would occur.

## C.7 PALEONTOLOGICAL RESOURCES

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, the geologic formation in which proposed projects would be located can be used to establish the likelihood of paleontological resources being present and their relative importance. Fossil remains are considered important if they are:

- well preserved
- identifiable
- type/topotypic specimens
- age diagnostic
- useful in environmental reconstruction
- represent rare and/or endemic taxa
- represent a diverse assemblage, and
- represent associated marine and nonmarine taxa (County of Ventura, 2011).

Vertebrate and mega-invertebrate fossils are considered highly important because they are comparatively rare and allow precise age determinations and environmental reconstructions for the strata in which they occur; micro-invertebrate fossils (microfossils) are much more abundant and, for this reason and because of their small size, would not be adversely impacted to the same degree as vertebrate and mega-

invertebrate fossils (County of Ventura, 2011). Direct impacts to paleontological resources include grading and excavation of fossiliferous rock, which can result in the loss of scientifically important fossil specimens and associated geological data. Indirect impacts include increased access opportunities and unauthorized collection of fossil materials (County of Ventura, 2011).

***Proposed Project Impacts:*** The proposed project area is located within a flood plain of the Santa Clara River and Sespe Creek and is primarily underlain by Quaternary geologic units: alluvial deposits consisting of unsorted and unconsolidated gravel, sand, silt, and clay in the river drainages and Holocene and Pleistocene flood plain deposits consisting of unconsolidated and unsorted sand, gravel, silt, clay, and boulders; locally cross-bedded and dissected by modern drainages (USGS, 1995). The proposed project is entirely underlain by artificial fill consisting of engineered levee fill which overlies the above geologic units.

Artificial fill has zero paleontological significance due to its young age and disturbed nature (engineered placement). Geologic units laid down in coarse sediments and high velocity environments such as river wash are unlikely to contain identifiable fossil resources, as the high energy depositional environment would likely have destroyed or damaged any fossil specimens. A search of the University of California Museum of Paleontology website indicates that no fossils have been collected from Holocene or Pleistocene deposits within or near the project site (UCMP, 2011). Therefore, the paleontological importance of the alluvial and flood plain deposits of the Santa Clara River and Sespe Creek flood plain underlying the proposed project is considered to be none to low.

As addressed in Section A.4 (Project Description) the main project activities would include raising the existing levee height by one to six feet along approximately 1,543 feet of the levee; adding a 321-foot-long retaining wall; removal and installation of turnouts, installation of a new formal access ramp off Mallard Street to the Sespe Creek Bike Trail; and modifications along the easement along the Faith Community Church property, including removal of the property's garden wall, a portion of the parking lot, and trees on the western portion of the parking lot. Other project activities would include removal of trees at Shiells Park. Installation of the fill, retaining wall, and new formal access ramp would likely require some ground disturbing activities such as over-excavation and re-compaction of the levee fill during placement of the new fill materials and construction of the retaining walls and access path. Removal of the trees in Shiells Park would disturb soil where the root ball is removed; Shiells Park is underlain by flood plain deposits with no to low paleontological sensitivity and the presence of significant fossils within the root ball area is unlikely. The potential to unearth fossils that are of scientific value would be low to none because, with the exception of the tree removal in Shiells Park, all ground disturbance activities would be confined within artificial levee fill which has no potential for fossils. Additionally, the Ventura County *Initial Study Assessment Guidelines* (County of Ventura, 2011) specifies that when a proposed project's disturbance is located in an area of Quaternary Deposits, or units with Moderate, Low, or None paleontology sensitivity, no further assessment needs be done for the preliminary assessment and no impact shall be concluded. Mitigation measures would be required only if fossil remains are found during construction. Due to the unlikeliness of disturbing any of the geologic units underlying the levee fill and the zero potential to encounter fossils within the levee fill, no paleontological impacts would occur.

***Cumulative Impacts:*** According to the Ventura County *Initial Study Assessment Guidelines*, cumulative impacts associated with paleontological resources include all projects that contribute to the progressive loss of exposed rock in Ventura County which can be studied and prospected for fossil remains. The introduction to Section C, as supported by Appendix 1, provides a discussion of the past,

present and reasonably foreseeable projects associated with the proposed project area. Cumulatively significant impacts could occur if these projects either (1) consistently result in the discovery (and possible damage) of fossil remains, or (2) consistently occur within area's that are considered to have a "High," "Moderate to High," or "Moderate" paleontological importance. As addressed above, the proposed project would have no impact on paleontological resources. Therefore, the proposed project would not contribute to impacts related to paleontological resources in a manner that would be cumulatively considerable. No cumulative impacts would occur.

## C.8 CULTURAL RESOURCES

A Phase 1 Archaeological Study was performed for the Sespe Creek Levee Improvements Project, and is included as Appendix 4 (HEART, 2012). The Phase 1 Study, conducted in February 2012, included the following:

- Performed a record search at the South Central Coastal Information Center, California State University Fullerton. The search included a review of all recorded archaeological sites within one-half mile of the proposed project area, all cultural resources reports on file with the SCCIC, the listings of the California Register of Interest (PHI), California Historical Landmarks (CHL), and California Register of Historic Resources Inventory (HRI).
- Contacted the Native American Heritage Commission with regard to potential sacred lands issues.
- Conducted an on-foot surface reconnaissance of the entire project area.
- Prepared a report summarizing the results of the records search and field phases.

The following discussions are based upon these efforts.

### C.8A Archaeological

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, and for the purposes of CEQA, a unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (Ventura County, 2011):

- Contains information needed to answer important scientific research question and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as oldest of its type or best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Identified California "VEN" site: "Ven" means Ventura; A222 indicates the recorded archaeological investigation site number.

The significance of an archaeological resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of *historical resources* pursuant to Section 5020.1(k) requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not archaeologically or culturally significant; or (2) demolishes or materially alters in an adverse manner those physical characteristics of a archaeological resource that convey its archaeological significance and that justify its eligibility for inclusion in the

California Register of Historical Resources as determined by a lead agency for purposes of CEQA (Ventura County, 2011).

***Proposed Project Impacts:*** As discussed in Appendix 4, both a records search and on-foot field inspection indicated that no previously recorded prehistoric or historic archaeological resources or historic properties that meet eligibility or significance criteria under the National Register of Historic Places, or appear eligible as State, county or local landmarks, exist within the boundaries of the proposed project site area (HEART, 2012). Any proposed improvements or modifications within the project area would have no known adverse physical or visual impacts on known prehistoric and historic archaeological resources. However, the nature of a record search and walkover can only confidently assess the potential for encountering surface cultural resource remains; therefore, customary caution is advised for proposed earth-disturbing activities within the project area. Therefore, in the event that archaeological resources are discovered during project-related activities, the following mitigation measures would be implemented:

- MM C-1** In the event that archaeological resources are found during project implementation, the on-site supervisor shall contact an approved archaeological consultant immediately. The on-site supervisor shall additionally divert all project-related activities to other areas until the discovery has been evaluated by the approved archaeological consultant, who will determine if further mitigation measures are warranted.
- MM C-2** 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, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating 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.

With implementation of Mitigation Measures C-1 and C-2, impacts to archaeological resources would be less than significant.

***Cumulative Impacts:*** Section C of this Initial Study, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As shown in Appendix 1, identified nearby cumulative projects involve earth-disturbing activities that could potentially impact significant archaeological resources. In reviewing the list of cumulative projects provided in Table C-1, the Upland Rock sediment removal activities would have the greatest potential to result in cumulative impacts, as these activities could occur at the same time as construction of the proposed project and in close proximity to the proposed project (within the east branch of Sespe Creek). However, as addressed above, it is highly unlikely that the proposed project would affect archaeological resources, and, in the event that a discovery is made, Mitigation Measures C-1 and C-2 would be implemented to ensure that potential effects are less than significant. Therefore, the proposed

project's incremental contribution to archaeological resources impacts would not be cumulatively considerable. Cumulative impacts would be less than significant.

### C.8B Historical

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project with an effect that may cause a substantial adverse change in the “mandatory significance”, “presumptive significance”, or “discretionary significance” of an historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historic resource would be materially impaired. (County of Ventura, 2011).

The significance of an historic resource is materially impaired when a project: (1) demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; (2) demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Act or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; (3) demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA; or (4) demolition, relocation, or alteration such that the significance of an historical resource would be impaired (County of Ventura, 2011).

**Proposed Project Impacts:** As discussed above in Section C.8A, both a records search and on-foot field inspection of the subject property indicate that no historic properties that meet eligibility or significance criteria under the National Register of Historic Places, or appear eligible as State, county or local landmarks, exist within the boundaries of the proposed project site area (HEART, 2012).

As identified in Appendix 4, the nearest listed Ventura County Historical Landmark [#48], the Southern Pacific Railroad Depot, is located approximately 0.76 mile (4,000 feet) east of the proposed project site area (HEART, 2012). As addressed in Section A.4.5 (Proposed Project), implementation of the proposed project would not involve the modification or demolition of any existing structures, other than the SC-2 Levee. Therefore, the proposed project would have no impact on known or potential historic resources located within the proposed project area.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. Although these identified cumulative projects could potentially impact historic resources individually (and thus potentially cumulatively), the proposed project would not affect historic resources. Consequently, it would not incrementally contribute to impacts related to historic resources in a manner that would be cumulatively considerable. No cumulative impacts would occur.

## C.9 COASTAL BEACHES AND SAND DUNES

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a proposed project would have a significant environmental impact if it causes a direct or indirect adverse physical change to a coastal beach or sand dune (Ventura County, 2011).

**Proposed Project Impacts:** The proposed project is located approximately 22 miles east of the nearest coastline. Therefore, the project site is not located within the Coastal Zone of the County's Local Coastal Program and would not create any barriers to sand dune replenishment or disturbance of sand dune vegetation. The primary structural elements of the proposed project would involve temporary construction activities to raise the levee and install a retaining wall. These activities would not affect sediment within the channel or transport to the coast. Therefore, the levee improvement activities would not impact coastal beaches and sand dunes.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. The impacts associated with the proposed project would not impact coastal beaches or sand dunes; therefore, the proposed project would have no potential to combine with similar impacts of other past, present, or reasonably foreseeable projects. No cumulative impacts to coastal beaches and sand dunes would occur.

## C.10 FAULT RUPTURE

**Significance Criteria:** As described in the Ventura County *Initial Study Assessment Guidelines*, a project is potentially at risk with respect to fault rupture if it is located within: (1) a State of California designated Alquist-Priolo Special Fault Study Zone; (2) a County designated Fault Hazard Area (County of Ventura, 2011a). Impacts from primary fault rupture and ground displacement are generally related to damage or collapse of structures and subsequent injury to people.

**Proposed Project Impacts:** The proposed project is located within the seismically active southern California region that is traversed by faults of the Transverse Ranges fault systems. The Transverse Ranges fault system consists primarily of blind reverse and thrust faults accommodating tectonic compressional stresses in the region. Blind faults have no surface expression and have been located using subsurface geologic and geophysical methods. Several major active and potentially active faults zones of the Transverse Ranges fault system with potential for fault rupture traverse Ventura County in an approximate east-west direction. Two major, active reverse faults are located in the project area and dip in opposite directions on either side of the Santa Clara River, the Oak Ridge and the San Cayetano faults.

**Oak Ridge fault (onshore segment):** The Oak Ridge fault extends east-west for about 80 miles through the onshore Ventura and the offshore Santa Barbara sedimentary basins. The onshore segment of the Oak Ridge fault is located approximately 1.75 miles south of the southern end of the proposed project. The onshore Oak Ridge fault is a south dipping reverse fault that trends generally east-west, roughly paralleled by both the Santa Clara River and SR 126, from the town of Piru to the coast. The onshore section of the fault is approximately 56 miles long with a slip rate between 3.0 to 6.0 millimeters per year (mm/yr) (SCEDC, 2012) and an estimated magnitude (M) of M7.1 to M7.2 (CGS, 2008). The fault is considered primarily Late Quaternary in age, however several Holocene have been mapped between the towns of Bardsdale and Fillmore. Much of the onshore trace is difficult to discern due to being obscured by the course of the Santa Clara River. At its eastern end, the Oak Ridge thrust becomes progressively more difficult to trace, and appears to be overthrust by the Santa Susana fault, thus becoming a blind thrust fault. It has been conjectured that the fault associated with the 1994 Northridge earthquake is probably

part of the Oak Ridge fault system, as it shares many of the characteristics of this fault (SCEDC, 2012). Portions of the fault have been Alquist-Priolo (A-P) zoned, however the closest A-P zoned section is located approximately 2.4 miles south of the southern end of the proposed project (CGS, 1999).

**San Cayetano fault:** The San Cayetano fault is a Holocene aged, north-dipping reverse fault that extends for approximately 25 miles along the northern edge of the Ventura Basin and westward into the Sespe Mountains. The San Cayetano fault has an approximate slip rate of 6.0 mm/yr and an estimated maximum magnitude of M7.0 (CGS, 2002). Recent studies suggest the San Cayetano fault system is capable of producing a moment magnitude greater than 7 with reverse slip rates over the past million years of 10-12 mm/yr (County of Ventura, 2011b). Based on detailed surface and subsurface mapping, the fault has been separated into two sections defined by a right step in the fault zone along Sespe Creek near the City of Fillmore (Dolan and Rockwell, 2001). The surface trace of the eastern section of the San Cayetano fault is along the southern edge of the Sespe Mountain range and dies out several kilometers east of the Town of Piru, where the reverse slip is assumed to be transferred on to the Santa Susana fault (a high slip rate, reverse fault east of the San Cayetano fault) (Dolan and Rockwell, 2001). The western surface trace lies well above the base of the slope of the Sespe Mountains and the surface trace ends just east of the City of Ojai. The western section may transfer slip onto the Sisar blind thrust fault and then ultimately to the Red Mountain fault (County of Ventura, 2011b). The western section of the fault has been Alquist-Priolo zoned and the closest A-P zoned section of the fault is approximately three miles northwest of the northern end of the proposed project (CGS, 1991).

The proposed project is not located within or crossing a State of California designated Alquist-Priolo Special Fault Study Zone or County designated Fault Hazard Area and no known active or potentially active faults cross or trend towards the proposed project, therefore no impacts from surface fault rupture would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project is not crossed by any known active or Alquist-Priolo zoned faults and therefore no impact from fault rupture would occur. As indicated in the Ventura County *Initial Study Assessment Guidelines* there is no known cumulative fault rupture impact that would occur as a result of other approved, proposed or probable projects. No cumulative impacts would occur.

## C.11 GROUND SHAKING

**Significance Criteria:** As discussed in the Ventura County *Initial Study Assessment Guidelines*, ground shaking hazards are everywhere throughout Ventura County and are accommodated by the Ventura County Building Code (County of Ventura, 2011). Ground shaking hazard areas are areas that can be expected to experience intense ground shaking during a maximum probable earthquake, with the shaking intensity depending primarily on the earthquake magnitude, distance and direction from the site, soil and bedrock conditions, and depth to groundwater. The potential for the highest amplification of ground shaking in Ventura County occurs in the Oxnard Plain and the Santa Clara River Valley in the southern half of the County, and in the Lockwood, Cuyama, and Cuddy Valleys in the northern half (County of Ventura, 2011a).

According to the Ventura County *Initial Study Assessment Guidelines*, threshold criteria for determining whether a project is potentially susceptible to damage from seismically induced ground shaking are whether the proposed structure is designed to be built in accordance with all applicable requirements of

the Ventura County Building Code, and if not then the project has the potential to expose people or other structures to potential significant adverse effects, including the risk of loss, injury or death involving ground shaking hazards; if the project will be built in accordance with all applicable requirements of the Ventura County Building Code then the project design will reduce the adverse effects of ground shaking to less than significant.

***Proposed Project Impacts:*** The proposed project is located within the seismically active southern California region and will likely be subject to strong ground shaking associated with earthquakes on faults of both the San Andreas and Transverse Ranges fault systems. Active reverse or thrust faults in the Transverse Ranges include blind thrust faults responsible for the 1994 Northridge Earthquake. Ground shaking results in seismic waves within the earth caused by the sudden release of accumulated stress and kinetic energy during an earthquake. These seismic waves can cause damage to structures, utilities and transportation corridors; cause landslides, rockfalls and embankment failures; and induce liquefaction failure in certain cohesionless soils. Earthquake induced ground shaking commonly causes greater damage to structures than fault rupture as it occurs over a larger area and can cause poorly engineered structures to fail.

The intensity of the seismic shaking, or strong ground motion, during an earthquake is dependent on the distance between the project area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the project area. Earthquakes occurring on faults closest to the project area would most likely generate the largest ground motion. The intensity of earthquake induced ground motions can be described using peak site accelerations, represented as a fraction of the acceleration of gravity (g). GIS data based on the United States Geological Survey (USGS) National Seismic Hazard Maps was used to estimate peak ground accelerations (PGAs) within the project area (USGS, 2009). The maps used depict peak ground accelerations with a two percent probability of exceedance in 50 years, which corresponds to a return interval of 2,475 years for a maximum considered earthquake. Peak ground acceleration is the maximum acceleration experienced by a particle on the Earth's surface during the course of an earthquake, and the units of acceleration are most commonly measured in terms of fractions of g, the acceleration due to gravity (980 cm/sec<sup>2</sup>). Peak ground accelerations within the project area range from 0.8 to 1.2 g (USGS, 2009), which corresponds to a potential for strong earthquake induced ground shaking.

Impacts associated with earthquake induced ground shaking primarily result from damage to, or collapse of, buildings or other structures. As addressed in Section A.4 (Project Description), construction for the proposed project would include the following: raising the existing levee height by one to six feet along approximately 1,543 feet of the levee; adding a 321-foot-long retaining wall; removing three existing turnouts on the riverward side of the levee; constructing one new turnout on the riverward side of the levee; installing a new formal access ramp off Mallard Street to the Sespe Creek Bike Trail; modifying the easement along the Faith Community Church property, including removal of the property's garden wall, a portion of the parking lot, and trees on the western portion of the parking lot; and adding new access ramps to the levee from the VCWPD stockpile property near SR 126 and at Shiells Park. With the exception of the installation of the 321-foot-long retaining wall, these activities would only require surficial grading activities and minor excavations for installation of fence poles, and would not involve the construction or modification of any buildings or other structures. Placement of the new levee fill and modification of the turnouts would be consistent with Corps requirements and the County of Ventura Building Code Requirements. Construction of the retaining wall would also follow County of Ventura Building Code Requirements, which would reduce the potential for damage associated with seismically-

induced groundshaking. Therefore, although the project area would have the potential for strong ground shaking in the event of a large regional or local earthquake, impacts would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. However, seismically induced ground shaking hazards and the potential effects of ground shaking related damage would affect each project individually so there would be no cumulative impacts. Additionally, as addressed above, ground shaking impacts associated with the proposed project would be less than significant. Therefore, cumulative impacts would be less than significant.

## C.12 LIQUEFACTION

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, the threshold criteria for determining whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving liquefaction, is whether it is located within a Seismic Hazards Zone (County of Ventura, 2011).

The State of California Seismic Hazard Zones Maps are to be utilized for all determinations for liquefaction potential. Projects located in mapped zones of required investigation for liquefaction must be evaluated for liquefaction potential in accordance with the requirements of the State of California Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117, dated 1997 (County of Ventura, 2011).

**Proposed Project Impacts:** Liquefaction is the phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silts, sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomena include lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects (Youd and Perkins, 1978). A structure that is located within a liquefaction zone may lose support under its foundation, which could cause the structure to tilt or settle into the ground surface and potentially collapse (County of Ventura, 2011).

The project area is located within a mapped liquefaction hazard zone, as determined by the California Geological Survey (CGS, 2002). Groundwater levels are relatively shallow beneath the levee, ranging from about 25 to 38 feet below the top of levee (VCWPD, 2012). Although the engineered levee fill would not be susceptible to liquefaction, the granular alluvial and flood plain sediments underlying the engineered levee fill may be susceptible to liquefaction due to their unconsolidated nature and the shallow ground water levels. The proposed project does not involve the construction or modification of any habitable structures, although it does include construction of a retaining wall that could be susceptible to damage from liquefaction. However, construction of the retaining wall would follow County of Ventura Building Code Requirements, which would reduce the potential for liquefaction-related failure. Consequently, impacts associated with liquefaction would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. However, liquefaction hazards and the potential effects of liquefaction-related damage would affect each project individually so there would be no cumulative impacts. Additionally, as addressed above,

liquefaction impacts associated with the proposed project would be less than significant. Therefore, cumulative impacts would be less than significant.

### C.13 SEICHE AND TSUNAMI

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project area would be subject to a potential seiche hazard if it is located within 10 to 20 feet vertical elevation from an enclosed body of water such as a bay, lake or reservoir (County of Ventura, 2011). The height of hazard above the water level is dependent on the ground motion intensity, duration of shaking, and subsurface topography of the lake or reservoir and surface topography of the shoreline. The *Initial Study Assessment Guidelines* indicate that the threshold of significance criteria for tsunami hazard is whether the proposed project is located in a mapped area of tsunami hazard as shown on the County *General Plan* maps. For most portions of the north and south coastal areas the tsunami hazard does not extend to areas more than 30 feet above sea level, and along the coastal plain the tsunami hazard extends inland for approximately one mile.

**Proposed Project Impacts:** A seiche is a series of waves caused by an earthquake within an enclosed or semi-enclosed body of water. The most common seiche experienced by Ventura County residents was in swimming pools during the 1994 Northridge earthquake. The shaking of an earthquake can result in large, destructive oscillations that can produce waves tens of feet above the normal water level in larger water bodies such as lakes or reservoirs. There is no record of a significant damaging seiche occurring in a lake, reservoir, or bay in Ventura County (County of Ventura, 2011). The nearest source for a potential seiche hazard in the project area would be Lake Piru; a reservoir located approximately 10.5 miles northeast of the project area. As the proposed project would not be located in the vicinity of a potential seiche hazard area, no impacts would occur.

A tsunami is a series of waves generated by an undersea disturbance, such as an earthquake or landslide. From the area of the disturbance, the waves will travel outward in all directions, much like the ripples caused by throwing a rock into a pond. The time between wave crests may be from 5 to 90 minutes, and the wave speed in the open ocean will average 450 miles per hour. As the waves approach the shallow coastal waters, they appear normal and the speed decreases. Then as the tsunami nears the coastline, it may grow to great heights and smash into the shore, causing much destruction. The worst recorded tsunami to hit California was in 1812. An earthquake occurred in the Santa Barbara Channel, and the resulting waves are reported by some disputed sources to have been up to 50 feet above sea level at Gaviota; the waves were probably at least 15 feet above sea level at Ventura (County of Ventura, 2011). The proposed project site is located at about 400 feet in elevation and is more than 20 miles from the coastline. According to Figure 2.6 (Tsunami Inundation Hazard Areas) of the Ventura County *General Plan Hazards Appendix*, the proposed project area would not be located within a tsunami hazard area (County of Ventura, 2011). Therefore, the proposed project would have no impacts associated with tsunamis.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project would not be located within a seiche or tsunami hazard area. As indicated in the Ventura County Initial Study Assessment Guidelines, hazards from seiche and tsunami will affect each project individually; and no cumulative seiche and tsunami hazard would occur as a result of other approved, proposed or probable projects. No cumulative impacts would occur.

## C.14 LANDSLIDES/MUDSLIDES

**Significance Criteria:** A landslide is defined by the California Geological Survey (CGS) as "the movement of a mass of rock, debris, or earth down a slope" (CGS, 2012) and the County of Ventura defines a landslide as a natural or man-induced dislodging and fall of a mass of soil or rocks along a sloped surface, or the dislodged mass itself. The CGS definition of landslide includes any type of down slope movement or mass movement of soil and rock under the direct influence of gravity and includes events such as rock falls, topples, slides, spreads, and flows, such as debris flows commonly referred to as mudslides or mudflows. The County of Ventura further defines a mudslide individually; a mudslide is a flow of very wet rock and soil (County of Ventura, 2011a). For determination of landslide/mudslide hazards for the purposes of conducting environmental assessments, the County of Ventura has included a number of different slope movement and mass wasting processes that range from very slow (a few inches in a hundred years) to extremely rapid (70 or more miles per hour), which include the following phenomena: rockfall, soil creep, soil failures, dry raveling, rotational and transitional slides, flows, slumps and any complex combinations of the above phenomena (County of Ventura, 2011a). The hazard applies to both natural and constructed slopes.

The Ventura County *Initial Study Assessment Guidelines* distinguishes two landslide hazards that require assessment, landslide hazards from known landslides and earthquake induced landslide hazards. Landslide hazards from mapped or known landslides include landslides sourced on a variety of maps including the Dibblee Quadrangle Maps, Public Works Agency files, and the CGS Landslide Evaluation maps. Earthquake induced landslide hazards are areas mapped by the CGS as having the potential for landslides in the event of an earthquake and have been mapped on the State of California Seismic Hazard Maps (County of Ventura, 2011a). According to the Ventura County *Initial Study Assessment Guidelines*, the threshold for landslide/mudslide hazard is determined by the Public Works Agency Certified Engineering Geologist based on the location of the site or project within, or outside of mapped landslides, potential earthquake induced landslide zones, and geomorphology of hillside terrain.

**Proposed Project Impacts:** In general, landslides and mudflows occur on slopes or near the base of hillsides where unstable conditions have been caused by channel erosion, weathering, and tectonic movement (County of Ventura, 2011a). Landslides on unstable slopes already on the verge of movement can be started by rainfall, snowmelt, changes in water level, stream erosion, changes in ground water levels or amounts, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors. Earthquake shaking and other factors can also induce landslides underwater. A particular threat of landslide/mudslide exists in all areas that have already experienced mass movement and in areas subject to changes in topography and moisture content. Important factors that affect the slope stability of an area include the steepness of the slope, the relative strength of the underlying rock material, and the thickness and cohesion of the overlying colluvium. The steeper the slope and/or the less strong the rock, the more likely the area is susceptible to landslides. The steeper the slope and the thicker the colluvium, the more likely the area is susceptible to debris flows. Another indication of unstable slopes is the presence of old or recent landslides or debris flows.

Generally most of the mapped landslides within Ventura County are shallow, ranging up to perhaps 100 feet in depth and generally less than 100 acres; most of the landslides in Ventura County are not presently active (moving), but have moved down slope to positions of "apparent" stability (County of Ventura, 2011b). The most notable and largest landslide within Ventura County is the La Conchita landslide which had two episodes of movement in 1995 and in 2005 (USGS, 2012). The La Conchita landslide is a portion of an older landslide which was reactivated in March of 1995. The 1995 landslide was a deep, coherent

slump which destroyed or severely damaged 14 houses. The 2005 La Conchita landslide had little or no newly failed material involved in the landslide and consisted of a remobilization of the southeastern portion of the 1995 landslide deposit. The 2005 landslide was reported to have mobilized simultaneously and nearly instantaneously into a highly fluid, rapidly moving debris flow involving about 250,000 square yards of material. The 2005 landslide destroyed 13 houses, severely damaged 23 others, and resulted in 10 deaths in the community of La Conchita (USGS, 2012).

The project area is relatively flat to gently sloping and would not be subject to landslide hazards such as rockfall, soil creep, soil failures, dry raveling, rotational and transitional slides, and slumps. As shown in Figure 2.7.1b of the Ventura County *General Plan Hazards Appendix*, the proposed project area would not be located adjacent to any mapped landslides (County of Ventura, 2011b), nor is it located within or adjacent to an earthquake induced landslide hazard area on the CGS Landslide Evaluation maps (CGS, 2002). However, the project area is within the Sespe Creek flood plain which may be susceptible to mudslides or debris flows travelling down the Sespe Creek channel. In September 2006, the Day Fire burned the natural vegetation on nearly 55,300 acres (more than one third) of the watershed, and the hydrology of Sespe Creek over the past decades has shifted the main channel to the east closer to the levee, resulting in a potential threat of debris flows or mudslides in the area. Although there is a potential for mudflows or debris flows within the project area, proposed project components that consist of improvements to the levee including raising the existing levee height by one to six feet along approximately 1,543 feet of the levee, adding a 321-foot-long retaining wall to a portion of the levee, and repair of the rock revetment would minimize potential damage to the levee and adjacent properties. Consequently, impacts related to landslides or mudflows would be less than significant.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. The hazards from landslides/mudslides will affect each project individually; and no cumulative landslide/mudslide hazard would occur as a result of other approved, proposed or probable projects. Additionally, as addressed above, landslide/mudslide hazard impacts associated with the proposed project would be less than significant. No cumulative impacts would occur.

## C.15 EXPANSIVE SOILS

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, the determination of a significant soils expansion effect shall be based upon an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving soil expansion if it is located within a soils expansive hazard zone or where soils with an expansion index greater than 20 are present (County of Ventura, 2011a).

***Proposed Project Impacts:*** Expansive soils are characterized by their ability to undergo significant volume change (shrink and swell) due to variation in soil moisture content. Changes in soil moisture could result from a number of factors, including rainfall, landscape irrigation, utility leakage, and/or perched groundwater. Expansive soils are typically very fine grained with a high to very high percentage of clay. The amount and type of clay minerals in the soil influence volume change. Shrinking and swelling of expansive soils can cause damage to buildings, roads, and other structures and to plant roots (NRCS, 2008). Special design commonly is needed in areas with expansive soils. Expansive soils are scattered throughout Ventura County (County of Ventura, 2011a). Historically, expansive soils have caused considerable damage in Ventura County. In the early 1960's, numerous homes were razed and many more were severely damaged in the Shadow Oaks Tract, adjacent to the City of Thousand Oaks.

The Shadow Oaks case was primarily responsible for the development of design techniques and procedures that provide for safe and economical construction on expansive soils and the establishment of more stringent building code (County of Ventura, 2011b).

Based on National Resources Conservation Service (NRCS) soil mapping for the Ventura area, the proposed project area is primarily underlain by four soil units: the Anacapa gravelly sandy loam, the Corralitos loamy sand, Riverwash, and Sandy alluvial land (NRCS, 2008). The Anacapa gravelly sandy loam consists of deep, well-drained soil on alluvial fans and floodplains and formed in alluvium of predominantly sedimentary sources. The Corralitos loamy sand consists of deep, somewhat excessively drained soil on alluvial fans and in small drainages and is formed in recent sandy alluvium (NRCS, 2012). Both the Riverwash and Sandy alluvial land units are actually termed as “miscellaneous areas” by the NRCS, and are areas that have little or no soil material and support little or no vegetation (NRCS, 2012). Riverwash is primarily found in drainage ways and is alluvium consisting of sand and sand stratified coarse sand to sandy loam. Sandy alluvial land is found on flood plains and is alluvium consisting of loamy sand, stratified sand to loamy sand, and stratified sand to silt loam. The shrink-swell potential of all of these soils all range from none to low (NRCS, 2012). The engineered fill of the Sespe Creek Levee would have low to no shrink-swell potential. Therefore, because both the levee and the adjacent soils where project improvements would occur have low to no shrink-swell potential, no impacts would occur from expansive soils.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project would not be located within an area of expansive soils. As indicated in the Ventura County *Initial Study Assessment Guidelines*, the hazards from expansive soils will affect each project individually; and no cumulative expansive soils hazard would occur as a result of other approved, proposed or probable projects. Consequently, no cumulative impacts would occur.

## C.16 SUBSIDENCE

***Significance Criteria:*** As indicated in the Ventura County *Initial Study Assessment Guidelines*, the determination of a significant subsidence effect shall be based upon an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving subsidence if it is located within a subsidence hazard zone (County of Ventura, 2011a).

***Proposed Project Impacts:*** Subsidence is a general term for the slow, long-term regional lowering of the ground surface with respect to sea level. It can be caused by natural forces such as the consolidation of recently deposited sediments or by man-induced changes such as the withdrawal of oil field fluids or the dewatering of an aquifer. The best known and documented example of subsidence in Ventura County is occurring in the Oxnard Plain, where water wells have caused ground subsidence on the order of 0.05 foot per year over a wide area (County of Ventura, 2011a). Subsidence that results from groundwater withdrawal or oil and gas extraction can be responsible for numerous structural effects. Most seriously affected are long, linear surface infrastructure facilities that are sensitive to slight changes in gradient or slope such as pipelines, drainage courses, rail lines, etc. As water, oil, or gas is removed from the subsurface, the total weight of the sediments that the water, oil, or gas used to help to support is placed on the sedimentary structure and the sediments can then become compressed. This compression and compaction produces a net loss in volume and hence a depression in the land surface. Subsidence is also occurring along the Santa Clara River due to the accumulation and hydrocompaction of sediments within

its present course while no longer adding deposits to the remainder of the Oxnard Plain (County of Ventura, 2011b).

Figure 2.8 of the Ventura County *General Plan Hazards Appendix* shows the limits of the subsidence zones. The most severe area of subsidence reaches roughly from Pierpont in the north to the Mugu Lagoon in the south and extends east on the Oxnard Plain to the junction of Highways 1 and 101. Areas of lesser subsidence extend inland from the more severe subsidence on the Oxnard Plain up along the Santa Clara River to a point just east of Piru. The proposed project area is included in its entirety in this lesser subsidence area; however, it would not be expected to experience differential subsidence or offset due to crossing the edge of a subsidence zone. Any slight changes in the gradient or height of the level would be reflected in the surrounding area, including the Sespe Creek drainage, and would therefore not affect the ability of the levee to function in its intended capacity.

The proposed project would be entirely located within an area of subsidence hazard, as delineated in Figure 2.8 Probable Subsidence Zone, of the Ventura County *General Plan Hazards Appendix* (County of Ventura, 2011b); however, the proposed project would not involve extraction of groundwater, oil, or gas to contribute to subsidence issues and would not be sensitive to slight changes in surface gradients. Impacts related to subsidence would be less than significant

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As indicated in the Ventura County *Initial Study Assessment Guidelines* hazards from subsidence will affect each project individually; and no cumulative subsidence hazard would occur as a result of other approved, proposed or probable projects. As discussed above, although the proposed project area would be located within a probable subsidence zone, impacts would be less than significant. Consequently, no cumulative impacts would occur.

## **C.17 HYDRAULIC HAZARDS**

### **C.17A Non-FEMA**

In the context of flood control and drainage, non-FEMA hydraulic hazards consist of the wearing away (erosion) or deposition (sedimentation) of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land clearing practices. Flooding is an overflow of water onto land that is normally dry (County of Ventura, 2011).

***Significance Criteria:*** Erosion/siltation hazards and flooding hazards are ubiquitous throughout Ventura County and are addressed by the Ventura County Public Works Agency-Watershed Protection District's Standards and Specifications Design Manual. Erosion/siltation hazards and the effects of flooding hazards are required to be considered within the existing framework of grading and building code ordinances which apply to all sites and projects. As such, threshold criteria are determined on a case-by-case basis pursuant to a variety of documents, including but not limited to the following: Ventura County ordinances and standards, Porter-Cologne Water Quality Control Act permit requirements, and NPDES permit requirements, which stipulate that project-specific BMPs are implemented to avoid or minimize erosion and sedimentation effects (County of Ventura, 2011).

***Proposed Project Impacts:*** Fluvial morphology and sedimentation analyses focused on Sespe Creek have determined that the area adjacent to the SC-2 Levee is characterized by cyclic behavior of degradation (erosion) and aggradation (sedimentation) that appears to coincide with the timing of large

floods followed by a succession of smaller events and underlying periods of base flow hydraulics (RBF, 2010); these conditions exist regardless of the proposed project, and would continue to exist following implementation of the proposed levee improvements because they are dictated by natural hydrologic processes. The proposed project would introduce the potential for site-specific erosion to occur in the areas of project disturbance during the construction period, particularly if a precipitation event occurs during the active construction period. However, compliance with applicable laws and regulations would ensure that project-specific BMPs are implemented to avoid or minimize the potential for erosion and sedimentation.

Regarding the potential for flooding hazards to increase as a result of the project, as described in Section A.4.2 (Project Objective), the proposed project would provide flood protection and public safety for the portion of the City of Fillmore which is currently subject to flooding due to existing deficiencies in the SC-2 Levee; therefore, the project would decrease the potential for flooding hazards in the project area. Non-FEMA hydraulic hazards associated with erosion and sedimentation would be temporary and less than significant, while no adverse impact associated with flooding hazards would occur.

***Cumulative Impacts:*** The introduction to Chapter C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. Other projects in the cumulative scenario could introduce or increase potential hazards associated with erosion and sedimentation, particularly as a result of earth-disturbing activities during construction; however, because this potential effect of the proposed project would be temporary and localized, the project would not contribute to the cumulative scenario and no cumulative impacts associated with erosion, sedimentation, and/or flooding hazards would occur as a result of the proposed project.

#### **C.17B FEMA**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, a proposed development that is located in part or in whole within the boundaries of a Special Flood Hazard Area, but outside of the boundaries of the Regulatory Floodway, would not result in significant impact under FEMA hydraulic hazards. A Special Flood Hazard Area is the area subject to a one percent chance of flooding in any given year, as defined on a Flood Insurance Rate Map (FIRM) as Zone A, and a Regulatory Floodway is the channel of a river or other watercourse and the adjacent land areas where floodwaters generally are the deepest, swiftest, and most hazardous, where floodwaters carry debris, potential projectiles and cause erosion, and where there is a high risk of loss of life and property damage (County of Ventura, 2011).

As listed in the Ventura County *Initial Study Assessment Guidelines*, significance criteria for FEMA Hydraulic Hazards, as relevant to the proposed project, are provided below (County of Ventura, 2011).

- A proposed development that is located, in part or in whole, within the boundaries of a Special Flood Hazard Area will result in a “Potentially Significant Project-Specific and Cumulative Impact – Mitigation Incorporated (PS-M)” under the issue area of Hydraulic Hazards – FEMA when potentially significant impacts from the one percent annual chance flood can be mitigated to a “Less Than Significant Project-Specific and Cumulative Impact (LS)” level through project design or measures such as but not limited to: relocating the proposed development elsewhere on the property where the risk of flood damage is potentially lower; implementing FEMA-supported building construction and grading technologies that mitigate flood damage and thereby reducing the risk of the flood hazard.

- A proposed development that is located, in part or in whole, within the boundaries of a Regulatory Floodway will result in a “Potentially Significant Project-Specific and Cumulative Impact (PS)” under the issue area of Hydraulic Hazards – FEMA. New habitable and non-habitable development will not be allowed within the Regulatory Floodway, and development in these areas cannot be mitigated to a less than significant level.

Flooding hazards are ubiquitous throughout Ventura County and are accommodated by the Ventura County Building Code and Ventura County Public Works Watershed Protection District Standards and Specifications Design Manual; the effects of flooding hazards are required to be considered within the existing framework of grading and building code ordinances which apply to all sites and projects (County of Ventura, 2011).

***Proposed Project Impacts:*** The proposed project is located in a Special Flood Hazard Area as well as the Regulatory Floodway. However, the proposed project is not a new development, but rather a series of improvements to existing infrastructure. In addition, the purpose of the project is to provide flood hazard protection for existing developed areas in order to obtain levee certification from FEMA through a Letter of Map Revision (LOMR), a document that officially revises a portion of the effective FIRM under the National Flood Insurance Program (NFIP), without the need to physically revise and reprint the entire map panel. Due to the nature of the proposed project to provide flood hazard protection, and the fact that the proposed project is required for the LOMR and FEMA certification, no FEMA hydraulic hazards would occur as a result of the project.

***Cumulative Impacts:*** The introduction to Chapter C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. Although other projects in the cumulative scenario may result in flooding hazard impacts, the proposed project would not result in adverse flooding hazard impacts and would therefore not contribute to cumulative impacts. No cumulative impact related to flooding hazard would occur.

## C.18 FIRE HAZARDS

As described in the Hazards Appendix of the Ventura County *General Plan*, the Ventura County Fire Protection District is responsible for wildfire suppression on all private land outside the boundaries of Santa Paula, Fillmore, Oxnard, San Buenaventura, and the Los Padres National Forest (County of Ventura, 2011b). Fire protection services for the proposed project area and its immediate vicinity are provided by mutual aid and automatic aid agreements with the four city fire departments and the surrounding counties and cities, as well as local military bases (County of Ventura, 2011b). The responsibility for warning and evacuation is in the hands of the law enforcement agencies, primarily the Sheriff's Department, as most fire hazards exist on unincorporated county territory (County of Ventura, 2011b).

The closest fire station to the proposed project area is the City of Fillmore Fire Station, which is located at 250 Central Avenue in the City of Fillmore approximately 0.80 mile (4,200 feet) east of the proposed project (City of Fillmore Fire Department, 2012). The City of Fillmore Fire Department is comprised of five full-time staff members including one chief, three captains, and one disaster coordinator. Additionally, the City of Fillmore Fire Department employs two volunteer Deputy Chiefs, four volunteer Captains, and 60 volunteer firefighters (City of Fillmore Fire Department, 2012).

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, projects located within High Fire Hazard Areas/Fire Hazard Severity Zones or Hazardous Watershed Fire Areas

may have a significant fire hazard impact. The fire hazard impact can be mitigated by compliance with Building and Safety requirements for structures and the Fire Protection District Hazard Abatement program which calls for the clearing of brush, flammable vegetation, or combustible growth located within 100 feet of structures or buildings. Projects not located within High Fire Hazard Areas/Fire Hazard Severity Zones or Hazardous Watershed Fire Areas will not have a significant impact (County of Ventura, 2011a).

***Proposed Project Impacts:*** According to Figure 2.13.2b within the Ventura County *General Plan - Hazards Appendix*, the proposed project would not be located within any Fire Hazard Severity Zone State Responsibility Area (SRA) based on State Department of Forestry and Fire Protection (CAL FIRE) criteria areas of Ventura County that are most prone to hazards from wildfires (County of Ventura, 2011b). Therefore, the proposed project will not have a significant impact to fire hazards.

Ventura County's Fire Protection District requires annual 100-foot brush clearance around structures in the chaparral/sage areas, under the California Health and Safety Code, Division 12 Part 2.7, and Division 12 Part 5. As discussed in Section A.4.5 (Proposed Project), maintenance of the 15-foot VFZ would occur and no operational changes pertaining to brush clearance would occur as a result of implementing the proposed project. The VCWPD would conduct vegetation maintenance (i.e., routine herbicide application) according to the County's Routine Maintenance Program (VCWPD, 2012). Additionally, as discussed in Section A.4.5, operation and maintenance of the proposed project would include VCWPD BMPs adhering to local fire abatement requirements by conducting annual brush clearance in the District right-of-way adjacent to residential areas.

It is expected that all project activities would be in compliance with the applicable sections of the California Uniform Fire Code and adopted Ventura County Fire Protection District ordinances, standards and regulations. Adherence to these codes, ordinances, standards and regulations would include, but not be limited to, the following:

- Materials that are susceptible to spontaneous ignition, such as oily rags, would be stored in appropriate containers and safeguards would be taken to minimize the risk of exposing combustible materials to unintended sources of ignition;
- Smoking would be prohibited except in approved areas;
- Leaking equipment would be immediately repaired and/or taken out of service;
- Fire protection equipment, including fire extinguishers, would be kept on site and inspected/maintained in accordance with applicable manufacturer recommendations;
- Readily accessible emergency telephone facilities would be provided to all work crews to immediately report fire ignition to "911" emergency response services;
- Internal-combustion-powered construction equipment would be located so that exhausts do not discharge against combustible material, equipment would not be refueled while in operation, and fuel for equipment would be stored in appropriate areas; and
- Combustible debris, rubbish and waste material would be removed and/or appropriately stored at the end of each workday and would not be disposed of by burning.

Adherence to the types of standard requirements listed above would occur throughout the project construction period, thereby minimizing the potential for wildfire ignition. Therefore, the proposed project would have no impact related to fire hazards.

***Cumulative Impacts:*** The introduction to Section C of this Initial Study, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As shown in Appendix 1, identified nearby cumulative projects involve construction activities that could potentially result in fire ignition are those most likely to combine with the proposed project for a potential cumulative impact related to fire hazards. In reviewing the list of cumulative projects provided in Table C-1, the Upland Rock sediment removal activities would have the greatest potential to result in cumulative impacts, as these activities could occur at the same time as construction of the proposed project and in close proximity to the proposed project (within the east branch of Sespe Creek). As described above, the proposed project area is not located within a high fire hazard area. When reviewing the Upland Rock sediment removal project, it too is not located within a high fire hazard area. According to the Ventura County *Initial Study Assessment Guidelines*, projects not located within High Fire Hazard Areas/Fire Hazard Severity Zones or Hazardous Watershed Fire Areas will not have a significant impact (County of Ventura, 2011a). No cumulative impacts to fire hazards would occur.

## C.19 AVIATION HAZARDS

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, a review of aviation hazards, as those hazards relate to proposed development of properties near county public airports, will focus on compliance with the County's Comprehensive Land Use Plan and pre-established federal criteria set forth in Federal Aviation Regulation Part 77 (Obstruction Standards), as well as those recommendations for good land-use planning made by State and county governments (County of Ventura, 2011a). As defined by the Ventura County *Initial Study Assessment Guidelines*, aviation hazards refer to the potential loss of life and/or property due to an aircraft accident, including any action which may cause an increase in the potential for an aircraft accident (County of Ventura, 2011a).

***Proposed Project Impacts:*** The nearest airport to the proposed project area is the Santa Paula Airport, located approximately eight miles southeast of the proposed project site area (County of Ventura, 2011b). Therefore, the proposed project area is not located within two miles of an existing airport or a privately owned landing strip, and is not located within the designated flight path of any local airport facility. As discussed in Section A.4.5 (Proposed Project), the proposed project does not involve any equipment or structures that could obstruct or interfere with aviation activities. Furthermore, the proposed project would not directly or indirectly result in an increase of persons within two miles of an existing airport or a privately owned landing strip, within an airport land use plan, or within the designated flight path of any local airport facility. Neither implementation nor operation and maintenance of the proposed project would affect flight paths or introduce an aviation hazard. No impact to aviation hazards would occur.

***Cumulative Impacts:*** The proposed project would be cumulatively significant if it would contribute an incrementally adverse impact to the potential loss of life and/or property due to an aircraft accident, taking into consideration other cumulative projects in the area. However, as described above, the proposed project would result in no impacts associated with aviation hazards. Consequently, the proposed project would have no potential to combine with other projects identified in the introduction to Section C,

as supported by Appendix 1, resulting in a cumulative impact to aviation hazards. No cumulative impact to aviation hazards would occur.

## C.20 HAZARDOUS MATERIALS/WASTE

Hazardous materials means any material that, because of its quantity, concentration, physical or chemical characteristics poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that the administering certified unified program agency (CUPA) determines to be potentially injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (County of Ventura, 2011).

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR) for a 0.5-mile radius of the proposed project site area to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for identifying hazardous material/waste sites. This report is included as Appendix 5 of this Initial Study (EDR, 2012).

### C.20A Hazardous Materials

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, a project that is designed to meet all of the applicable requirements set forth in the following authorities shall not be considered to have a significant impact in this environmental area (County of Ventura, 2011):

- **Underground Storage Tanks** - California Health and Safety Code, Division 20, Chapter 6.7 and the California Code of Regulations Title 23, Division 3, Chapter 16.
- **Business Plan** - California Health and Safety Code, Division 20, Chapter 6.95, Article 1.
- **Risk Management Plan** - California Health and Safety Code, Division 20, Chapter 6.95, Article 2.
- **CUPA** - California Health and Safety Code, Division 20, Chapter 6.11.
- **Fire Code** - The Fire Code adopted by the VCFPD in regards to aboveground hazardous materials. Reference California Health and Safety Code, Division 12, part 2.7.

As addressed in Section 20a.E of the Ventura County *Initial Study Assessment Guidelines*, the methodology for determining hazardous material impacts of a project shall entail the following (County of Ventura, 2011):

1. Determine if the proposed project will utilize hazardous materials in a quantity that is subject to regulation by the Environmental Health Division and/or VCFPD.
2. Determine if the project will utilize and require the installation of underground hazardous materials storage tanks.
3. Determine if existing underground storage tanks are on-site, and if they are in compliance with the testing and monitoring requirements set forth in the California Health and Safety Code, Division 20, Chapter 6.7 and the California Code of Regulations Title 23, Division 3, Chapter 16. Consult with the Ventura County Environmental Health Division Hazardous Materials Program and determine if any enforcement or compliance actions are pending. A site assessment

must be completed on active LUFT sites before the application is deemed complete.

4. Determine if existing tanks are to be permanently closed.

***Proposed Project Impacts:*** As discussed in Section A.4.5 (Proposed Project), Table A-4, the equipment and vehicles required for project construction and routine maintenance would be powered by either diesel fuel or gasoline. Construction vehicles and equipment would be re-fueled onsite within the designated work areas on the levee or on the landside of the levee. No on-site fuel storage would occur. Therefore, implementation of the proposed project would have the potential to cause small-scale hazardous materials spills related to fuels and other automotive and equipment fluids such as oils, lubricants, and hydraulic fluids. Should any hazardous material(s) be spilled or encountered during project implementation, the material(s) would be contained, removed and treated in accordance with standard VCWPD contract specifications and requirements, as well as federal, State and local laws, regulations and ordinances. Herbicides would be used for occasional vegetation removal, as specified in the VCWPD's Routine Maintenance Program EIR, and BMPs would be followed (VCWPD, 2012). Additionally, as noted in Section A.9 (Other Agencies Whose Approval May Be Required), prior to project implementation the VCWPD would consult with the Ventura County Environmental Health Division to ensure that concerns related to hazardous materials are fully addressed.

As discussed in Section A.4.5, the proposed project will not utilize or require the installation of underground hazardous materials storage tanks. As described in Appendix 5, the nearest underground storage tanks are two identified State and tribal registered underground storage tanks within approximately 0.13 mile (700 feet) of the proposed project. These are located at (1) California Community Builders, located southeast of the proposed project site at the corner of Sespe Ave and D Street; and (2) Royce Rental and Tank Service, located southwest of the proposed project site at 1565 Ventura Street (EDR, 2012). Additionally, as described in Appendix 5, two historical underground storage tanks are located within approximately 0.13 mile (700 feet) of the proposed project. These are located at (1) Dick Elkins Trucking, located northeast of the proposed project site at 960 3<sup>rd</sup> Street; and (2) Perry Ranch Company, located southeast of the proposed project site at 199 E Street (EDR, 2012).

Based on information provided in Appendix 5, the locations of these existing and historic underground storage tanks would not be collocated with or impeded upon by proposed project implementation; consequently, the likelihood of encountering such facilities would be extremely low. Furthermore, as these four existing and historic underground storage tanks are not located within the proposed project area, the proposed project would have no bearing on their closure status. Therefore, less than significant impacts related to the disruption of an existing hazardous materials site are anticipated to occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. All of the past, present and reasonably foreseeable projects within Ventura County are, or would be, subject to compliance with all applicable State, federal and local laws, regulations and ordinances regarding hazardous materials. As discussed above, no conflicts with hazardous materials associated with implementation of the proposed project are anticipated to occur. Therefore, the proposed project's incremental contribution to impacts associated with hazardous materials would not be cumulatively considerable.

In reviewing the list of cumulative projects provided in Table C-1, the Upland Rock sediment removal activities would have the greatest potential to result in cumulative impact with regards to disrupting underground storage tanks, as this project could occur at the same time as construction of the proposed

project and in close proximity to the proposed project (within the east branch of Sespe Creek). It is assumed that all projects identified within Table C-1, as supported by Appendix 1, would consult with the Ventura County Environmental Health Division to ensure that concerns related to hazardous materials are fully addressed. Furthermore, as discussed above, the proposed project would not be collocated with or impeded upon any underground storage tanks or hazardous materials storage facilities. Therefore, the proposed project's incremental contribution to impacts associated with hazardous materials with regards to upsetting underground storage tanks or hazardous materials facilities would not be cumulatively considerable. Cumulative impacts would be less than significant.

### **C.20B Hazardous Waste**

***Significance Criteria:*** "Hazardous wastes" include the following (County of Ventura, 2011):

- A waste, or combination of wastes, which because of quantity, concentration, physical or chemical characteristics, may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or may pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
- A waste that meets any of the criteria for the identification of a hazardous waste adopted by the State Department of Toxic Substances Control pursuant to Division 20, Chapter 6.5 of the California Health and Safety code.

According to the Ventura County *Initial Study Assessment Guidelines*, the storage, handling and disposal of potentially hazardous waste shall be in conformance with the requirements set forth in the following regulations (County of Ventura, 2011):

- California Code of Regulations (CCR), Title 22, Division 4.5.
- California Health and Safety Code, Division 20, Chapter 6.5.
- Ventura County Ordinance Code, Division 4, Chapter 5 (Hazardous Substances), Article 1, (Certified Unified Program Agency).

The above State Legislation and local ordinances have been enacted for the purpose of preventing contamination from improper storage, handling and disposal of hazardous wastes. It is also the intent of these regulations to establish procedures so that the generators of hazardous wastes will be encouraged to employ reduction technology and destruction of their hazardous wastes prior to disposal.

***Proposed Project Impacts:*** The proposed project would generate used motor oil, which is considered a hazardous waste, during construction activities. The proposed project would be subject to compliance with State regulations governing hazardous waste generation, including those defined by the Department of Toxic Substances Control (DTSC), which require the safe disposal of all hazardous waste. Based on the equipment used for project construction presented in Section A.4.5 (Proposed Project), Table A-4, no other hazardous wastes would be generated due to implementation of the proposed project. The only soil spoils associated with the project would be from tree removal (soil within tree root balls), and all vegetative material would be disposed of at the nearest green waste recycling facility (VCWPD, 2012).

As noted in Section A.9 (Other Agencies Whose Approval May Be Required), prior to project implementation the VCWPD would consult with the Ventura County Environmental Health Division to ensure that concerns related to hazardous waste are fully addressed. This coordination would include

obtaining all necessary authorizations from the Ventura County Environmental Health Division and conformance with regards to applicable State Legislation and local ordinances for the purpose of preventing contamination from improper storage, handling and disposal of hazardous wastes prior to initiating any construction activities on the project site. Therefore, project impacts associated with hazardous wastes would be less than significant.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. All of the past, present and reasonably foreseeable projects within Ventura County would also be required to comply with all applicable State and local laws and regulations regarding the disposal of hazardous waste, and may be required to implement additional safety measures for the handling and disposal of hazardous waste if warranted by project-specific regulatory reviews and approvals. As discussed above, the VCWPD would consult with the Ventura County Environmental Health Division to ensure that concerns related to hazardous waste are fully addressed. It is assumed that all projects identified in Table C-1 would consult with the Ventura County Environmental Health Division to ensure that concerns related to hazardous waste are fully addressed. Therefore, the proposed project would not incrementally contribute to impacts associated with hazardous wastes that would be cumulatively considerable. Less than significant cumulative impacts would occur.

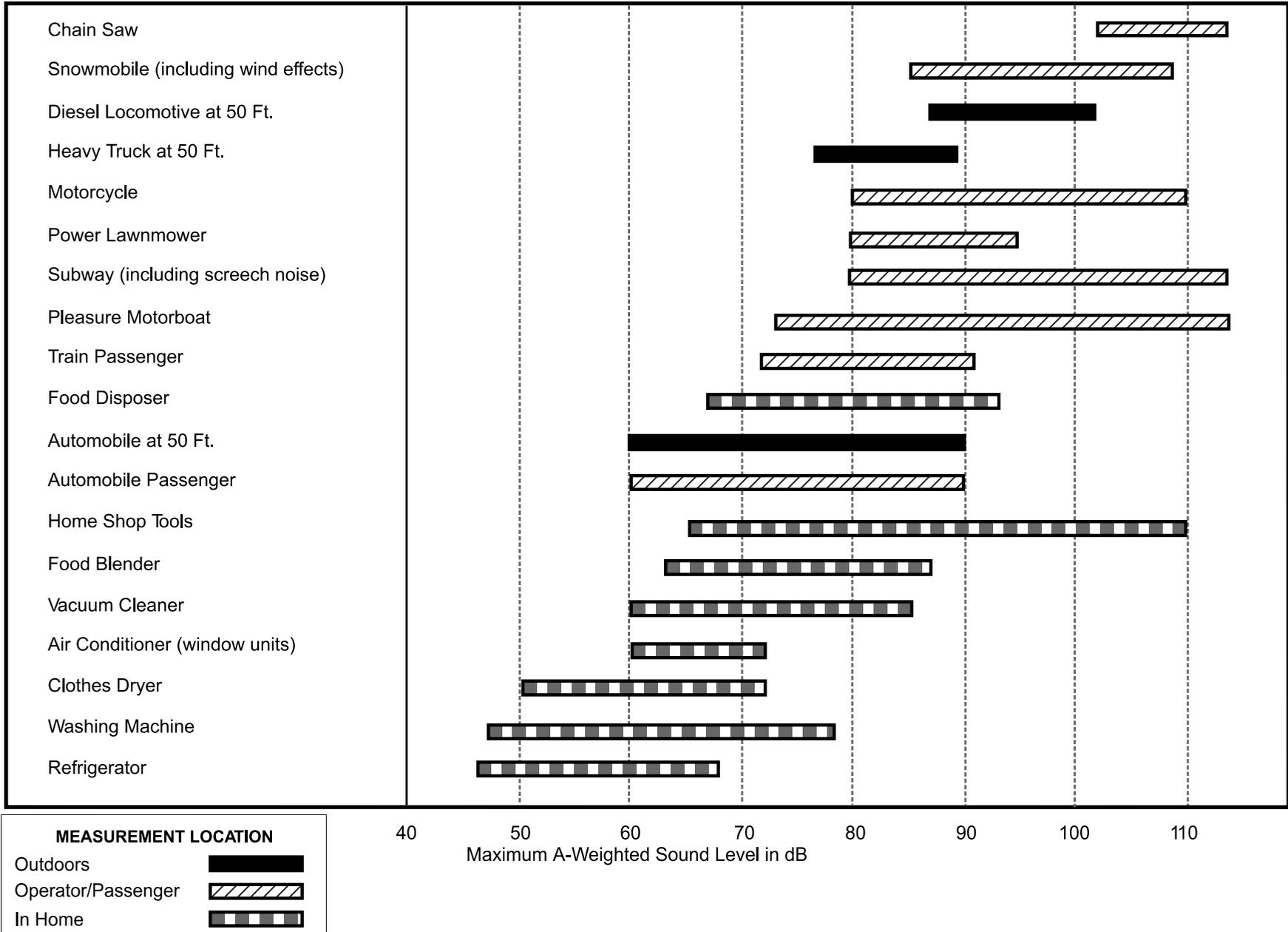
## **C.21 NOISE AND VIBRATION**

Noise is defined as any unwanted sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise is annoying (County of Ventura, 2011a). Because the effects of noise accumulate over time, it is necessary to address both the intensity and duration of sound. As such, the thresholds of significance for noise take both of these elements into account.

### **General Information on Noise**

A brief background on the fundamentals of environmental acoustics is helpful in understanding how humans perceive various sound levels. Although extremely loud noises can cause temporary or permanent damage, the primary environmental impact of noise is annoyance. The objectionable characteristic of noise often refers to its loudness. Loudness represents the intensity of the sound wave, or the amplitude of the sound wave height measured in decibels (dB). Decibels are calculated on a logarithmic scale; thus, a 10 dB increase represents a 10-fold increase in acoustic energy or intensity, while a 20 dB increase represents a 100-fold increase in intensity. Decibels are the preferred measurement of environmental sound because of the direct relationship between a sound's intensity and the subjective "noisiness" of it. The A-weighted decibel system (dBA) is a convenient sound measurement technique that weights selected frequencies based on how well humans can perceive them. Figure C.21-1 provides typical ranges of common sounds heard in the environment.

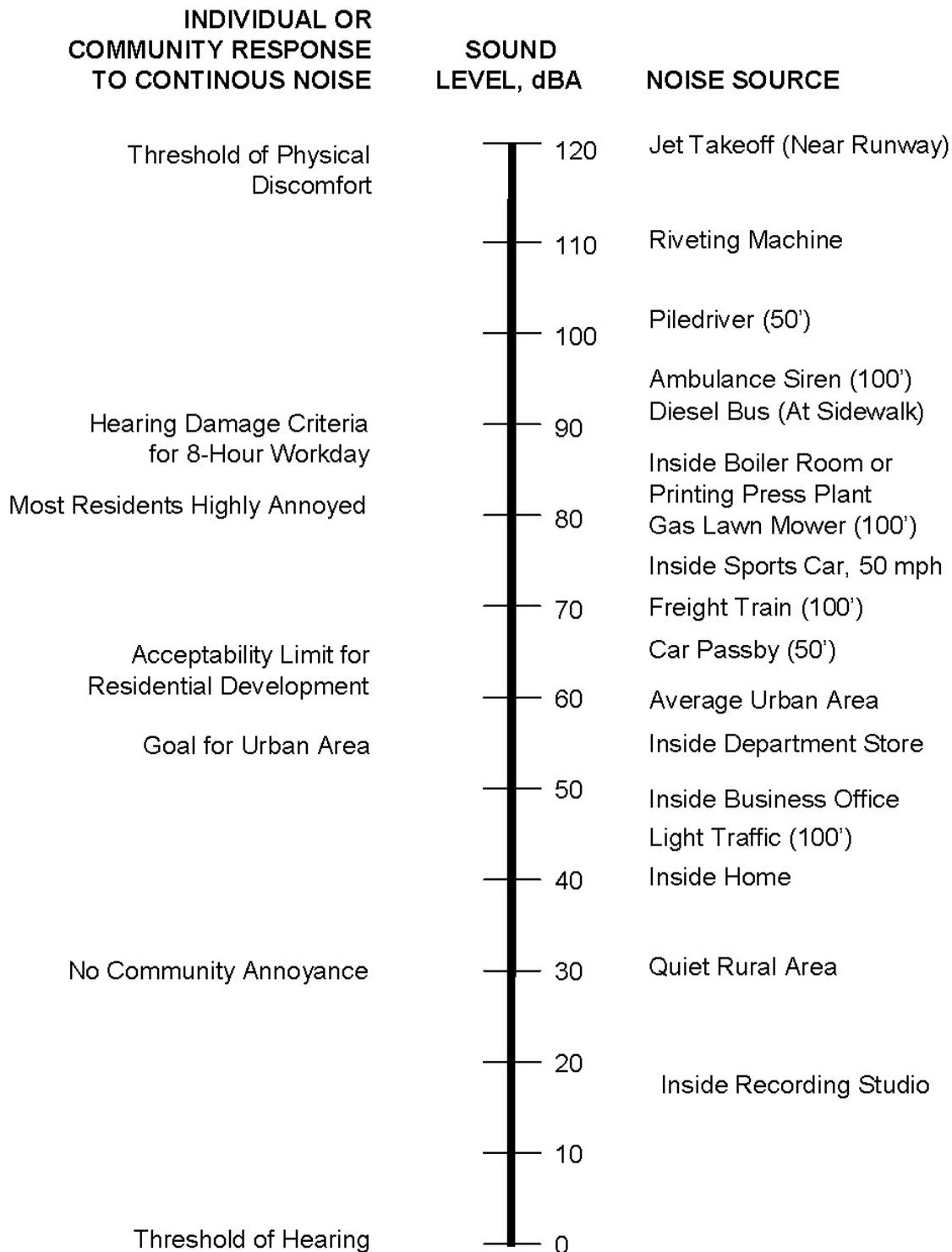
The range of human hearing spans from the minimal threshold of hearing (approximately 3 dBA) to that level of noise that is past the threshold of pain (approximately 120 dBA). In general, human sound perception is such that a change in sound level of three (3) dB is just noticeable, while a change of 5 dB is clearly noticeable. A change of 10 dB is perceived as a doubling (or halving) of sound level. Noise levels are generally considered low when they are below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss if exposure is sustained. Example noise sources and individual or community response are shown in Figure C.21-2.



**Figure C.21-1**  
**Typical Range of Common Sounds**  
**Heard in the Environment**



Source: USEPA, 1978.  
 Protective Noise Levels  
 Condensed Version of  
 EPA Levels Document



Source: County of Ventura, 2010 – Figure 1.

**Figure C.21-2**  
**Example Noise Sources and Individual or Community Response**

Ambient environmental noise levels can be characterized by several different descriptors. Energy Equivalent or Energy Average Level (Leq) describes the average or mean noise level over a specified period of time. Leq provides a useful measure of the impact of fluctuating noise levels on sensitive receptors over a period of time. Other descriptors of noise incorporate a weighting system that accounts for human’s susceptibility to noise irritations at night. Community Noise Equivalent Level (CNEL) is a measure of cumulative noise exposure over a 24-hour period, with a five (5) dB penalty added to evening hours (7:00 p.m. to 10:00 p.m.) and a 10 dB penalty added to night hours (10:00 p.m. to 7:00 a.m.). Day/Night Average Noise Level (Ldn) is essentially the same as CNEL, with the exception that the evening penalty is dropped.

**General Information on Vibration**

Vibration is an oscillatory motion through a solid medium, in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Typically, groundborne vibration generated by heavy equipment or traffic on rough roads attenuates rapidly with distance from the source of the vibration so that potential impact areas are usually confined within short distances (i.e., 200 feet or less) from the source (FTA, 2006).

**Noise Environment of the Proposed Project Area**

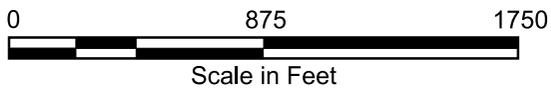
The dominant noise sources in the proposed project area are street traffic along Highway 126, Old Telegraph Road, and residential streets (e.g., Sespe Avenue), as well as general residential noises, such as dogs barking and household maintenance activities.

On February 9, 2012, noise measurements were recorded using an impulse integrating sound level meter (Quest Technologies-Model 2800) at three locations along the SC-2 Levee where project activities would occur to quantify existing conditions. Figure C.21-3 provides the locations where sound measurements were taken. Table C.21-1 provides the recorded ambient noise conditions in the proposed project area. As demonstrated in Table C.21-1, the existing average ambient noise levels in the vicinity of proposed project area range between 48 and 51 dBA Leq (20 minutes).

**Table C.21-1. Ambient Noise Levels Representative of the Project Area**

Location		Time & Duration	Leq	Lmax	Lmin	Noted Sources
#	Description					
1	North of Highway 126 at formal bike trail entrance off E Street/Cottonwood Lane; behind homes and industrial operations. Potential construction access and staging area.	11:35 a.m. 20 min.	48.1	57.6	38.8	Birds chirping, airplane overhead, distant traffic noise along Highway 126, and dogs barking.
2	On levee behind Residence #1, located at the end of the Robin Court cul-de-sac.	12:05 p.m. 20 min.	50.3	67.7	36.2	Birds/crows (loudest) squawking, wind chime (at Residence #1), cars passing on Sespe Avenue, traffic on Highway 126 (distant), and dogs barking.
3	On levee behind first residence to the south of Shiells Park; home is located at the north end (cul-de-sac) of Mockingbird Lane.	12:38 p.m. 20 min.	51.0	67.0	37.7	Dogs barking (loudest), birds chirping, traffic on Old Telegraph Road (distant), and household noise (vacuuming).

Notes: All measurements are in dBA and were taken on February 9, 2012. According to the County of Ventura *Construction Noise Threshold Criteria and Control Plan* (November 2005, Amended July 2010), Appendix C, ambient noise measurements were conducted for 20 minutes at representative locations.



Source: Google Earth, 2012.

**Figure C.21-3**

**Noise Measurement Locations**

**Sensitive Receptors**

According to the Ventura County *General Plan* (Section 2.16 - Noise), land uses considered to be noise sensitive include residential, educational and health facilities, research institutions, and certain recreational and entertainment facilities (typically, indoor theaters and parks for passive activities) and churches (County of Ventura, 2011b). However, it is stated in the *General Plan* (Section 2.16.2) that construction noise shall be evaluated in accordance with the County’s *Construction Noise Threshold Criteria and Control Plan*. Per the County’s *Construction Noise Threshold Criteria and Control Plan* noise-sensitive receptors and their periods of greatest sensitivity to construction noise are presented in Table C.21-2. As such, noise-sensitive receptors in the project area would include residential homes along the SC-2 Levee alignment between Old Telegraph Road and Highway 126, if construction is occurring outside of daytime hours (7:00 a.m. to 7:00 p.m. Monday through Friday, and 9:00 a.m. to 7:00 p.m. Saturday, Sunday, and local holidays); and the local churches including Faith Community Church (355 D Street), First Baptist Church of Fillmore (1057 First Street), and the Church of Jesus Christ of Latter-Day Saints (1017 First Street), when in use. As noted in Section A.4 (Description of Proposed Project), the Faith Community Church offers services at 9:00 a.m., 10:45 a.m., and 6:00 p.m. on Sundays, which are not within the proposed construction schedule (7:00 a.m. to 7:00 p.m. Monday-Friday). Faith Community Church holds other events and services throughout the week that may occur during active construction hours. The First Baptist Church of Fillmore offers services at 11:00 a.m. on Sundays. The Church of Jesus Christ of Latter-Day Saints (Fillmore Ward) has meetings/sacrament at 10:00 a.m., with Sunday School/Primary starting at 11:10 a.m., and Priesthood/RS/YW starting at 12:10 p.m. Again, other events and services may occur throughout the week that could coincide with construction hours.

**Table C.21-2. Noise-Sensitive Receptors**

Receptor Description	Typical Sensitive Time Period
Hospitals, Nursing Homes (quasi-residential)	24 hours
Single-Family and Multi-Family Dwellings (residential)	Evening/Night
Hotels/Motels (quasi-residential)	Evening/Night
Schools, Churches, Libraries (when in use)	Daytime/Evening

Source: County of Ventura, 2010 – Figure 3.

**Significance Criteria**

**Noise.** The proposed project involves the construction/modification and maintenance of the existing SC-2 Levee between Old Telegraph Road and Highway 126 in Fillmore, California. For construction, the Ventura County’s *Construction Noise Threshold Criteria and Control Plan* would apply, which establishes the thresholds of significance criteria provided in Table C.21-3, for construction during daytime hours. According to the County’s *Construction Noise Threshold Criteria and Control Plan*, “daytime hours” are defined as 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 7:00 p.m., Saturday, Sunday and local holidays.

**Table C.21-3. Daytime Construction Activity Noise Threshold Criteria**

Construction Duration Affecting Noise-Sensitive Receptors	Noise Threshold Criteria <sup>1</sup>	
	Fixed $L_{eq}(h)$ , dBA	Hourly Equivalent Noise Level ( $L_{eq}$ ), dBA <sup>2, 3</sup>
0 to 3 days	75	Ambient $L_{eq}(h)$ + 3 dB
4 to 7 days	70	Ambient $L_{eq}(h)$ + 3 dB
1 to 2 weeks	65	Ambient $L_{eq}(h)$ + 3 dB
2 to 8 weeks	60	Ambient $L_{eq}(h)$ + 3 dB
Longer than 8 weeks	55	Ambient $L_{eq}(h)$ + 3 dB

Source: County of Ventura, 2010 – Figure 4.

- Notes: (1) The Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building.  
 (2) The instantaneous  $L_{max}$  shall not exceed the Noise Threshold Criteria by 20 dBA more than 8 times per daytime hour.  
 (3) Local ambient  $L_{eq}$  measurements shall be made on any mid-week day prior to project work.

While the proposed project is located in unincorporated Ventura County, the identified noise-sensitive receptors are located within the City of Fillmore. Per the City of Fillmore Noise Element, “land uses considered sensitive to noise include residential areas, schools, hospitals, etc.” (City of Fillmore, 1988). City of Fillmore Zoning Ordinance Article III – General Regulations, Section 6.04.1805 – General Standards, Part 14 – Noise Attenuation, Section E – Exceptions to Provisions, states that noise sources associated with construction, repair, remodeling, or grading of real property are exempt, provided the activities do not take place between 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a major State or Federal holiday (City of Fillmore, 1994). Similarly, under Section 6.04.1805 Part 14 Section F, it states that maintenance of real property is also exempt during these hours (City of Fillmore, 1994).

Operation of the proposed project, which would modify an existing levee and ancillary facilities, is not considered a noise generator; therefore the noise thresholds established in the Ventura County *General Plan* would not apply.

**Vibration.** According to the Ventura County *Initial Study Assessment Guidelines*, vibration from construction would be significant if the project, either individually or when combined with other recently approved, pending, or probable future projects, includes construction activities involving blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation which exceeds the criteria provided in the Transit Noise and Vibration Impact Assessment (Section 12.2), as shown in Table C.21-4.

**Table C.21-4. Screening Distances for Vibration Assessment**

Vibration-Generating Transit Use	Critical Distance from Right-of-Way or Property Line (feet) by Land Use Categories		
	Category 1 (High Sensitivity Use)	Category 2 (Residential)	Category 3 (Institutional)
Steel-Wheeled/Steel-Rail Vehicle Transit Use			
Conventional Commuter Railroad	600	200	120
Rail Rapid Transit	600	200	120
Light Rail Transit	450	150	100
Intermediate Capacity Transit	200	100	50
Rubber-Tire Heavy Vehicles (if not previously screened out)**	100	50	---

Sources: County of Ventura, 2011a – Noise and Vibration Table 1; FTA, 2006.

Definitions

Category 1 (High Sensitivity Use) – Buildings where vibration would interfere with operations. Examples includes concert halls, vibration-sensitive research and manufacturing, hospitals with vibration-sensitive equipment, and university research operations.

Category 2 (Residential) – All residential land uses and any buildings where people sleep, such as hotels and hospitals.

Category 3 (Institutional) – Schools, churches, other institutions, and quite offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Conventional Commuter Rail – Conventional passenger railroad serving areas surrounding an urban center. Most commuter railroads utilize locomotive-hauled coaches, often in push-pull configuration.

Rail Rapid Transit – (often called “Heavy Rail Transit”) A mode of public transit with tracked vehicles in multiple units operating in exclusive rights-of-way. Trains are generally powered by electricity from a third rail alongside the track.

Light Rail Transit (LRT) – A mode of public transit with tracked vehicles in multiple units operating in mixed traffic conditions on streets as well as sections of exclusive right-of-way. Vehicles are generally powered by electricity from overhead lines.

Intermediate Capacity Transit (ICT): A transit system with less capacity than rail rapid transit, but more capacity than typical bus operations. Examples of ICT include bus rapid transit (BRT), automated guideway transit (AGT), monorails and trolleys.

***Proposed Project Impacts***

**Construction**

**Noise.** As described in Section A.4 (Description of Proposed Project), activities associated with the proposed project would involve the use of various construction equipment including excavators, cement trucks, fork lift, bulldozer, grader (blade), and generator to construct the flood wall and raise the levee. Construction of the levee modifications is anticipated to take approximately five to six months. While construction activities would move linearly along the levee alignment, due to the limited access to the levee noise would be expected to be generated along the entire length of the levee throughout construction as a result of material deliveries and construction worker access. Therefore, the most appropriate threshold of significance criteria provided in Table C.21-3 that would apply would be for a construction duration of longer than eight weeks with a maximum  $L_{eq}$  of 55 dBA, or an increase of three (3) dB over the ambient noise condition, whichever is greater. In addition, as noted (#2) in Table C.21-3, the instantaneous  $L_{max}$  shall not exceed the Noise Threshold Criteria by 20 dBA or 75 dBA more than eight times per daytime hour.

As shown in the noise modeling provided in Appendix 6, construction of the levee modifications would result in peak unmitigated noise levels ranging from 77 to 92 dBA at the closest noise-sensitive receptors. Construction activities would occur between 7:00 a.m. and 7:00 p.m. Monday through Friday (daytime hours). As such, construction noise would be exempt per the City of Fillmore’s noise regulations. Per the County’s *Construction Noise Threshold Criteria and Control Plan* (see Table C.12-2, above), the only “typically noise-sensitive use” during daytime hours located in the project vicinity would be the local churches, which include the Faith Community Church, First Baptist Church of Fillmore, and The Church of Jesus Christ of Latter Day Saints (when in use); residences located along the alignment are not considered to typically be sensitive during daytime hours. The estimated unmitigated construction noise levels would exceed the County’s significance criteria by resulting in noise levels greater than 55 dBA  $L_{eq}(h)$  and would potentially exceed the threshold by 20 dBA more than eight times per daytime hour, resulting in a potentially significant impact at the identified local churches, if these churches were to be in use when construction is occurring. Implementation of Mitigation Measures N-1 through N-7 would reduce the potential to exceed the construction noise thresholds of Ventura County, and would ensure that construction activities are occurring during daytime hours when the local churches are not in use, such that noise impacts to daytime sensitive receptors would be reduced to a less-than-significant level.

- MM N-1** The VCWPD shall coordinate with the Faith Community Church (355 D Street), First Baptist Church of Fillmore (1057 First Street), and The Church of Jesus Christ of Latter Day Saints (1017 First Street) to schedule construction activities in the vicinity of these churches, including vegetation removal and wood chipping activities at Shiells Park, when the churches are not in use. However, if construction activities near the church(es) must occur when the church(es) is/are in use, the VCWPD shall monitor construction noise levels to ensure noise levels do not exceed the County of Ventura daytime noise threshold of 55 dBA Leq (hourly) within 10 feet of the sanctuary building. If noise levels are determined to exceed 55 dBA Leq (hourly), offending construction activities must be temporarily suspended until the affected church activity has finished.
- MM N-2** The wood chipper shall be sited at Shiells Park on the far western portion of the park, approximately equidistant from the north and south boundaries of the park, such that the chipper would be located as far away from residences as possible. To further reduce noise levels, a temporary paneled noise shield, barrier, or enclosure shall be installed around the wood chipper; the noise control shield shall be made of panels featuring a solid panel with a weather-protected, sound-absorptive material on the construction-activity side of the noise shield. Wood chipper operations shall be scheduled to occur during times of highest ambient noise levels, to the extent feasible and without conflict of MM N-1.
- MM N-3** All equipment shall include noise reduction measures, as applicable. These measures shall include, but may not be limited to, properly operating and maintaining mufflers, correct placement of equipment engine covers, and ensuring that small loading equipment is equipped with rubber tires.
- MM N-4** All machinery shall be equipped with the best available exhaust mufflers and “hush kits,” as applicable.
- MM N-5** Chain saws shall be maintained with sharp, damped blades with random tooth spacing.
- MM N-6** Noise producing signals, including horns, whistles, alarms, and bells shall be limited to safety warning purposes only.
- MM N-7** As part of the project’s advanced notification to all residences and property owners, a VCWPD contact person name and phone number shall be provided. The contact person shall respond to questions or concerns related to noise and vibration within 24 hours. If warranted by inquiries or complaints, on-site noise measurements shall be taken to determine if noise or vibration levels are substantially greater than expected levels.

In addition to the noise generated by levee improvement activities, haul trucks would also generate noise. As shown in Figure C.21-1, a heavy truck can generate noise at levels of up to 88 dBA at 50 feet (USEPA, 1978). At the peak of construction, a total of 50 daily truck trips are anticipated, with an average of 35 daily truck trips and 5 daily worker employee trips throughout construction. As such, the noise level increases from truck traffic would, for brief periods (e.g., as a truck passes a given location), exceed the Ventura County daytime construction noise threshold criteria of 55 dBA (or ambient + 3dBA); however, it is not expected that the increase in truck traffic resulting from the proposed project would increase the overall ambient noise levels during any given hour by more than 3 dB. The County’s *Construction Noise Threshold Criteria and Control Plan* also states that the maximum instantaneous noise level ( $L_{max}$ ) at any given location should not exceed the Noise Threshold Criteria (NTC) by 20 dBA

more than eight times within any daytime hour. Construction truck trips would generally occur throughout a given day and are not expected to occur within a one-hour timeframe. Furthermore, given the limited total number of daily truck trips, it is not anticipated that the proposed project would result in eight or more exceedances of the NTC by more than 20 dBA in any daytime hour. Therefore, impacts to sensitive receptors generated from the haul trucks would be less than significant.

**Vibration.** Construction would not involve blasting, pile-driving, vibratory compaction, demolition, drilling, major excavation, or other similar types of vibration-generating activities in close proximity to high sensitivity uses (Category 1 – See Table C.21-4 for definition); however, the use of large construction equipment and delivery haul trucks may produce short-term groundborne vibration and associated groundborne noise. Category 2 (Residential) and Category 3 (Institutional) land uses (see definitions provided with Table C.21-4) are located immediately adjacent to the levee alignment (within 50 feet) and along the truck travel routes. Within the project area, truck travel would occur along major roadways such as Old Telegraph Road and/or Highway 126, which are not expected to have expansion joints, speed bumps, or other design features resulting in uneven road surfaces. Upon entering the levee road, travel speeds would be limited for safety reasons, which would minimize any potential for vibration impacts. Furthermore, operation of such equipment would be occurring daytime hours when residences would not typically be sleeping, and per Mitigation Measure N-1, construction activities would be minimized near the Faith Community Church when daytime church activities are occurring. As such, vibration impacts would be less than significant.

### **Operations**

Operations and maintenance of the improved levee would not differ from pre-construction (existing) conditions. Therefore, no new noise or vibration impacts would occur as a result of the levee improvements. However, it is recognized that as part of the proposed project the existing informal entrance from Mallard Street to the Sespe Creek Bike Trail would be formalized, and the existing informal access from Robin Court would be closed. As a result, pedestrian access to the bike trail would shift from Robin Court to Mallard Street, which may result in some increase in noise. Noise generated by pedestrian use is considered to be minimal and would not be expected to result in a noticeable increase over existing ambient noise conditions, especially considering that the Mallard Street entrance has been informally used for years and to a greater degree than the Robin Court informal entrance, as apparent from the degradation of the rip-rap in these areas. Furthermore, the formal entrances to the Sespe Creek Bike Trail at the north end (Old Telegraph Road) and the south end (off E Street) would continue to be utilized, such that noise impacts to residences along Mallard Street due to this change in access to the bike trail would be less than significant.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Noise and vibration impacts are generally considered to be localized; therefore, only those projects that are in the immediate vicinity of the proposed project would have the potential to result in cumulative noise and vibration impacts. Furthermore, because the proposed project would not result in a change in operations from existing conditions, cumulative impacts would be limited to the construction period. Cumulative noise and vibration impacts would occur if other projects are occurring at the same time as project construction (April through September 2014) and in the immediate vicinity. In reviewing the list of cumulative projects provided in Table C-1, the Upland Rock sediment removal activities would have the potential to result in cumulative impacts, as these activities could occur at the same time as construction of the proposed project and in close proximity to the proposed project (within the east branch of Sespe Creek).

Per Upland Rock's CUP-4185 (VCRMA, 1985b) conditions of approval, excavation activities would be restricted to Monday through Friday, 7:00 a.m. to 8:00 p.m., and Saturday and Sunday, 9:00 a.m. to 6:00 p.m. No mining would occur within 100 feet of any dwelling not accessory to the project, or within 200 feet of any building used as a place of public assembly, institution or school. Furthermore, CUP-4185 states that mining operations are not allowed to produce noise that exceeds 60 dBA Leq daytime (6:00 a.m. to 10:00 p.m.) in "urban" or "rural communities" or 55 dBA Leq daytime in "all other areas". These standards shall be measured at a point outside of occupied sensitive uses, such as residences, schools, health care facilities, or places of public assembly. Noise would be considered in excess of the standards when the average sound level, measured over one hour, is greater than the standard; unless, it can be demonstrated that the average ambient noise level at the occupied sensitive use in question is within 10 dB of the applicable noise standard. If this can be demonstrated, a violation will have occurred if the average noise level (Leq) exceeds the applicable noise standard plus 3 dB. Exceptions to the noise standard, as detailed in CUP-4185, include: (a) where ambient noise levels exceed the applicable noise standard, permitted operations may generate noise levels equal to the ambient noise level but not exceed it; (b) where the owners/occupants of sensitive uses have signed a waiver pursuant to Section 8107-9.6.13 indicating that they are aware that permitted mining and related operations could exceed the allowable noise standard and that they are willing to experience such noise levels; and/or (c) where a sensitive use was established subsequent to the adoption of the exemption.

If the County receives a noise complaint, the Upland Rock CUP-4185 (VCRMA, 1985b) states that the Planning Director may require the permittee to make informal noise measurements, and may require formal noise evaluation to be made by a qualified, independent noise expert. Until such time as a determination is made regarding the existence of a violation, the operator shall take steps to minimize any on-going noise emanations. Once a violation has been verified, the problem shall be corrected as soon as possible in coordination with the Planning Division. Noise reduction requirements, as required in the Mitigated Negative Declaration (VCRMA, 1985a), and detailed in the Upland Rock CUP-4185 (VCRMA, 1985b), include the following:

- (1) The applicant shall install and continually use, low decibel horns (BAC-A-LARM horns, model BAL-124) on all trucks and skip loaders. Horns will be mounted with the directional axes directed to the rear of the equipment.
- (2) The applicant shall ensure that the lowest volume level horn adjustment setting is maintained at all times.
- (3) The applicant shall use rubber mats in truck beds to muffle the sound of rock falling onto the truck bed. Only trucks used for working in the West Branch of the creek are required to have rubber mats.

With implementation of the conditions of approval, as detailed in the Upland Rock CUP-4185 and summarized above, noise impacts associated with the Upland Rock mining activities would be less than significant. Taking into consideration the low noise standards that must be met by the Upland Rock mining activities (as required by CUP-4185) and the distance from the proposed project activities (300-500 feet away), these noise levels would not combine with the substantially higher noise levels generated by the proposed project at much closer distances to sensitive receptors to result in a cumulative impact. Furthermore, per the County's *Construction Noise Threshold Criteria and Control Plan*, the only "typically noise-sensitive use" during daytime hours located in the project vicinity would be the local churches, and impacts to such uses would be reduced to a less-than-significant level with implementation

of Mitigation Measures N-1 through N-7. As such, noise and vibration impacts associated with construction of the proposed project would not be cumulative considerable. As noted above, operation of the proposed project would be identical to current operations; therefore no new operational cumulative impacts would occur.

## C.22 DAYTIME GLARE

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project will be considered to have a significant project-specific glare impact if the project would create a new source of disability glare or discomfort glare for motorists travelling along any road of the County Regional Road Network (Ventura County, 2011).

**Proposed Project Impacts:** As described in Section A.4.5 (Proposed Project), the proposed project would not include daytime or nighttime lighting. However, during construction of the proposed project, vehicles and equipment that would be present and in use at the project site may provide a source of reflection or glare in direct sunlight. Since construction access for the proposed project would be at both ends of the SC-2 Levee, using Old Telegraph Road at the north end and SR 126 at the south end, any vehicles or equipment that would produce a glare may be visible from Old Telegraph Road or SR 126. However, the presence of construction vehicles and equipment would be temporary, and therefore, would not result in a significant source of daytime glare for motorists. In addition, during the operation period, the structural improvements associated with the proposed project (i.e., levee fill, retaining wall, etc.), would not create a new source of glare for motorists. Therefore, potential impacts of the proposed project to glare would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Construction and operation of other projects in the cumulative scenario could reasonably include the use of equipment and installation of features which could create glare. As such, future development within the Sespe Creek and Fillmore areas could result in cumulative glare impacts to motorists. However, as discussed above, glare impacts associated with the proposed project would be temporary and less than significant. Therefore, impacts associated with glare would not be cumulatively considerable and would be less than significant.

## C.23 PUBLIC HEALTH

**Significance Criteria:** The issue of Public Health entails human health related issues such as, but not limited to, vectors, bioaerosols and other pathogens or environmental factors that may pose a substantial present or potential hazard to public health (County of Ventura, 2011a).

According to the Ventura County *Initial Study Assessment Guidelines*, significance must be determined on a case by case basis and is related to project type, location and other environmental factors (County of Ventura, 2011a).

**Proposed Project Impacts:** The proposed project consists of implementing improvements to a section of the Sespe Creek Levee, a stone-revetted levee located on the east side of Sespe Creek between Old Telegraph Road and SR 126. Project improvements would occur along approximately 1.1 miles, or 5,808 feet, of the SC-2 Levee. The active channel of Sespe Creek comprises the area west of the SC-2 Levee, and agricultural areas are located west of the active channel. Agricultural areas are also located to the south of SR 126, which comprises the southern limit of the project area. Residential developments in the City of Fillmore are located to the east and south of the levee, and north of Old Telegraph Road,

which comprises the northern limit of the project area. The proposed project would affect two groups of the general public: the workers undertaking project-related construction activities; and, users of the project area. Members of the public that potentially could be within the proposed project area would include the following:

- Residents and agricultural workers living or working near the project site; and
- Recreationists using the Sespe Creek Bike Trail.

As noted in Section A.4.5 (Proposed Project), the proposed project would not involve significant subsurface disturbances. The only soil spoils associated with the project would be from tree removal (soil within tree root balls). An on-site raw material excavation and re-use/export plan would be implemented for each work task. Solid waste generated during construction of the project would be disposed of in accordance with Ventura County Ordinances #4445 (solid waste disposal, waste reduction, waste diversion) and #4421 (requirements for the diversion of construction and demolition debris from landfills by recycling, reuse, salvage), to the extent practicable. The VCWPD would incorporate the requirements of these ordinances into the project's contract specifications requirements.

Mechanical equipment utilized during the short-term construction process would emit air pollutants that have the potential to cause health effects. These emissions would be controlled and minimized by adhering to standard regulations required by the VCAPCD (see Section C.1, Air Quality).

In order to maintain public safety along the Sespe Creek Bike Trail, the trail would be temporarily closed between SR 126 and Old Telegraph Road during the project's five- to six-month construction period. Temporary exclusionary fencing and signage would be erected at the entrances to this section of the bike path, and a temporary detour for bicyclists and recreationists would be available along neighboring residential streets. A suggested temporary detour route is from the E Street entrance along to Cottonwood Lane, east along Waterford Lane, north along D Street, east along Sespe Avenue, and north along C Street to the trail entrance north of Old Telegraph Road (see Figure A-8).

No other public health impacts are anticipated from the proposed project. The primary recipients benefiting from the proposed project include residents of the City of Fillmore that are currently located within the inundation area on the landward side of the SC-2 Levee. People who own property and/or businesses within this area would also benefit from the flood hazard protection that would be introduced with implementation of the proposed project. Therefore, the proposed project would result in a less than significant impact on public health.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Although these projects may involve the use or transport of materials that could pose a threat to public health, or involve other activities which could place public health at risk, these projects would be required to mitigate for such impacts. Consequently, significant cumulative public health impacts within the proposed project area would not be anticipated to occur. As addressed above, public health impacts associated with implementation of the proposed project would be less than significant; therefore, its incremental contribution to public health impacts would not be cumulatively considerable. Less than significant cumulative impacts would occur.

## C.24 GREENHOUSE GASES

Greenhouse Gases (GHGs) and climate change are a globally cumulative issue. The California Air Resource Board (CARB) and United States Environmental Protection Act (USEPA) regulate GHG emissions within the State of California and the United States, respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

The background and regulatory information provided in this section was obtained from Federal, State and local air quality agency websites and other publically available resources. The GHG emissions estimate, provided as Appendix 2, was prepared using construction activity and schedule assumptions provided by the VCWPD. Types of equipment used in each construction phase and the construction phase schedule were provide by VCWPD; Aspen Environmental Group filled minor gaps in the assumptions of equipment type and conservatively estimated the operating hours and trips for off-road and on-road equipment, respectively, based on similar projects that Aspen Environmental Group has worked on previously.

### Greenhouse Gases and Climate Change

In the early 1960's scientists recognized that carbon dioxide levels in the atmosphere were rising every year. It was also noted that several other gases, including methane and nitrous oxides were also increasing. Levels of these gases have increased by about 25 percent since large-scale industrialization began around 150 years ago, according to the USEPA. After numerous computer-simulated model runs on the effects of these increases in the atmosphere, it was concluded that the rising concentrations almost always resulted in an increase of average global temperature. Rising temperatures may, in turn, produce changes in weather, sea levels and land use patterns, commonly referred to as "climate change" (EIA, 2010). The general scientific consensus is that climate change is occurring and that human activity contributes in some measure to that change. Man-made emissions of GHGs, if not sufficiently curtailed, could contribute to increases in global temperatures.

Many chemical compounds found in the Earth's atmosphere are GHGs. When sunlight strikes the Earth's surface, some light reflects back to space as infrared radiation (heat). GHGs, however, absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy sent from the sun to the Earth's surface should be about the same as the amount of energy radiated back into space, leaving the temperature of the Earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some naturally occurring GHGs include: water (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O); while others are exclusively man-made.

GHGs, in most cases, have both natural and anthropogenic sources. Natural mechanisms already exist as part of the 'carbon cycle' for removing GHGs from the atmosphere into land or ocean sinks. Levels of GHGs from the increase in anthropogenic sources have exceeded the normal rates of natural absorption. This excess has resulted in increased atmospheric concentrations of GHGs.

GHG emissions in the United States come mostly from energy use. Energy emissions stem largely from economic growth, vehicle transportation, fuels for electricity generation, and weather patterns that secondarily affect heating and cooling needs. Energy-related carbon dioxide emissions, resulting from fossil fuel exploration and combustion account for three-quarters of the human-generated GHG emissions in the United States, primarily in the form of carbon dioxide emissions. More than half the energy-related emissions come from large stationary sources such as power plants; a third comes from transportation;

while industrial processes, agriculture, forestry, other land uses, and waste management make up a majority of the remainder of sources (USEPA, 2010).

The principal GHGs that enter and accumulate in the atmosphere as the result of human activity are listed below.

- **Carbon Dioxide (CO<sub>2</sub>).** CO<sub>2</sub> enters the atmosphere through combustion of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, chemical reactions (e.g., the manufacturing of cement), and organismal respiration. CO<sub>2</sub> is also removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle. CO<sub>2</sub> has an atmospheric lifetime of up to 200 years and, therefore, is a more important GHG than water vapor, which has an atmospheric residence time of only a few days. CO<sub>2</sub> provides the reference point for the global warming potential (GWP) of other gases; thus, the GWP of CO<sub>2</sub> is equal to one (1). GWP is a relative measure of how much heat a greenhouse gas traps in the atmosphere.
- **Methane (CH<sub>4</sub>).** CH<sub>4</sub> is emitted during the production and transport of coal, natural gas, and oil. CH<sub>4</sub> emissions also result from livestock and other agricultural practices, and the decay of organic waste in municipal solid waste landfills and wastewater treatment plants. The chemical lifetime of CH<sub>4</sub> in the atmosphere is 12 years. CH<sub>4</sub> is about 21 times more powerful at warming the atmosphere than CO<sub>2</sub>, and therefore has a GWP of 21.
- **Nitrous Oxide (N<sub>2</sub>O).** N<sub>2</sub>O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste. N<sub>2</sub>O has a long atmospheric lifetime (120 years) and heat-trapping effects about 310 times more powerful than CO<sub>2</sub> on a per-molecule basis, and therefore has a GWP of 310.
- **Fluorinated Gases.** Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) are synthetic, powerful GHGs emitted during a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high GWP gases.

As noted above, GWP is a relative measure, compared to carbon dioxide, of a compound’s residence time in the atmosphere and ability to warm the planet. Mass emissions of GHGs are converted into carbon dioxide equivalent (CO<sub>2</sub>e) emissions for ease of comparison.

Climate change affects people and other biota. Scientists are certain that increasing the concentration of GHGs will change the planet’s climate; however, they are not sure by how much the climate will change, at what rate it will change, or what the exact effects will be globally or locally. Scientists worldwide are working to better understand future climate change and how the effects will vary by region and over time.

Global carbon dioxide emissions are expected to increase by 1.9 percent annually between 2001 and 2025 (EIA, 2010). Much of the increase in these emissions is expected to occur in the developing world where emerging economies are fueled with fossil energy, such as in China and India. Around 2018, developing countries’ emissions are expected to surpass the emissions of industrialized countries; increasing by 2.7 percent annually between 2001 and 2025, faster than the world average.

Climate models predict that the average temperature at the Earth’s surface could increase from 2.5°F to 10.4°F above 1990 levels by the end of the 21st century if GHGs continue to increase (USEPA, 2007). Other aspects of the climate are also changing such as rainfall patterns, sea level rise, receding glaciers, changes in the range and distribution of plants and animals, lengthening of growing seasons, trees blooming earlier, ice on rivers and lakes freezing later and breaking up earlier, and thawing of permafrost.

Scientists believe that most areas in the United States will continue to warm, although some will likely warm more than others. Predicting which parts of the country will become wetter or drier is extremely difficult, but scientists generally expect increased precipitation and evaporation, and overall drier soil in the middle parts of the country. The northern regions, such as Alaska, are expected to experience the

most warming. To address climate change concerns, the United States government has established a comprehensive policy with three basic components:

- Slowing the growth of emissions;
- Strengthening science, technology and institutions; and
- Enhancing international cooperation.

Currently, the federal government is using voluntary and incentive-based programs to reduce emissions and has established a variety of programs promoting climate technology and science. The United States prepared a comprehensive strategy in February 2002 to reduce the GHG intensity by 18 percent over the 10-year period from 2002 to 2012. GHG intensity is a measurement of GHG emissions per unit of economic activity. By meeting this commitment, the United States will prevent the release of more than 500 million metric tons cumulatively between 2002 and 2012 (Climate Vision, 2007).

### **Greenhouse Gas Regulations**

Based upon a recent U.S. Supreme Court decision (*Massachusetts v. EPA* (2007) 549 U.S. 497), the USEPA has been given the authority to regulate CO<sub>2</sub> or GHG emissions as an air pollutant under the federal Clean Air Act (42 U.S.C. §7602(g)). The USEPA has adopted *40 CFR Part 98 – Mandatory Reporting of Greenhouse Gases Rule* which requires mandatory reporting of GHG emissions for facilities that emit more than 25,000 metric tons of CO<sub>2</sub>e emissions per year (USEPA, 2009) and *40 CFR Part 52 – Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* which mandates Prevention of Significant Deterioration (PSD) permitting to facilities whose stationary source CO<sub>2</sub>e emissions exceed 75,000 tons per year (USEPA, 2011). Neither of these regulations is applicable to the proposed project because it has no operating stationary emission sources that are subject to these regulations.

Statewide rules and regulations, such as Senate Bill 97 (SB 97) and Assembly Bill 32 (AB 32) have been implemented or are in development in California which mandate the quantification or reduction of GHGs.

Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs the State Office of Planning and Research (OPR) to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions” by July 1, 2009, and directs the Resources Agency to certify and adopt the CEQA guidelines by January 1, 2010.

The OPR published a technical advisory on CEQA and Climate Change on June 19, 2008. The guidance did not include a suggested threshold, but stated that the OPR has asked the CARB to, “recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of greenhouse gas emissions throughout the state.” The OPR does recommend that CEQA analyses include the following components:

- Identify Greenhouse Gas Emissions
- Determine Significance
- Mitigate Impacts

On December 30, 2009, the California Natural Resources Agency adopted amendments to the CEQA Guidelines including GHG/Climate Change analysis guidelines. According to the California Natural Resources Agency, “due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis” (CNRA, 2009a). According to

GHG amendments to the CEQA Guidelines, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects, and the analysis must be based on best available information. For these projects, compliance with CEQA entails the assessment of three basic factors:

- Identify and quantify Greenhouse Gas Emissions;
- Assess the significance of the impact on climate change; and
- If the impact is found to be significant, identify alternatives and/or mitigation measures that will reduce the impact below significance.

In September 2006, Governor Schwarzenegger signed AB 32, also known as the California's Global Warming Solutions Act of 2006 (CARB, 2008a) to mandate the quantification and reduction of GHGs to 1990 levels by 2020. The CARB promulgated regulations for mandatory GHG emission reporting to comply with AB 32, and has recently approved GHG emissions cap and trade regulations that have been designed to achieve the State's GHG emission reduction goals.

Currently, the Ventura County *General Plan* does not include any specific policies related to greenhouse gas emissions/climate change. The policies, goals, and programs in the Ventura County *General Plan* applicable to air quality, as related to the proposed project, are provided in the air quality chapter of this document.

**Significance Criteria:** The CEQA Implementation Document and Environmental Checklist Form, as amended by the California Natural Resources Agency and adopted by the Office of Administrative Law on February 16, 2010, state that a project would have significant impacts on GHG emissions if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Currently there are no formally adopted thresholds of significance or specific methodologies established for determining impacts related to a project's potential contribution to global climate change in CEQA documents. On November 8, 2011, the VCAPCD published the revised "Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County" (VCAPCD, 2011). However, while this paper does list potential options for establishing significance thresholds, this paper does not include specific significance thresholds recommendations for land use development projects or any other project types.

In 2008, CARB published a preliminary draft staff proposal that contains interim significance thresholds for GHGs (CARB, 2008b). The threshold consists of performance standards and a quantitative threshold of 7,000 metric tons CO<sub>2</sub>e/year from non-transportation related GHG sources which include combustion-related components/equipment, process losses, purchase electricity, and water usage and wastewater discharge. Additionally, the SCAQMD has published draft significance criteria for its own use that provides a quantitative threshold of 10,000 metric tons CO<sub>2</sub>e/year for industrial projects. Both of these quantitative thresholds include the amortization of project construction emissions over the project life. To be conservative, the lower CARB quantitative standard of 7,000 metric tons CO<sub>2</sub>e/year has been selected as the GHG emissions significance threshold for use in assessing the GHG emission impacts of the proposed project.

***Proposed Project Impacts – Emissions***

**Construction**

The proposed project would generate direct GHG emissions during construction. Direct GHG emissions during construction would be generated from use of off-road equipment (such as graders, dozers, excavators, and rollers) and from on-road construction vehicle trips (such as heavy haul trips for fill and other construction materials like water and concrete blocks, and commute driving by construction employees). The direct construction GHG emissions are totaled and then amortized over the project life of 50 years for comparison with the GHG emissions significance threshold. The greenhouse gas emissions estimate calculations are provided in Appendix 2, and the summary of the proposed project’s CO<sub>2</sub>e annual emissions estimate is shown in Table C.24-1.

Table C.24-1 shows that the proposed project would have minimal GHG emissions, well below the GHG emissions significance criteria; therefore, the project would have less than significant GHG emissions impacts.

**Table C.24-1. Summary of Project Greenhouse Gas Emission Estimates (Metric Tons/year)**

	<b>CO<sub>2</sub>e, metric tons</b>
Construction On-Road Emissions	154.9
Construction Off-Road Emissions	23.9
Total Construction Emissions	178.7
Amortized Construction Emissions	3.6
Significance Criteria	7,000

Source: Appendix 2.

**Operation**

The proposed project does not change, increase or decrease, the operations/maintenance requirements along this section of the Sespe Creek Levee (SC-2), so there are no new operations emissions that would occur due to this project. Please refer to the Project Description information presented in Section A.4.5 for a complete description of the operations/maintenance requirements for the Sespe Creek Levee. In addition, the proposed project would reduce the potential for future flooding events, which would reduce any GHG emissions associated with potential future flood damage clean-up and repair actions.

***Proposed Project Impacts – Conformance with Regulations and Policies/Strategies***

A summary of the compliance with all potentially applicable GHG plans, policies, and regulations is provided in Table C.24-2.

Table C.24-3 identifies current California emission reduction strategies to reduce GHGs and identifies the applicability of each strategy and the project design feature or mitigation measure that is proposed to comply with the applicable strategies.

**Table C.24-2. Project Consistency with Applicable Plans, Policies, and Regulations for GHG Emissions**

Adopted Plan, Policy, or Regulation	Consistency Determination	Proposed Project Consistency
<b>Federal</b>		
40 CFR Part 98. Mandatory Reporting of Greenhouse Gases Rule.	Not Applicable	The project would not have emissions sources that would be subject to this regulation.
40 CFR Part 52. Proposed Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.	Not Applicable	The project would not have emissions sources that would be subject to this regulation.
<b>State</b>		
AB 32. Annual GHG Emissions Reporting	Not Applicable	The project does not include emissions sources that would be subject to this regulation.
AB 32. Cap-and-trade	Not Applicable	The project does not include emissions sources that would be subject to this regulation.
<b>Local</b>		
Ventura County General Plan - Air Quality Element Policies Goals and Implementation Measures	Consistent	Air Quality Mitigation Measures MM AQ-1 through MM AQ-4 will ensure that the project is consistent with the General Plan's Air Quality Element Policies Goals and Implementation Measures that will indirectly reduce GHG emissions by reducing fossil fuel combustion.

**Table C.24-3. California GHG Reduction Strategies**

Strategy	Project Design/Mitigation to Comply with Strategy
Vehicle Climate Change Standards: AB 1493 (Pavley) required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by CARB in September 2004.	These are CARB enforced standards; vehicles that access the project that are required to comply with the standards would comply with these strategies.
Other Light Duty Vehicle Technology: New standards would be adopted to phase in beginning in the 2017 model.	
Heavy-Duty Vehicle Emission Reduction Measures: Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	
Diesel Anti-Idling: In July 2004, CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Consistent with MM AQ-1 Section 4.2, Air Quality.
Hydrofluorocarbon Reduction: 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak-tightness to the pass criteria for vehicular Inspection and Maintenance programs; 5) Enforce federal ban on releasing HFCs.	Not applicable.
Transportation Refrigeration Units (TRU), Off-Road Electrification, Port Electrification: Strategies to reduce emissions from TRUs, increase off-road electrification, and increase use of shore-side/port electrification.	Not applicable.
Manure Management: Reduction of volatile organic compounds from confined animal facilities through implementation of control options.	Not applicable.
Alternative Fuels - Biodiesel Blends: CARB would develop regulations to require the use of 1 to 4 percent (1 to 4%) biodiesel displacement of California diesel fuel.	Not applicable.
Alternative Fuels - Ethanol: Increased use of ethanol fuel.	Not applicable.
Achieve 50 percent (50%) Statewide Recycling Goal: Achieving the State's 50 percent (50%) waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48 percent (48%) has been achieved on a statewide basis. Therefore, a 2 percent (2%) additional reduction is needed.	Not applicable.
Zero Waste - High Recycling: Additional recycling beyond the State's 50 percent (50%) recycling goal.	Not applicable.

Strategy	Project Design/Mitigation to Comply with Strategy
Landfill Methane Capture: Install direct gas use or electricity projects at landfills to capture and use emitted methane.	Not applicable.
Urban Forestry: A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	Not applicable.
Afforestation/Reforestation Projects: Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	Not applicable.
Water Use Efficiency: 19 percent (19%) of all electricity, 30 percent (30%) of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	Not applicable.
Building Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the California Energy Commission to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Not applicable.
Appliance Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the California Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Not applicable.
Cement Manufacturing: Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not applicable.
Smart Land Use and Intelligent Transportation Systems (ITS): Smart land use strategies encourage jobs/housing proximity, promote transit oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.	Not applicable.
Smart land use, demand management, ITS, and value pricing are critical elements for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	Not applicable.
Enteric Fermentation: Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not applicable.
Green Buildings Initiative: Green Building Executive Order, S-20-04 (CA 2005), sets a goal of reducing energy use in public and private buildings by 20 percent (20%) by the year 2015, as compared with 2003 levels.	Not applicable.
California Solar Initiative: Installation of one million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses; increased use of solar thermal systems to offset the increasing demand for natural gas; use of advanced metering in solar applications; and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Not applicable.

The Office of the California Attorney General maintains a website with a list of CEQA Mitigations for Global Climate Change Impacts. The Attorney General has listed some examples of types of mitigations that local agencies may consider to offset or reduce global climate change impacts from a project. The Attorney General assures that the presented lists are examples and not intended to be exhaustive but instead provides measures and policies that could be undertaken. Moreover, the measures cited may not be appropriate for every project, so the Attorney General suggests that the lead agency should use its own informed judgment in deciding which measures it would analyze, and which measures it would require, for a given project.

The Attorney General suggests energy efficiency measures that could be undertaken or funded by a diverse range of projects, including: renewable energy, water conservation and efficiency, solid waste measures, land use measures, transportation and motor vehicles, and carbon offsets. However, most of the suggested measures would not be applicable to the proposed project because they are more appropriate as measures to reduce long-term operational GHG emissions.

In summary, the proposed project will conform to State and local GHG emissions/climate change regulations and policies/strategies; therefore, the proposed project would have less than significant GHG impacts.

**Feasible Mitigation.** CEQA, as well as the Ventura County *General Plan* and County of Ventura *Initial Study Assessment Guidelines*, requires that all feasible mitigation be applied to the project to reduce significant impacts. It has been determined that the project's minimal GHG emissions would not have a significant impact on global warming or climate change, and that the project would conform with State and local GHG/climate change regulations and policies/strategies. Therefore, no GHG emissions mitigation is recommended for this project.

**Cumulative Impacts:** Greenhouse gas emissions create long-term globally cumulative climate change impacts. There are no project-specific localized impacts from greenhouse gas emissions. Therefore, the assessment presented above is a cumulative impacts assessment.

## C.25 COMMUNITY CHARACTER

**Significance Criteria:** Community character refers to the distinctive physical quality, attributes, or features of a community that sets it apart from other communities or areas. According to the Ventura County *Initial Study Assessment Guidelines*, significant impacts would occur when: (1) a project that is inconsistent with any of the policies or development standards relating to community character of the Ventura County *General Plan Goals, Policies and Programs* or applicable Area Plan, is regarded as having a potentially significant environmental impact; and/or (2) a project has the potential to have a significant impact on community character, if it either individually or cumulatively (when combined with recently approved, current, and reasonably foreseeable probable future projects) would introduce physical development that is incompatible with existing land uses, architectural form or style, site design/layout, or density/parcel sizes within the community in which the project site is located. (County of Ventura, 2011)

**Proposed Project Impacts:** As discussed in Section A.5 (Project Site Zoning and General Plan Land Use Designations), the proposed project is subject to the management direction of the City of Fillmore *General Plan* and the Ventura County *General Plan*. The project site is not located within any County Area Plan. In accordance with the Ventura County *General Plan*, the proposed project site is zoned as open space. As further discussed in Section A.5 (Project Site Zoning and General Plan Land Use Designations), the proposed project is considered to be consistent with all of the *General Plan* goals and policies.

As discussed in Section A.4.5 (Proposed Project), the proposed project would require the construction and removal of structures that may affect the community character of the project area. Primarily, the proposed project would raise the SC-2 Levee by one to six feet along approximately 1,543 feet of the levee, and add a 321-foot-long retaining wall along the landward side of the levee. Additional project features identified in Section A.4.5 that may affect community character include the following: removal of the Faith Community Church garden wall, a portion of the parking lot, and trees on the western portion of the parking lot; installation of a new formal access ramp at the end of Mallard Street and closure of the

informal access gate at the end of Mallard Court; removal of 23 trees along the western boundary of Shiells Park, and replacement of these trees at a 1:1 ratio; installation of a new pedestrian access ramp at Shiells Park; removal of three turnouts from the existing levee design; the addition of one new turnout, including removal and replacement of one tree; and the removal of vegetation from the Corps-required 15-foot VFZ. Additionally, as discussed in Section A.4.5, operations and maintenance of the proposed project would include occasional / as-needed graffiti removal along the retaining wall.

The activities described above would be consistent with policies or development standards relating to community character, and would not introduce physical development that is incompatible with existing land uses, architectural form or style, site design/layout, or density/parcel sizes within the community. Therefore, the proposed project is not considered to have significant adverse effects to community character, and impacts would be less than significant impact.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. The majority of projects presented in Table C-1 require discretionary actions for the legalization or continued operation of an existing use, or minor modifications for the expansion of existing development. As implemented, these projects may create adverse impacts to community residents from increased environmental impacts, as well as proposing incompatible uses with existing land uses, architectural form or style, site design/layout, or density/parcel sizes within the community.

In reviewing the list of cumulative projects provided in Table C-1, the Upland Rock sediment removal activities would have the greatest potential to result in cumulative impacts, as these activities could occur at the same time as construction of the proposed project and in close proximity to the proposed project (within the east branch of Sespe Creek). However, as discussed in the Ventura County *Initial Study Assessment Guidelines*, significant impacts would primarily occur when a project was found inconsistent with all *General Plan* goals and policies (County of Ventura, 2011). While cumulative activities would permanently alter the existing character of the surrounding communities, the proposed project activities are not considered to result in a cumulatively considerable contribution to this impact, as they would be consistent with all *General Plan* goals and policies. Therefore, as related to community character, the proposed project would not incrementally contribute to impacts in a manner that would be cumulatively considerable. Less than significant cumulative impacts would occur.

## C.26 HOUSING

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the following criteria would result in a significant impact under this issue area (County of Ventura, 2011).

- Eliminate existing dwelling units.
- Introduce a demand for housing by temporary construction workers or full-time employees.

***Proposed Project Impacts:*** As discussed in Section A.4.5 (Proposed Project), the proposed project would neither remove existing housing, nor prevent the future construction of homes in the project area.

According to the Ventura County *Initial Study Assessment Guidelines*, any project that involves construction has an impact on the demand for additional housing due to potential housing demand created by construction workers (County of Ventura, 2011). However, construction worker demand would be a less than significant project-specific and cumulative impact because construction work is short-term and

there is a sufficient pool of construction workers within Ventura County and the Los Angeles metropolitan regions (County of Ventura, 2011).

According to the Ventura County *Initial Study Assessment Guidelines*, pursuant to *General Plan Policy 3.4.2-9*, projects that would result in new jobs in the County have an impact on the demand for housing (County of Ventura, 2011a). However, only projects that result in 30 or more new full-time-equivalent lower-income employees would have a significant project-specific and cumulative impact on the demand for housing because the *General Plan* shows that there is potentially insufficient inventory of land to develop lower-income housing (County of Ventura, 2011).

The proposed project would require up to 15 construction workers; this small workforce would be anticipated to come from the Ventura County area. Consequently, the workforce needed would be expected to be available within a reasonable commuting distance of the proposed project area, and thus would not result in a demand for additional housing. As discussed in Section A.4.5, once operational, no specified additional maintenance employment has been identified.

Additionally, while the proposed project would be improving existing flood protection for residences and would remove parcels from the 100-year floodplain, which could induce development of these parcels, these parcels are already developed within the City of Fillmore. As such, the proposed project would not induce growth in the area. Therefore, no impacts to housing would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. Some cumulative projects identified may require the removal or disruption to existing or planned housing. However, as the proposed project would have no impacts related to the removal of housing, it would not incrementally contribute to housing impacts associated with the removal or elimination of dwelling units.

While a number of cumulative projects identified in Table C-1 would include extensive construction workforce(s), as discussed within the Ventura County *Initial Study Assessment Guidelines*, construction worker demand would be a less than significant project-specific and cumulative impact because construction work is short-term and there is a sufficient pool of construction workers within Ventura County and the Los Angeles metropolitan regions (County of Ventura, 2011). However, in reviewing the list of cumulative projects provided in Table C-1, there is the potential for large-scale cumulative development projects to have a direct result in 30 or more new full-time-equivalent lower-income employees. Since the proposed project would have no operational employment, it would not incrementally contribute to housing demand impacts that would be cumulatively considerable. No cumulative impacts would occur.

## **C.27 TRANSPORTATION/CIRCULATION**

### **C.27A(1) Roads and Highways - Level of Service**

There are two primary categories of traffic impacts that would occur as a result of the proposed levee improvement project. The first category would be the impacts associated with construction traffic on the roadways that provide access to the project site. During the construction activities, a number of vehicles would be traveling to and from the project site, including trucks delivering materials to the site, trucks transporting waste material away from the site, and construction workers' vehicles commuting to and from the site. The second category of traffic impacts would be the impacts associated with the operation

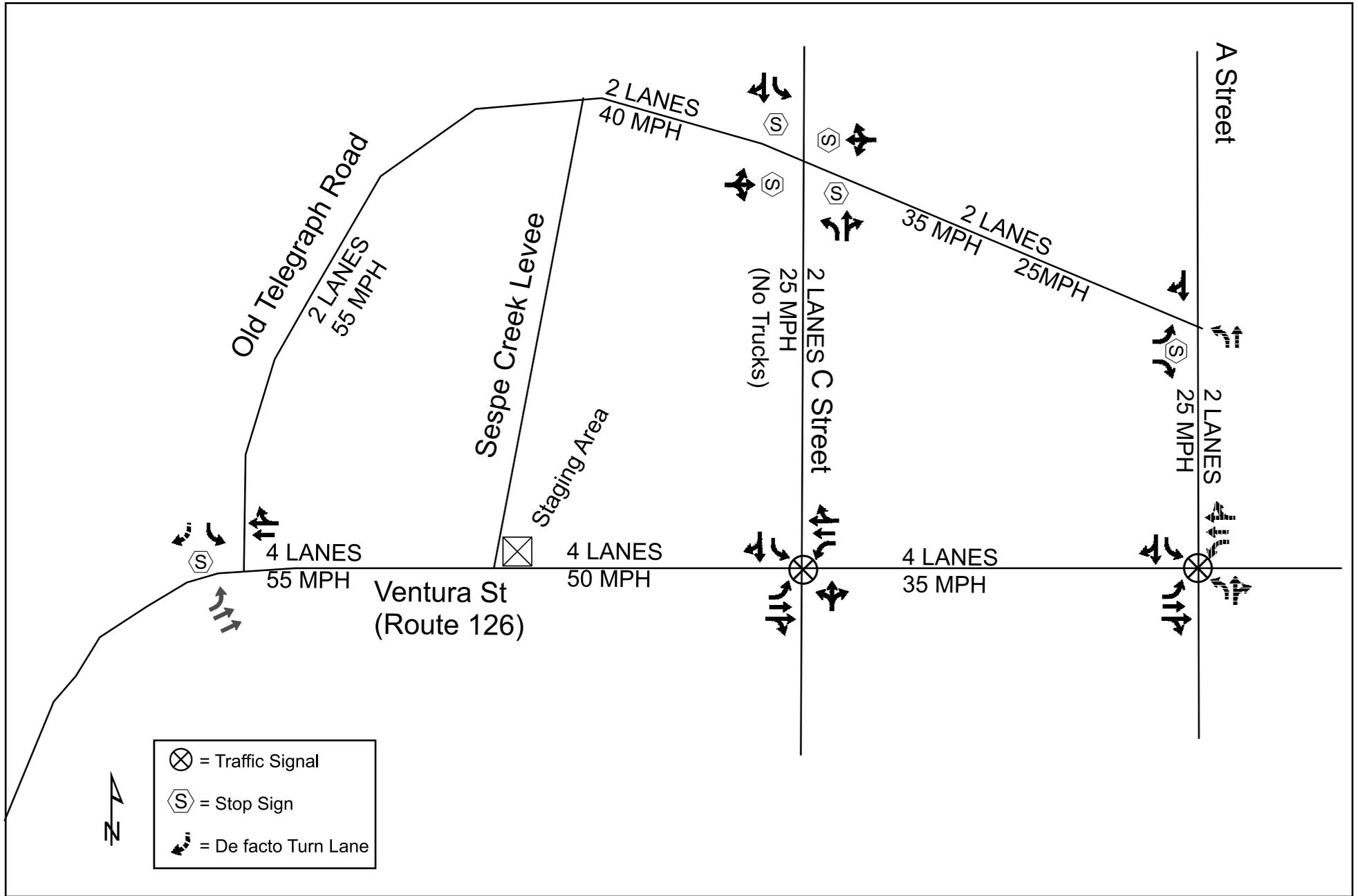
of the proposed project after construction is complete. The traffic impacts associated with each of these construction and operation categories have been evaluated for the affected roadways and intersections.

**Existing Baseline Conditions.** The study area roadways that would primarily be affected by the proposed project are shown in Table C.27-1. The table shows the roadway segments, the responsible agency that has jurisdiction of each roadway, the existing daily traffic volumes (vehicles per day), the roadway capacity values, the volume/capacity (V/C) ratios, and the levels of service (LOS) on each roadway segment. The sources for the traffic volume data are the Caltrans “Traffic Volumes” website (Caltrans, 2010 Traffic Volumes), the Ventura County *General Plan - Public Facilities and Services Appendix* (County of Ventura, 2007), and the City of Fillmore *General Plan Circulation Element* (City of Fillmore, 2003). The source of the capacity values is the *Draft Final Subsequent EIR for Focused General Plan Update* (County of Ventura, 2005).

LOS is a qualitative indicator of a roadway’s operating conditions used to represent various degrees of congestion and delay. It is measured from LOS A (excellent conditions) to LOS F (extreme congestion), with LOS A through D considered to be acceptable by the County of Ventura and the City of Fillmore. Table C.27-1 indicates that all study area roadway segments currently operate at acceptable levels of service (LOS B and C) based on the daily traffic volumes and roadway capacity values. A figure illustrating the roadway network that shows the number of lanes, speed limits, and types of traffic control at the key intersections is provided as Figure C.27-1.

**Table C.27-1. Study Area Roadways**

Roadway	Jurisdiction	Daily Traffic Volume	No. of Lanes & Capacity	V/C Ratio	Level of Service
Ventura Street – State Route 126					
West of Old Telegraph Road	Caltrans	29,000	4 – 58,000	0.50	C
Old Telegraph to C Street	Caltrans	29,500	4 – 58,000	0.51	C
C Street to A Street	Caltrans	29,500	4 – 58,000	0.51	C
East of A Street	Caltrans	30,000	4 – 58,000	0.52	C
Old Telegraph Road					
Route 126 to Sespe Creek	Ventura Co.	4,000	2 – 27,000	0.15	B
Sespe Creek to C Street	City of Fillmore	4,000	2 – 27,000	0.15	B
C Street to A Street	City of Fillmore	4,000	2 – 27,000	0.15	B
C Street					
Old Telegraph Rd to Route 126	City of Fillmore	4,500	2 – 27,000	0.17	B
A Street					
Old Telegraph Rd to Route 126	City of Fillmore	8,000	2 – 27,000	0.30	C



**Figure C.27-1**  
Existing Roadway Network  
and Lane Configuration



There are five intersections in the study area that could potentially be affected by the proposed project. The five intersections, the responsible jurisdiction, and the type of traffic control currently in place at each intersection are listed in Table C.27-2.

**Table C.27-2. Study Area Intersections**

Intersection	Jurisdiction	Type of Traffic Control
Route 126 @ Old Telegraph Road	Caltrans	Stop sign on Old Telegraph Rd
Route 126 @ C Street	Caltrans	Traffic Signal
Route 126 @ A Street	Caltrans	Traffic Signal
Old Telegraph Road @ C Street	City of Fillmore	Four-way stop signs
Old Telegraph Road @ A Street	City of Fillmore	Stop sign on Old Telegraph Rd

Traffic counts were taken at these five intersections in February 2012 during the morning and afternoon peak periods. The existing peak hour traffic volumes at each intersection are shown on Figure C.27-2. Based on the peak hour traffic volumes, the turning movement counts, and the number of lanes at each intersection, the intersection capacity utilization (ICU) values and the corresponding LOS have been determined for each intersection. The LOS for an intersection is based on the ICU value, which is a comparison of the traffic volumes passing through the intersection to the overall capacity of the intersection. The methodology used for calculating the ICU values, which includes the assumed lane capacities and the determination of critical movements, is from the *Ventura County Congestion Management Program* (Ventura County Transportation Commission, 2009). The relationship between the ICU value and the LOS at an intersection is shown in Table C.27-3.

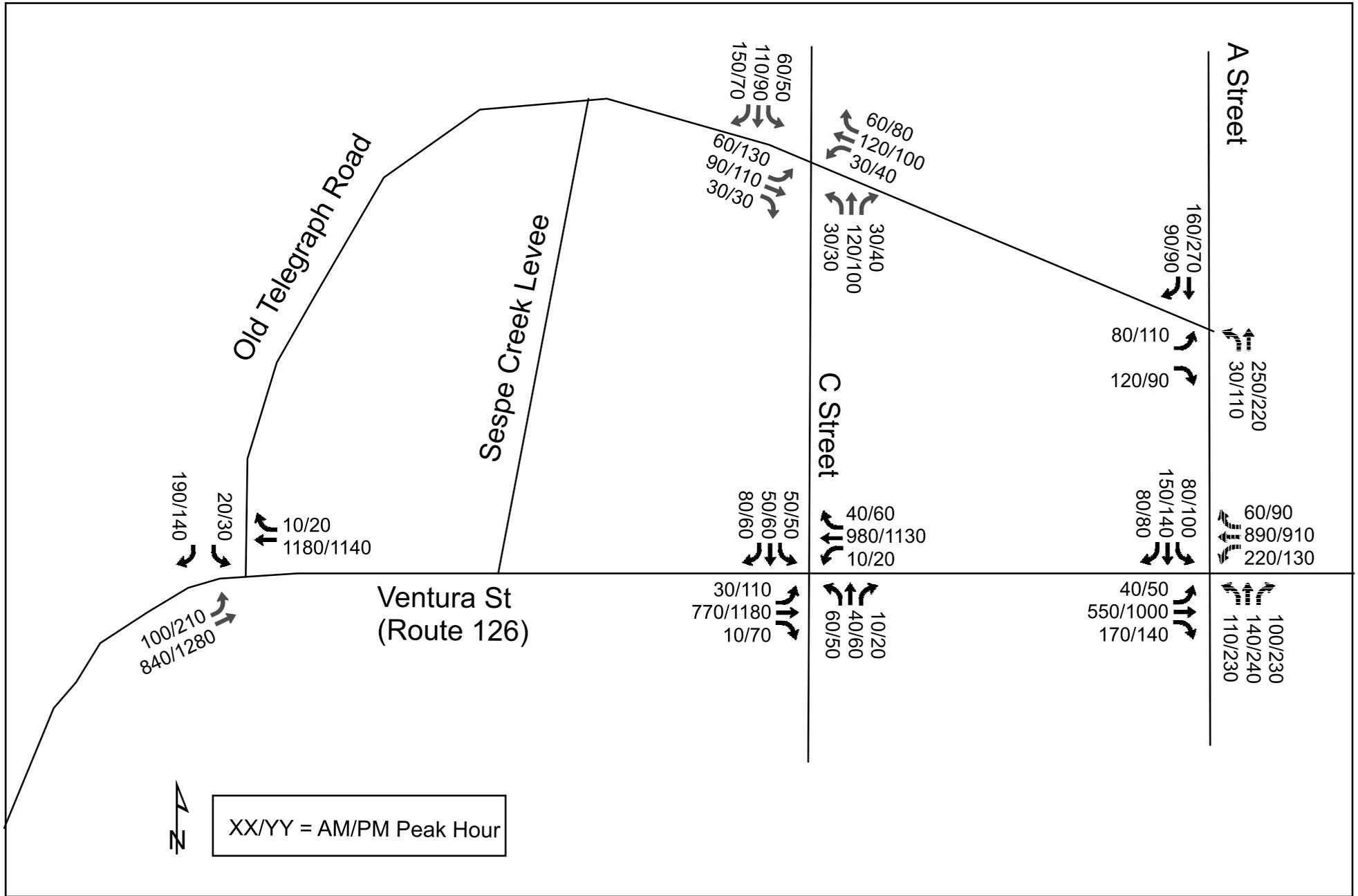
**Table C.27-3. Relationship Between ICU Values and Levels of Service**

ICU Value	Level of Service
0.00 to 0.60	A
> 0.60 to 0.70	B
> 0.70 to 0.80	C
> 0.80 to 0.90	D
> 0.90 to 1.00	E
> 1.00	F

The LOS values for each intersection are summarized in Table C.27-4. All of the intersection operate at LOS A during the morning peak hour, four of the intersections operate at LOS A during the afternoon peak hour, and one intersection operates at LOS C during the afternoon peak hour; therefore, all of the study area intersections currently operate at an acceptable level of service (LOS D or better).

**Table C.27-4. Existing Intersection Levels of Service**

Intersection	ICU Value & Level of Service	
	AM Peak Hour	PM Peak Hour
Route 126 @ Old Telegraph Road	0.55 – A	0.58 – A
Route 126 @ C Street	0.49 – A	0.60 – A
Route 126 @ A Street	0.58 – A	0.79 – C
Old Telegraph Road @ C Street	0.43 – A	0.43 – A
Old Telegraph Road @ A Street	0.25 – A	0.36 – A



**Figure C.27-2**  
Existing Traffic Volumes

**Future Baseline Conditions.** The future baseline traffic conditions without the project for the target year of construction (2014) were estimated by considering the effects of general ambient regional growth and the cumulative increase in traffic volumes that would be generated by other development projects proposed in the vicinity of the project site. The first step in estimating the future baseline traffic volumes was to expand the existing traffic volumes by a factor of four percent, which represents a growth rate of two percent per year for two years. This growth factor accounts for the traffic increases associated with general regional growth and development projects not in the immediate vicinity of the project site.

The second step in estimating the future baseline traffic volumes was to estimate the increased levels of traffic that would occur at the study area roadways and intersections as a result of traffic that would be generated by other proposed development projects (i.e., those that would have a direct traffic impact on the study area roadways). The list of development projects that were considered in the cumulative analysis is provided in Table C-1. The volumes of traffic that would be generated by these projects were estimated for the morning and afternoon peak hours and geographically distributed onto the roadway network to quantify the cumulative impacts of the projects on the study area roadways. Of particular note for the cumulative analysis is the Upland Rock mining project, which is an operation that may be extracting sand and/or gravel from Sespe Creek during a time period that would overlap with construction of the proposed project.

Based on the peak hour traffic volumes, the turning movement counts, and the lane configuration at each intersection, the future (year 2014) baseline ICU values and levels of service were calculated for the five study area intersections for each peak period, as summarized in Table C.27-5. As shown, all five of the study area intersections are projected to operate at acceptable levels of service (LOS A, B, C, or D) during the morning and afternoon peak hours for the year 2014 scenario without the proposed project.

**Table C.27-5. Future Baseline Intersection Levels of Service**

Intersection	ICU Value & Level of Service	
	AM Peak Hour	PM Peak Hour
Route 126 @ Old Telegraph Road	0.59 – A	0.62 – B
Route 126 @ C Street	0.52 – A	0.63 – B
Route 126 @ A Street	0.61 – B	0.84 – D
Old Telegraph Road @ C Street	0.45 – A	0.46 – A
Old Telegraph Road @ A Street	0.26 – A	0.38 – A

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, the minimum LOS for roadway segments and intersections is LOS D for all County thoroughfares and State highways within the unincorporated area of the County. A potentially significant adverse project-specific traffic impact would occur if the project would cause the existing LOS on a roadway segment to fall to an unacceptable level or if the project would add one or more peak hour trips to a roadway segment that is currently operating at an unacceptable LOS. A potentially significant adverse project-specific traffic impact would occur at an intersection if the project would exceed the thresholds shown in Table C.27-6. (County of Ventura, 2011)

**Table C.27-6. Thresholds of Significance for Changes in LOS at Intersections**

Intersection LOS (Existing)	Increase in V/C (ICU) or Trips Greater Than
A	0.20
B	0.15
C	0.10
D	10 Peak Hour Trips*
E	5 Peak Hour Trips*
F	1 Peak Hour Trip*

\* To critical movements. These are the highest combination of left and opposing through/right-turn peak hour turning movements.  
 Source: County of Ventura, 2011.

The City of Fillmore’s standards indicate that LOS D is the minimum acceptable LOS at all intersections along SR 126 and A Street, except the minimum acceptable LOS at the Route 126/A Street intersection is LOS E. At all other intersections in the City, LOS C is the minimum acceptable LOS. A project would have a significant impact if the project traffic would cause an intersection that operates at an acceptable LOS to operate at an unacceptable LOS or if it is expected to result in an ICU degradation of 0.01 or greater at an intersection that is projected to operate at an unacceptable LOS without the project. (City of Fillmore, 2007)

***Proposed Project Impacts***

**Construction**

To address the construction impacts associated with the proposed project, the levels of traffic that would be generated by the construction activities were estimated, and then the impacts of this additional traffic on the affected roadways and intersections were quantified. Truck volumes as well as the volume of traffic generated by construction workers and miscellaneous trips were estimated. Then, a comparative analysis was conducted of traffic volumes and levels of service with and without the proposed construction activities. The trip generation characteristics were based on work force estimates and quantities of material that would be transported to and from the site on a typical day and a peak day of construction activity.

The preliminary construction schedule for the project indicates that the construction activities for the levee improvements would extend from April through September of 2014. It is possible, however, that the construction would occur within a three-month time frame. This accelerated schedule has been assumed for the traffic impact analysis to represent a worst-case scenario. Based on the estimated quantity of fill material and the accelerated schedule, the proposed project would generate 40 truck trips (round trips) on an average day and up to 60 truck trips on a peak day of construction activity. These estimates of the number of truck haul trips and the anticipated number of construction personnel were used to forecast the number of truck trips and automobile/light-duty vehicle trips that would be generated during the construction phase. With regard to the construction personnel, it is anticipated that there would be an average of five workers on-site on an average day and 15 workers on a peak day. In addition, a construction inspector and a biological monitor would be at the site each day. The resulting levels of site-generated construction traffic are shown in Table C.27-7. The table shows the projected traffic volumes for an average day and a peak day of construction activity.

**Table C.27-7. Project Generated Traffic**

Traffic Category	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
AVERAGE DAY									
Workers	7	0	7	0	7	7	10	10	20
Trucks	9	9	18	9	9	18	40	40	80
Miscellaneous	5	5	10	5	5	10	20	20	40
Total	21	14	35	14	21	35	70	70	140
Total PCE*	30	23	53	23	30	53	100	110	220
PEAK DAY									
Workers	17	0	17	0	17	17	40	40	80
Trucks	13	13	26	13	13	26	60	60	120
Miscellaneous	10	10	20	10	10	20	40	40	80
Total	40	23	63	23	40	63	140	140	280
Total PCE*	53	36	89	36	53	89	200	200	400

\* Passenger Car Equivalent

Table C.27-7 indicates that the construction activities would generate a total of 140 vehicle trips per day on an average day (70 inbound and 70 outbound). Included in this traffic are 40 round-trip truck trips (40 inbound and 40 outbound for a total of 80 truck trips). For purposes of the roadway and intersection capacity analyses, it was assumed that each truck represents two “passenger car equivalents,” which means that a truck uses double the capacity of a passenger car. The total number of passenger car equivalent (PCE) vehicles generated by the project on an average day would be 53 trips during the AM peak hour (30 inbound and 23 outbound), 53 trips during the PM peak hour (23 inbound and 30 outbound), and 220 trips per day. On a peak day of construction activity, the project would generate 89 PCE trips during the AM peak hour (53 inbound and 36 outbound), 89 trips during the PM peak hour (36 inbound and 53 outbound), and 400 trips per day. The traffic impact analysis is based on the peak day traffic volumes.

The peak hour truck volumes shown in Table C.27-7 represent the assumption that approximately 20 percent of the daily truck traffic could potentially occur during the peak hour. It was also assumed that these trucks would enter the site and leave the site within a one-hour interval. For the miscellaneous traffic, it was assumed that up to 25 percent of the daily traffic would occur during the peak hour.

The site-generated traffic was distributed onto the roadway network based on the most probable geographical distribution of the project-related traffic. The trucks traveling to the site, for example, would consist primarily of fill material that would most likely originate at a facility that is located near Santa Paula. The truck traffic was, therefore, assigned to SR 126 to and from the west. The workers’ vehicles and miscellaneous traffic was assumed to be distributed with 45 percent of the traffic originating from the west on SR 126, 45 percent from the east on SR 126, 5 percent from the south on A Street, and 5 percent from the north on A Street.

As the project’s primary staging area would be on the north side of SR 126 east of the Sespe Creek Levee, it was assumed that the project generated traffic would be destined for that location. The segment of SR 126 adjacent to the proposed staging area has a two-way left-turn lane that motorists could legally use to turn left into the staging area from eastbound SR 126. Trucks and other construction vehicles would access the levee construction site via a new access ramp that would be constructed between the main staging area and the levee. This would allow for vehicles to travel between the staging area and the construction site without entering a public roadway (i.e., SR 126).

The project generated traffic volumes are shown on Figure C.27-3.

It should be noted that the traffic analysis is based on the assumption that all project generated traffic would be traveling to and from the main staging area on the north side of SR 126 east of the levee. It is possible that some of the project-related vehicles (e.g., the construction workers' vehicles) would be parked at alternate locations if such locations would be closer to a particular construction activity on a particular day. Examples of these alternate parking areas are a City-owned parcel east of the Sespe Creek Bike Trail formal entrance at E Street (behind the homes on Waterford Lane), the Faith Community Church property, Shiells Park, and various public streets in Fillmore along the whole length of the levee. The traffic impacts at these locations would be minor because these areas would only be used by construction workers and/or inspectors/monitors, which would range from an average of 7 persons per day to a peak of 17 persons per day. The locations would not be used for truck access or parking.

An analysis of traffic impacts was conducted by adding the project generated traffic to the baseline conditions, then quantifying the before and after traffic volumes and determining the ICU values and levels of service at the study area intersections for the "without project" and "with project" scenarios. Two baseline scenarios are addressed in the analysis: existing conditions and the year 2014 conditions with ambient growth and the cumulative traffic generated by the other projects occurring in the vicinity of the proposed project. The traffic volumes for the "existing plus project" scenario are shown on Figure C.27-4. The year 2014 traffic volumes with the proposed project are shown on Figure C.27-5.

For the existing conditions baseline scenario, the before-and-after ICU values and LOS at each of the study area intersections are summarized in Table C.27-8 for the morning and afternoon peak hours. The table shows the existing traffic conditions, the traffic conditions with the addition of the project generated traffic, and the increase in the ICU values associated with the project. The final column in the table indicates if the intersection would be significantly impacted by the proposed project.

The intersection of SR 126 and Old Telegraph Road, for example, operates with an ICU value of 0.55 and LOS A for existing conditions and with an ICU value of 0.56 and LOS A for the existing plus project scenario. The increase in the ICU value associated with the project would be 0.01 and the project would not result in a significant impact according to the criteria. Table C.27-8 indicates that none of the study area intersections would be significantly impacted by the construction of the proposed project for the existing plus project scenario. The last row of Table C.27-8 shows the ICU value and LOS at the intersection of SR 126 and the staging area driveway. As shown, this intersection would operate at an acceptable LOS A during the morning and afternoon peak hours. For existing conditions, this intersection is shown as "N/A" (not applicable) because there were no traffic movements into or out of the driveway when the traffic counts were taken.

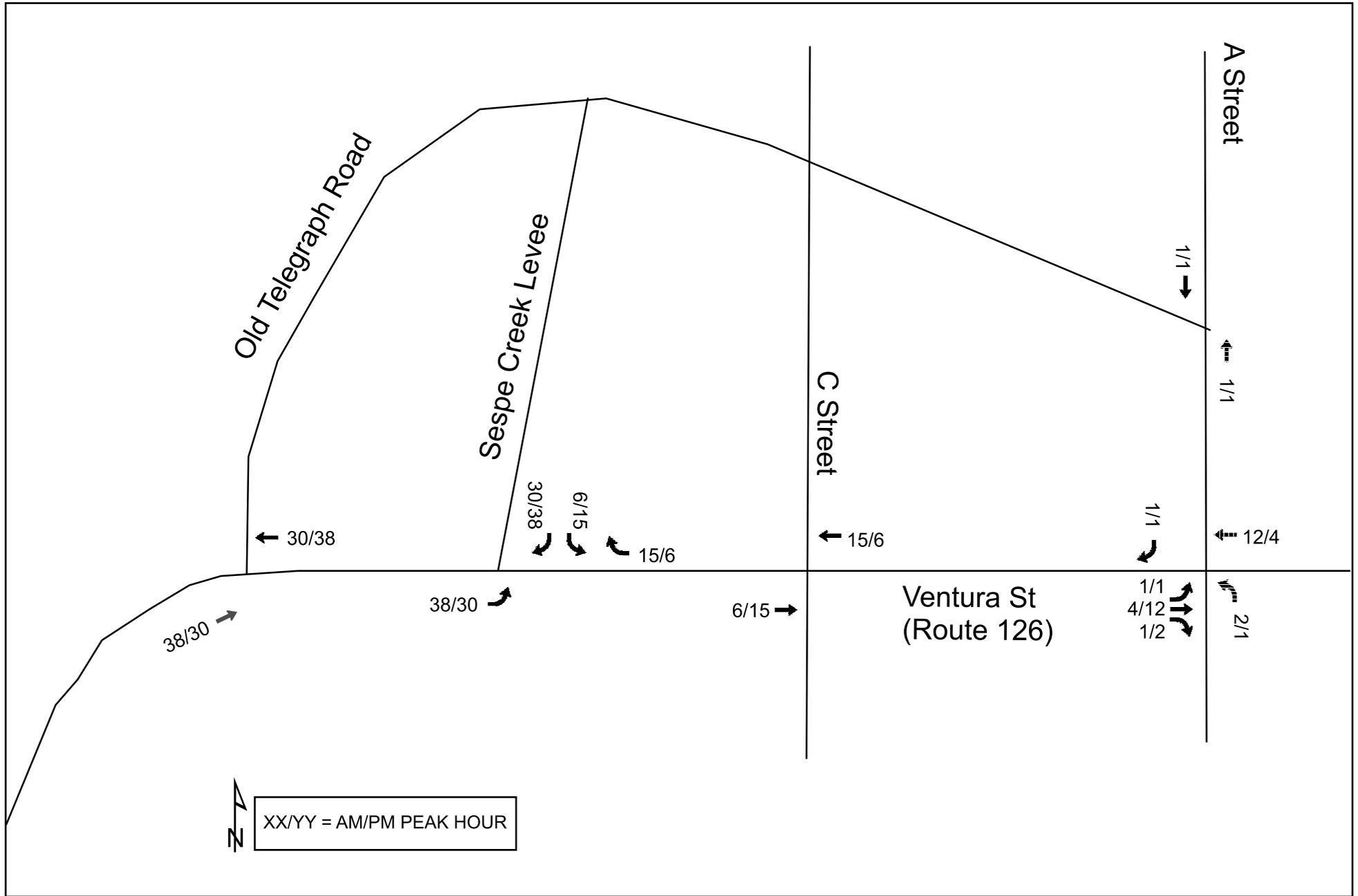
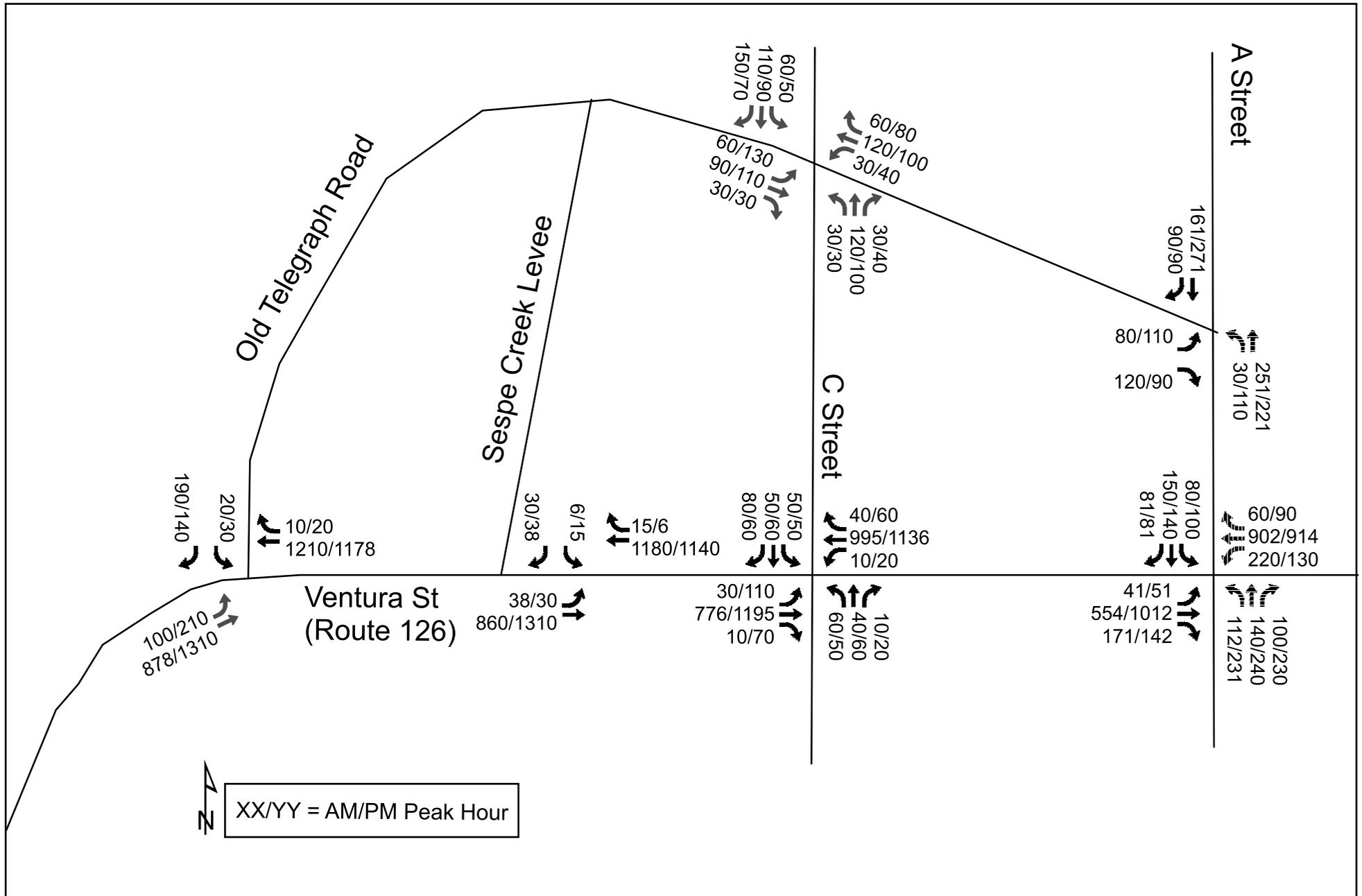


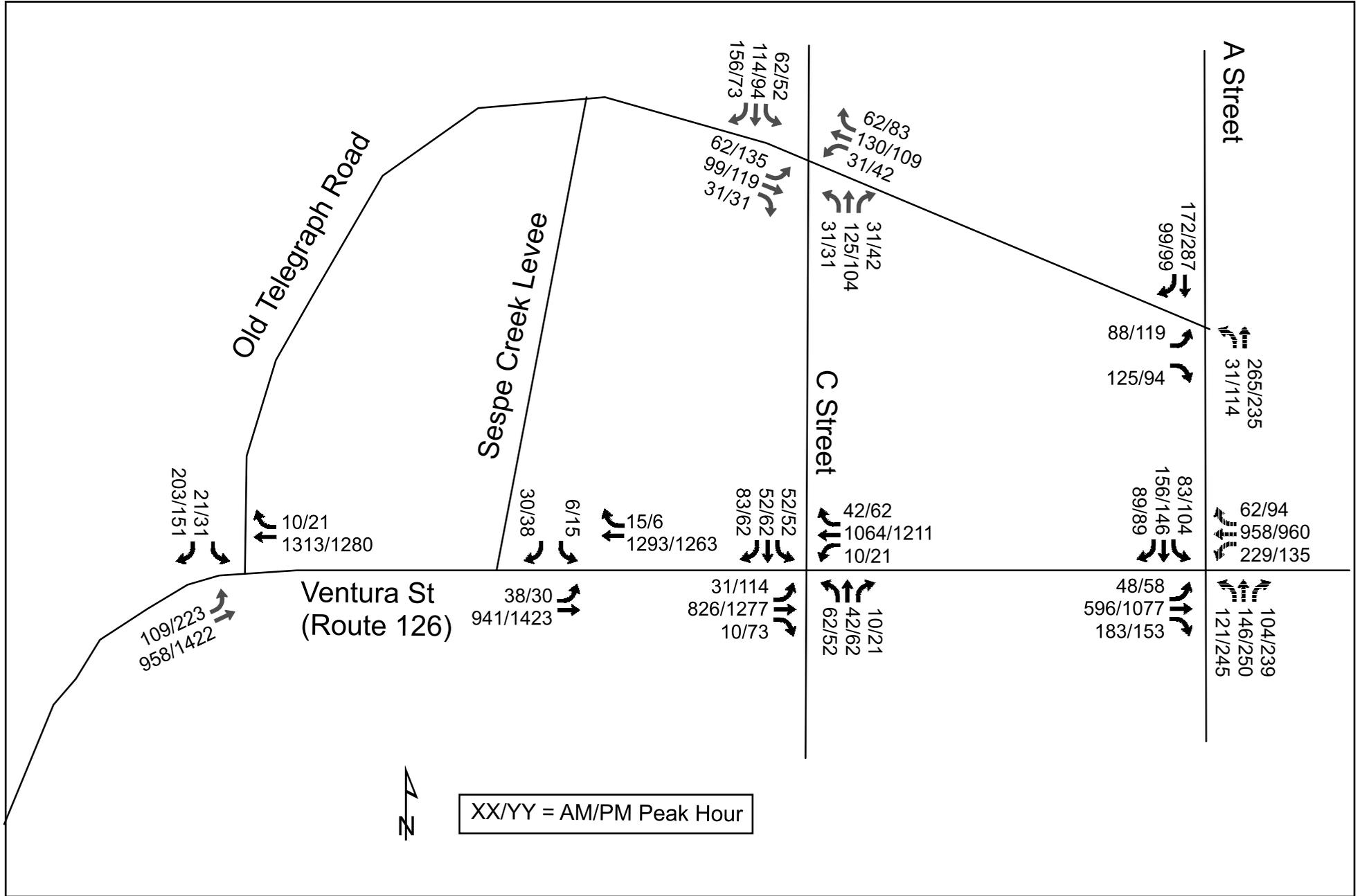
Figure C.27-3

Project Generated Traffic



**Figure C.27-4**  
Existing Plus Project  
Traffic Volumes





**Figure C.27-5**  
2014 Traffic Volumes  
with Project



**Table C.27-8. Project Impact on Intersection Levels of Service Existing Conditions as Baseline**

Intersection	ICU Value & LOS			Significant Impact?
	Existing Conditions	Existing Plus Project	Increase In ICU Value	
Route 126 @ Old Telegraph Road				
AM Peak Hour	0.55 – A	0.56 – A	0.01	No
PM Peak Hour	0.58 – A	0.59 – A	0.01	No
Route 126 @ C Street				
AM Peak Hour	0.49 – A	0.49 – A	0.00	No
PM Peak Hour	0.60 – A	0.60 – A	0.00	No
Route 126 @ A Street				
AM Peak Hour	0.58 – A	0.58 – A	0.00	No
PM Peak Hour	0.79 – C	0.80 – C	0.01	No
Old Telegraph Road @ C Street				
AM Peak Hour	0.43 – A	0.43 – A	0.00	No
PM Peak Hour	0.43 – A	0.43 – A	0.00	No
Old Telegraph Road @ A Street				
AM Peak Hour	0.25 – A	0.25 – A	0.00	No
PM Peak Hour	0.36 – A	0.36 – A	0.00	No
Route 126 @ Staging Area Driveway				
AM Peak Hour	N/A	0.42 – A	0.42	No
PM Peak Hour	N/A	0.44 – A	0.44	No

The intersection impacts of the proposed project for the scenario with the year 2014 as the baseline are summarized on Table C.27-9. As shown, none of the study area intersections would be significantly impacted by the construction of the proposed project for the year 2014 scenario.

**Table C.27-9. Project Impact on Intersection Levels of Service Year 2014 as Baseline**

Intersection	ICU Value & LOS			Significant Impact?
	2014 Conditions Without Project	2014 Conditions With Project	Increase In ICU Value	
Route 126 @ Old Telegraph Road				
AM Peak Hour	0.60 – A	0.61 – B	0.01	No
PM Peak Hour	0.63 – B	0.64 – B	0.01	No
Route 126 @ C Street				
AM Peak Hour	0.52 – A	0.52 – A	0.00	No
PM Peak Hour	0.63 – B	0.63 – B	0.00	No
Route 126 @ A Street				
AM Peak Hour	0.61 – B	0.62 – B	0.01	No
PM Peak Hour	0.84 – D	0.84 – D	0.00	No
Old Telegraph Road @ C Street				
AM Peak Hour	0.45 – A	0.45 – A	0.00	No
PM Peak Hour	0.45 – A	0.45 – A	0.00	No
Old Telegraph Road @ A Street				
AM Peak Hour	0.27 – A	0.27 – A	0.00	No
PM Peak Hour	0.39 – A	0.39 – A	0.00	No
Route 126 @ Staging Area Driveway				
AM Peak Hour	N/A	0.46 – A	0.46	No
PM Peak Hour	N/A	0.48 – A	0.48	No

A roadway segment analysis has been conducted to evaluate the project’s impacts on daily traffic volumes. Table C.27-10 represents the analysis scenario using existing conditions as the baseline and Table C.27-11 represents the scenario with the year 2014 as the baseline. The tables indicate that all of the study area roadway segments would operate at acceptable LOS levels and that no significant impacts would occur based on the County of Ventura and the City of Fillmore significance criteria cited above.

**Table C.27-10. Roadway Segment Analysis – Existing Conditions as Baseline**

Roadway	No. of Lanes & Capacity	Daily Traffic Volume			V/C Ratio & LOS w/ Project
		Existing	Project Traffic	Existing + Project	
Ventura Street – State Route 126					
West of Old Telegraph Road	4 – 58,000	29,000	190	29,190	0.50 - C
Old Telegraph to Sespe Creek	4 – 58,000	29,500	190	29,690	0.51 - C
Sespe Creek to C Street	4 – 58,000	29,500	90	29,590	0.51 - C
C Street to A Street	4 – 58,000	29,500	90	29,590	0.51 - C
East of A Street	4 – 58,000	30,000	70	30,070	0.52 - C
Old Telegraph Road					
Route 126 to Sespe Creek	2 – 27,000	4,000	10	4,010	0.15 - B
Sespe Creek to C Street	2 – 27,000	4,000	10	4,010	0.15 - B
C Street to A Street	2 – 27,000	4,000	10	4,010	0.15 - B
C Street					
Old Telegraph Rd to Route 126	2 – 27,000	4,500	0	4,500	0.17 - B
A Street					
Old Telegraph Rd to Route 126	2 – 27,000	8,000	10	8,010	0.30 - C

**Table C.27-11. Roadway Segment Analysis – Year 2014 as Baseline**

Roadway	No. of Lanes & Capacity	Daily Traffic Volume			V/C Ratio & LOS w/ Project
		2014 Without Project	Project Traffic	2014 With Project	
Ventura Street – State Route 126					
West of Old Telegraph Road	4 – 58,000	30,600	190	30,790	0.53 - C
Old Telegraph to Sespe Creek	4 – 58,000	31,000	190	31,190	0.54 - C
Sespe Creek to C Street	4 – 58,000	31,000	90	31,090	0.54 - C
C Street to A Street	4 – 58,000	31,000	90	31,090	0.54 - C
East of A Street	4 – 58,000	31,500	70	31,570	0.54 - C
Old Telegraph Road					
Route 126 to Sespe Creek	2 – 27,000	4,200	10	4,210	0.16 - B
Sespe Creek to C Street	2 – 27,000	4,200	10	4,210	0.16 - B
C Street to A Street	2 – 27,000	4,200	10	4,210	0.16 - B
C Street					
Old Telegraph Rd to Route 126	2 – 27,000	4,700	0	4,700	0.17 - B
A Street					
Old Telegraph Rd to Route 126	2 – 27,000	8,300	10	8,310	0.31 - C

The conclusion of the traffic analysis is that the traffic volumes that would be generated by construction of the proposed project would not result in a significant impact at any of the study area roadways or intersections. Environmental commitments identified in Section A.4.5 would further reduce or avoid potential impacts on study area roadways and intersections, such as by requiring implementation of a Traffic Control Plan. The impacts during construction on the roads and highways relative to LOS would be less than significant.

## **Operation**

The traffic levels associated with the operation and maintenance of the improved levee would be the same as under current operations. No new traffic volumes or impacts would occur as a result of the proposed project.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. The traffic that would be generated by these projects was considered in the determination of the baseline traffic volumes for the future analysis scenario of 2014, which is the time period when the proposed project's construction activities would occur. Included among the cumulative projects is the Upland Rock sand and gravel mining operation, which may be excavating and transporting material from Sespe Creek during the same time period that the Sespe Creek Levee improvements would be constructed. The exact timeframe and physical proximity of the Upland Rock project to the proposed project is not currently known; however, in order to be conservative in this analysis, traffic that would be generated by the Upland Rock activities was incorporated into the traffic projections for the future analysis year. The analysis of this future scenario indicates that the cumulative impacts on the study area roadways and intersections would be less than significant. The Ventura County *Initial Study Assessment Guidelines* state that a project would have a potentially significant adverse cumulative traffic impact if the project will add one or more peak hour trips to a roadway segment that is currently operating at an unacceptable LOS or if the project will add 10 or more peak hour trips to a roadway segment that is projected to reach an unacceptable LOS by the year 2020. The traffic analysis outlined above indicates that the study area roadways are all operating at acceptable LOS levels for all analysis scenarios. The year 2020 scenario is not addressed in the analysis because the proposed project would not generate any additional traffic during operation of the completed project. The cumulative impacts on the study area roadways would, therefore, be less than significant.

### **C.27A(2) Roads and Highways – Safety/Design of Public Roads**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, “most development projects affect the public road system through access encroachments, improving or widening existing roads, and/or constructing new road sections” (County of Ventura, 2011). Projects that comply with the County's road standards are generally considered to have less than significant impacts on the safety and design of the public road system and projects that impact intersections in a manner that exceeds the State's accident guidelines for signalization are considered significant.

***Proposed Project Impacts:*** The proposed project would utilize SR 126 because the staging area would be provided on the north side of SR 126 east of the Sespe Creek Levee. This parcel is currently used by the VCWPD as a staging area and material storage area for existing maintenance activities at Sespe Creek. Therefore, it already has a driveway that provides access to SR 126. No modification to this driveway would be required for the proposed project. In addition, as the volumes of project generated traffic are relatively low, the project would not result in the need for a new traffic signal. Left turn movements into the staging area can be accommodated by an existing two-way left-turn lane that is located in the center of SR 126. Observations at the driveway location indicate that visibility is adequate for this left-turn movement. Prior to project implementation, VCWPD will coordinate with the City of Fillmore Public Works Department, the Ventura County Public Works Agency Transportation Department, and Caltrans regarding the use of this driveway, as well as all potential haul routes, access points, project-related parking, and bicycle and pedestrian access and restrictions. Access to the project site would also be provided from Old Telegraph Road at the north end of the project and from various

local streets in Fillmore. These access points would be relatively minor as compared to the SR 126 staging area. Impacts to safety and design of the public road system from construction and operations of the project would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. The cumulative project closest to the proposed project site is the Upland Rock sand and gravel mining operation, which could be excavating and transporting material from Sespe Creek during the same time period that the Sespe Creek Levee improvements would be constructed. As access to the Upland Rock activity area and to the proposed project's staging area is already in place on SR 126, no physical changes are proposed to the roadways or the driveways. The Ventura County *Initial Study Assessment Guidelines* indicate that a project will have a potentially significant adverse cumulative traffic impact if the affected road has been identified as experiencing a high accident rate, requires the installation of a traffic signal because of safety issues, or has been identified as having a substandard design. As these conditions are not applicable to the roadways in the project vicinity, the proposed project would not incrementally contribute to public road and highway safety and design impacts in a manner that would be cumulatively considerable. Cumulative impacts would be less than significant.

#### **C.27A(3) Roads and Highways – Safety/Design of Private Access**

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, impacts associated with the safety and design of a private road involves the physical configuration of the road and its conformance with applicable State and local fire guidelines and ordinances.

**Proposed Project Impacts:** The proposed project area would be open to the public and would not require the construction of, or modification to, any private roads. There would be no impacts relative to the safety and design of private access roads.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Cumulative projects within the area include private development, which could result in private roadway safety and design impacts that are cumulatively considerable. However, as addressed above, the proposed project would not require the construction of, or modification to, any private roads. Consequently, it would not incrementally contribute to any private road safety and design impacts that would be cumulatively considerable. No cumulative impacts would occur.

#### **C.27A(4) Roads and Highways – Tactical Access**

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would have a significant impact if there is a single access and the access road exceeds 800 feet in length.

**Proposed Project Impacts:** Although the project has no public roads, it does have an access road for maintenance vehicles. In addition, access is provided for pedestrians and bicycles. As access is provided from both ends of the project, tactical access is in conformance with the guidelines and there would be no impacts.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As these projects would have no effect on access to the proposed project site, no cumulative impacts would occur relative to tactical access.

### C.27B Pedestrian/Bicycle

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project that will cause actual or potential barriers to existing or planned pedestrian/bicycle facilities may have a significant impact. In addition, projects that generate or attract pedestrian/bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities may have a significant impact.

**Proposed Project Impacts:** Construction of the proposed project would result in the temporary closure of the Sespe Creek Bike Trail between SR 126 and Old Telegraph Road during the project's five-to six-month construction period. Temporary exclusionary fencing and signage would be erected at the entrances to this section of the bike path notifying the public of the temporary closure. A temporary detour for bicyclists and recreationists would be available along neighboring residential streets. A suggested temporary detour route is from the E Street entrance along to Cottonwood Lane, east along Waterford Lane, north along D Street, east along Sespe Avenue, and north along C Street to the trail entrance north of Old Telegraph Road (see Figure A-8). The impacts of this temporary detour of the bike trail would be less than significant.

The project includes the provision of a new pedestrian access ramp over the levee from the end of Mallard Street in Fillmore that would improve access to the Sespe Creek Bike Trail. This feature could potentially generate or attract additional pedestrians and bicyclists to the trail system. The potential increase in bicycle and pedestrian volumes would not result in a traffic-related safety issue or increase the demand for a protected highway crossing because the Sespe Creek Bike Trail within the project site does not cross a roadway and because the proposed Mallard Street access ramp is not in the proximity of a major roadway. The project's impacts relative to pedestrian/bicycle facilities would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As these projects would have no effect on pedestrian or bicycle facilities or access in the immediate vicinity of the proposed project site, no cumulative impacts would occur relative to pedestrians and bicycles.

### C.27C Bus Transit

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project will normally have a significant impact on bus transit if it would substantially interfere with existing bus transit facilities or routes, or if it would create a substantial demand for bus transit facilities/services.

**Proposed Project Impacts:** The bus agency that serves the project area is VISTA transit, which operates an inter-city bus service that provides connections between cities in Ventura County. It has a fixed-route bus line on SR 126 that serves the cities of Ventura, Santa Paula, Fillmore, and Piru. The proposed project would not interfere with any bus transit facilities or routes. It could potentially generate a minor increase in the demand for bus ridership if one or more of the construction workers would ride the bus to and from the project site. The increased demand, if any, would not be substantial and would not result in an adverse impact. Since 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/services, there would be no project impacts associated with bus transit.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These projects could result in impacts related to bus transit that are cumulatively significant. However, as addressed above, the

proposed project would not impact bus transit. Consequently, it would not incrementally contribute to bus transit impacts that would be cumulatively considerable. No cumulative impacts would occur.

#### **C.27D Railroads**

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project will normally have a significant impact on a railroad if it would substantially interfere with an existing railroad's facilities or operations.

**Proposed Project Impacts:** The Santa Paula Branch Line railroad tracks are located near the project site as the tracks run along the north side of Old Telegraph Road and through Fillmore. This branch line runs between the city of Ventura and the Los Angeles County line through the Santa Clara River Valley. The Fillmore Western Railroad operates excursion trains on this branch line. Implementation of the proposed project would not interfere with any existing railroad facilities or operations and no impacts would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As these projects would have no effect on railroads, no cumulative impacts would occur. Distant cumulative projects with the potential to be located near rail lines could potentially result in cumulatively significant impacts. However, as addressed above, the proposed project would not incrementally contribute to railroad impacts in a manner that is cumulatively considerable. No cumulative impacts would occur.

#### **C.27E Airports**

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project could potentially be incompatible with the operation of an airport if it is within the sphere of influence of an airport and if it includes features such as high buildings, residential units, refineries, churches, or schools.

**Proposed Project Impacts:** The proposed project is not within the sphere of influence of an airport and does not have any incompatible features; therefore, no airport-related impacts would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. Distant cumulative projects with the potential to be located near airport facilities could result in aviation impacts that are cumulatively significant. However, as addressed above, no airport facilities are located within the immediate proposed project area. The proposed project would not incrementally contribute to aviation impacts in a manner that is cumulatively considerable. No cumulative impacts would occur.

#### **C.27F Harbors**

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would have an impact on a harbor if the construction or operation of the project will increase the demand for commercial boat traffic and/or adjacent commercial boat facilities.

**Proposed Project Impacts:** The proposed project site is not located near a harbor and implementation of the project would not affect the demand for boat traffic or facilities. Therefore, the proposed project would not interfere with harbor facilities or operations. No impacts would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. While these cumulative projects may induce growth and thus increase harbor use, at a regional scale, their incremental contribution to direct or indirect cumulative impacts to the operation of a harbor or the demand for new or expanded harbor facilities are expected to be negligible. Additionally, as addressed above, the proposed project would not affect harbors. Therefore, no cumulative impacts would occur.

### **C.27G Pipelines**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, a project would have a significant impact if it would substantially interfere with, or compromise the integrity or affect the operations of, an existing pipeline.

***Proposed Project Impacts:*** The proposed project does not involve the construction or operation of any pipelines except for storm water lines that feed into Sespe Creek. The project would not, therefore, result in any significant impacts related to pipelines.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. While some of these cumulative developments could potentially have an effect on pipelines, the proposed project would not impact pipelines. Consequently, it would not incrementally contribute to pipeline impacts that would be cumulatively considerable. No cumulative impacts would occur.

## **C.28 WATER SUPPLY**

In accordance with the Ventura County *Initial Study Assessment Guidelines*, this environmental issue area addresses domestic water supply, or a supply of potable water used for human consumption or connected to domestic plumbing fixtures in which the supply is obtained from an approved individual water supply system or a public water system operating with an unrevoked permit from the Ventura County Environmental Health Division or the California Department of Public Health (County of Ventura, 2011).

### **C.28A Quality**

***Significance Criteria:*** Water quality refers to the chemical, biological, and physical quality of water used for human consumption (County of Ventura, 2011). According to the Ventura County *Initial Study Assessment Guidelines*, a potential water supply impact may occur if a project requires a supply of domestic water (County of Ventura, 2011).

***Proposed Project Impacts:*** The proposed project would require a water supply for dust suppression during the five- to six-month construction period, but the project would not include the development of any habitable structures or bathroom facilities, and does not require a source of domestic water supply. No impacts to water supply quality would occur.

***Cumulative Impacts:*** As described above, the proposed project would not require a supply of domestic water. Therefore, it would not combine with the other past, present or reasonably foreseeable cumulative projects to contribute to a cumulative water supply quality impact. No cumulative impacts would occur.

### C.28B Quantity

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, the purpose of assessing this issue area is to ensure consistent and complete assessment of any direct and indirect impacts resulting from the *General Plan* requirement that each legal parcel requiring a domestic water source have a permanent supply of water for the project (County of Ventura, 2011).

**Proposed Project Impacts:** As described above, the proposed project would not introduce a permanent water supply requirement and would not require a source of domestic water supply. Therefore, no impacts to water supply quantity would occur.

**Cumulative Impacts:** As described above, the proposed project would not require a water source and would result in no impact to water supply quantity. Therefore, it would not combine with the other past, present or reasonably foreseeable cumulative projects to contribute to a cumulative water supply quantity impact. No cumulative impacts to water supply quantity would occur.

### C.28C Fire Flow

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project will be considered to have a significant impact associated with fire flow if one of the criteria listed below is met during project construction or operation (County of Ventura, 2011).

- It cannot meet the required fire flow as determined by:
  - The Insurance Services Office, Inc. (ISO) Guide for Determination of Required Fire Flow;
  - The Ventura County Waterworks Manual (VCWWM);
  - Ventura County Fire Protection District (VCFPD) Fire Code; and
  - Fire Prevention Standard 14.5.1, 14.5.2, and 14.5.3.
- If it cannot provide an acceptable mitigation factor, i.e., fire sprinklers to allow for a reduction in the required fire flow.
- A private water system cannot meet flow, duration, or reliability requirements as defined in the Ventura County Waterworks Manual and VCFPD Fire Code.

Fire flow is defined as the number of gallons per minute of water available from a fire hydrant in the event of an emergency situation. Per the Ventura County *Initial Study Assessment Guidelines*, VCFPD staff responsible for a proposed project will review information submitted by the applicant relative to water availability, and may require plans for a private water system if an acceptable water purveyor has not been identified. Also as described in the Ventura County *Initial Study Assessment Guidelines*, no impact to fire flow would occur if a project would have no requirements for fire flow, or if a project is served by a water purveyor that can provide the required fire flow in accordance with the VCWWM and VCFPD Fire Code.

**Proposed Project Impacts:** Section A.4.5 (see the discussion under “Materials and Waste”) describes that water for soil compaction and dust suppression during project construction would be provided by the City of Fillmore, via a water meter placed on a fire hydrant near SR 126 and E Street. The City of Fillmore is considered an acceptable water purveyor for the project, and the VCFPD would

not require plans for a private water system. The project's water requirements would be temporary and minimal, limited to dust abatement during the five- to six-month construction period, and as mentioned, would be met by the City of Fillmore, a public water supplier. The proposed project would result in no impacts associated with fire flow.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As described above, the proposed project would not result in an impact related to fire flow requirements. Therefore, it would not combine with the other past, present or reasonably foreseeable cumulative projects to contribute to a cumulative impact to fire flow requirements. No cumulative impacts to fire flow requirements would occur.

## C.29 WASTE TREATMENT/DISPOSAL

### C.29A Individual Sewage Disposal System

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines* (County of Ventura, 2011a), compliance with applicable sections of the following documents must be demonstrated to ensure no significant impact:

- Ventura County Building Code, Articles 1 and 6
- Ventura County Sewer Policy
- Ventura County Ordinance Code, Division 4
- Uniform Plumbing Code
- Environmental Health Division Onsite Wastewater Treatment System Technical Information Manual
- California Regional Water Quality Control Board Basin Plans.

**Proposed Project Impacts:** A sewage disposal system can be defined as a system which disposes of domestic waste (sewage) generated by individual residences and businesses located in areas without access to public sewer service (County of Ventura, 2011a). During construction, the proposed project contractor would supply portable toilets for workers and would be responsible for the disposal of generated sewage. As the number of on-site workers would be minimal (estimated at a maximum of 15), with all workers anticipated to come from within the Ventura County area, no impacts to existing sewage treatment facilities are expected to occur from on-site portable toilets. Once operational, the proposed project would not include any toilet facilities or require the construction, modification, or use of any on site or existing sewage disposal structures or systems. Therefore, no individual sewage disposal system impacts would occur.

**Cumulative Impacts:** As discussed above, the proposed project would not require an on-site sewage disposal system. Therefore, it would not combine with the past, present or reasonably foreseeable projects outlined in the introduction to Section C (as supported by Appendix 1) to contribute to sewage disposal system impacts that would be cumulatively considerable. No cumulative impacts would occur.

### C.29B Sewage Collection/Treatment Facilities

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project which would individually or cumulatively generate sewage effluent which would be discharged to

and exceed the capacity of an existing facility or ancillary facilities would have a potentially significant impact; however, if the project incorporates project conditions and mitigation measures for improvements required by the sewer entity or Regional Water Board, there would be a less than significant impact (County of Ventura, 2011a).

***Proposed Project Impacts:*** Sewage collection/treatment facilities are those which collect wastewater from domestic, commercial, industrial and institutional uses, treat it to remove organic and inorganic hazardous or noxious waste materials, and discharge the treated effluent (County of Ventura, 2011a). As discussed above in Section C.29A, the proposed project would not impact sewage treatment facility capacity during construction and does not include any on-site sewage disposal facilities for operation, and thus would not generate sewage effluent requiring the generation or use of any new or existing sewer mains or sewage treatment plants. Furthermore, the proposed project would not be connected to a sewage collection facility. Therefore, no impacts to sewage collection/treatment facilities would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These cumulative projects include retail development and school expansions that may induce growth and thus increase demand on sewage collection/treatment facility use, at a regional scale. However, as addressed above, the proposed project would not affect, directly or indirectly, sewage collection/treatment facilities. Therefore, no cumulative impacts would occur.

### **C.29C Solid Waste Management**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, any project that generates solid waste would have an impact on the demand for solid waste disposal capacity in Ventura County (County of Ventura, 2011a).

***Proposed Project Impacts:*** Clear and grub green wastes generated during construction of the proposed project would be hauled to the nearest green waste recycling facility for appropriate disposal. The only soil spoils associated with the project would be from tree removal (soil within tree root balls). An on-site raw material excavation and re-use/export plan would be implemented for each work task. Furthermore, the VCWPD would incorporate into the project's contract specifications requirements to comply with Ventura County Ordinances #4445 (solid waste disposal, waste reduction, waste diversion) and #4421 (requirements for the diversion of construction and demolition debris from landfills by recycling, reuse, salvage), to the extent practicable.

**Construction Materials – Recycling and Reuse.** The project's contract specifications shall include a requirement that recyclable construction materials (i.e., metal, concrete, asphalt, rebar, wood) generated during construction of the project must be diverted from the landfill and be recycled at a permitted recycling facility. All non-recyclable materials must be disposed of at a permitted disposal facility. Illegal disposal or landfilling recyclable construction materials is prohibited. A comprehensive list of permitted recyclers, haulers, and solid waste and recycling facilities in Ventura County is located at: [www.wasteless.org/construction&demolitionrecyclingresources](http://www.wasteless.org/construction&demolitionrecyclingresources).

**Sediment and Soil – Recycling and Reuse.** The project's contract specifications shall include a requirement that sediment and soil not reused on site will be transported to a permitted facility for cycling or reuse. Illegal disposal and landfilling of soil is prohibited.

**Organic Materials – Recycling and Reuse.** The project's contract specifications shall include a requirement that wood waste and vegetation removed during the construction phase of the project must be

diverted from the landfill. This can be accomplished by on site chipping and land application or by transporting the material(s) to an authorized or permitted green waste facility in the County. Illegal disposal and landfilling of recyclable organic materials is prohibited. A complete list of permitted green waste facilities is located at: [www.wasteless.org/greenwasterecyclingfacilities](http://www.wasteless.org/greenwasterecyclingfacilities).

**Recyclable Construction and Demolition Debris – Required Reports.** The project’s contract specifications shall include a requirement that the construction contractor must submit a Form B – Recycling Plan to the County of Ventura Public Works Department, Integrated Waste Management Division (IWMD), for approval prior to issuance of the Notice to Proceed. The Recycling Plan must specify how all recyclable materials generated by the project (e.g., metal, concrete, wood, green waste, soil) will be diverted from the landfill. A copy of Form B – Recycling Plan is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD). Furthermore, contractors shall submit a Form C – Recycling Report to the IWMD for approval prior to the engineer’s preparation of the final estimate. The Form C – Recycling Report must have original recycling facility receipts and/or other documentation attached to verify recycling, on site reuse or salvage occurred. A copy of Form C – Recycling Report is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD).

The amount of waste generated by the proposed project would be relatively small in quantity. Therefore, the proposed project would have less than significant impacts to solid waste management and collection.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These cumulative projects include retail development and school expansions that may induce growth and thus increase demand on solid waste management and collection, at a regional scale. However, as addressed above, the proposed project would have less than significant impacts to solid waste management. Therefore, less than significant cumulative impacts would occur.

#### C.29D Solid Waste Facilities

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines* (County of Ventura, 2011a), solid waste facilities shall be in compliance with the following statutes and regulations and are subject to enforcement by the County of Ventura Resource Management Agency, Environmental Health Division (EHD):

- California Health and Safety Code, Division 104, Part 13, Chapter 4, Article 7
- California Health and Safety Code, Division 104, Part 14
- California Code of Regulations, Title 14, Division 7
- California Code of Regulations, Title 27, Division 2
- California Public Resources Code, Division 30
- Ventura County Ordinance Code, Division 4, Chapter 7

Solid waste operations and facilities are those projects that involve solid waste handling, storage, processing and disposal activities that are subject to solid waste regulations enforced by the Local Enforcement Agency/EHD. Solid waste facilities operate under the authority of the Local Enforcement Agency, which under the proposed project would be the Ventura County EHD. Per the Ventura County *Initial Study Assessment Guidelines*, if a proposed project does not involve a solid waste operation or facility, it would have no impact (County of Ventura, 2011a).

**Proposed Project Impacts:** The proposed project does not involve the construction or operation of solid waste facilities. Clear and grub green wastes generated during construction of the project would be hauled to the nearest green waste recycling facility for appropriate disposal. The only soil spoils associated with the project would be from tree removal (soil within tree root balls). An on-site raw material excavation and re-use/export plan would be implemented for each work task. Solid waste generated during construction of the proposed project would be disposed of in accordance with Ventura County Ordinances #4445 (solid waste disposal, waste reduction, waste diversion) and #4421 (requirements for the diversion of construction and demolition debris from landfills by recycling, reuse, salvage), to the extent practicable. The VCWPD would incorporate the requirements of these ordinances into the project's contract specifications requirements. Anticipated average daily use at the project site is anticipated to generate a minimal amount of solid waste material and is not anticipated to impact the available capacity of waste disposal facilities serving the proposed project area. Since the proposed project does not involve the construction or operation of solid waste facilities, no impacts to solid waste facilities would occur under the proposed project.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These cumulative projects include retail development and school expansions that may induce growth and thus increase demand on solid waste disposal facilities, at a regional scale. However, as addressed above, the proposed project is anticipated to generate a minimal amount of solid waste material and is not anticipated to impact the available capacity of waste disposal facilities serving the proposed project area, resulting in a less than significant cumulative contribution to solid waste facilities. Therefore, less than significant cumulative impacts would occur.

### C.30 UTILITIES

**Significance Criteria:** A proposed project could result in impacts to utilities if it would cause a disruption or re-routing of an existing utility facility or increase demand on a utility that results in expansion of an existing utility facility which has the potential for secondary environmental impacts (County of Ventura, 2011a). These facilities include: electrical generation plants, transmission substations and transmission lines; fixed natural gas transmission and distribution systems; and, structures such as radio and television transmitting and receiving antennas, radar stations, microwave towers and cellular and hard line telephone facilities (County of Ventura, 2011a).

**Proposed Project Impacts:** During construction, all equipment would be gasoline or diesel powered and would not consume any electricity or natural gas. Construction would require a minimal amount of electricity for minor form work, an electric saw, and a grinder for work on the retaining wall; electricity would be obtained from a local source (possibly by arrangement from the Faith Community Church). No disruptions to overhead electrical lines would occur from either project construction or operational activities. Therefore, the proposed project would result in less than significant impacts to existing overhead electrical and communications infrastructure.

No buried utility lines are expected to be interfered with during construction. Therefore, the proposed project would not cause disruptions to any existing buried electrical, natural gas, or communications infrastructure.

Once constructed, the proposed project would not require or include the use of any electricity, natural gas, or communications infrastructure for daily operations. Therefore, the proposed project would have no impacts to an increase in demand to any existing electrical, natural gas, or communications facilities.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These cumulative projects include retail development and school expansions that may induce growth and thus increase demand on electrical, natural gas, and communications facilities, at a regional scale. As addressed above, the proposed project would have no impacts to the increase in demand or cause disruptions to any existing electrical, natural gas, or communications facilities, resulting in no cumulative contribution to utility facilities. Therefore, less than significant cumulative impacts would occur.

### C.31 FLOOD CONTROL/ DRAINAGE

The proposed project is located in the lower portion of the Sespe Creek watershed, within a FEMA-designated Flood Hazard Area. Modeled flow characteristics associated with varying-level storm events in this area are shown in Table C.31-1.

**Table C.31-1. Sespe Creek Peak Flows in Proposed Project Area**

Magnitude Storm (years)	Flood Peak (cfs*)	Ratio to 100-year storm
500	227,000	1.672
200	172,000	1.267
100	135,800	1.000
50	102,000	0.751
20	66,000	0.486
10	43,700	0.322
5	25,700	0.189

\* cfs: cubic feet per second  
Source: RBF, 2010

The VCWPD maintains a series of flood protection facilities in the Sespe Creek watershed to protect developed areas from flooding hazards associated with the flood peaks identified above. Following is a discussion of potential impacts of the proposed project associated with VCWPD facilities as well as facilities that are owned and maintained by persons or agencies other than the VCWPD.

#### C.31A WPD Facilities/Watercourses

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project will be considered to have a significant impact associated with VCWPD flood control facilities/watercourses if one of the criteria listed below is met during project construction or operation (County of Ventura, 2011).

- Any project that will, either directly or indirectly, impact flood control facilities and watercourses by obstructing, impairing, diverting, impeding, or altering the characteristics of the flow of water, resulting in exposing adjacent property and the community to increased risk for flood hazards, shall be considered to have a potentially significant impact. Examples are listed below.

- Reducing the capacity of flood control facilities and watercourses. This includes the planting of any vegetation within the watercourse or on the banks thereof.
- Eroding watercourse bed and banks due to high velocities, changes in adjacent land use, encroachments into the channel such as bridges, and loading the top of the channel embankment with structures.
- Deposition of any material of any kind in a watercourse.
- Placement of a structure that encroaches on a flood control facility or that does not have sufficient setback from a watercourse.

***Proposed Project Impacts:*** The proposed project would improve existing flood control features, and would decrease existing flood hazards to developed areas within the City of Fillmore. The location of proposed project actions within an existing Flood Hazard Area is necessary in order to provide the needed improvements to the SC-2 Levee. The proposed project would result in no adverse impacts to VCWPD flood control facilities/watercourses.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project would result in no adverse impacts to flood control/drainage facilities. Therefore, the proposed project would not combine with other past, present and reasonably foreseeable projects to contribute to a cumulative impact to flood control/drainage facilities.

### **C.31B Other Facilities/Watercourses**

In some areas, flood control and drainage facilities that are owned and maintained by entities other than the VCWPD provide for removal of accumulated stormwater flows from land through both man-made drainage facilities and natural channels. Flow of waters in channels can lead to erosion of channel beds and banks by high velocities of flow or deposition of materials where velocities are low. Existing channels may be of sufficient size to contain regulatory flow rates or they may be inadequate to contain all storm flows and expose adjacent lands to flood hazards. (County of Ventura, 2011)

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, the Ventura County Flood Insurance Study and associated maps define Areas of Special Flood Hazard that are subject to the authority of the Ventura County Flood Plain Management Ordinance. The natural channels and facilities not designated within these source documents and the impacts thereon are the focus of review under this guideline (County of Ventura, 2011). In reviewing a project for impacts, the following are to be given consideration:

- The possibility of deposition of sediment and debris materials within existing channels and allied obstruction of flow.
- The capacity of the channel and the potential for overflow during design storm conditions.
- The potential for increased runoff and the effects on Areas of Special Flood Hazard and regulatory channels both on and off site. (County of Ventura, 2011).

Any increase in flow to and from natural and man-made drainage channels and facilities is required to be considered within the existing framework of grading and building code ordinances, and any project that

does not comply with the requirements of such regulations, manuals and standards is considered as having a potentially significant project and cumulative impact (County of Ventura, 2011).

Impacts to flood control and drainage facilities that are owned and maintained by an entity other than the VCWPD would occur if a project affects the extent of the floodplain, the capacity of a drainage facility or channel, or the velocity of flow within a drainage facility or channel (County of Ventura, 2011).

***Proposed Project Impacts:*** The vast majority of actions under the proposed project would occur along the SC-2 Levee, and would have no effect on flood control and drainage facilities maintained by an entity other than the VCWPD. A 0.12-acre parcel of land owned by the City of Fillmore may be used as a staging area during project construction, but such use would have no effect on drainage in the area. Similarly, a portion of the Community Faith Church may be used as a construction staging area, but such use would have no effect on drainage.

Construction and operation of the proposed project are anticipated to have no impact on flood control/drainage facilities owned and maintained by an entity other than the VCWPD.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a discussion of the past, present and reasonably foreseeable projects associated with the proposed project area. As discussed above, the proposed project would result in no adverse impacts to flood control/drainage facilities. Therefore, the proposed project would not combine with other past, present and reasonably foreseeable projects to contribute to a cumulative impact to flood control/drainage facilities.

### **C.32 LAW ENFORCEMENT/EMERGENCY SERVICES**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines* (County of Ventura, 2011a), public safety depends on the timely availability of law enforcement and emergency service personnel. Projects that increase demand for law enforcement or emergency services may have a significant adverse impact on public safety unless mitigated.

Law enforcement and emergency service personnel consist of all individuals, both sworn and not sworn, who are used by the Ventura County Sheriff's Department to protect the County's citizens. A project that directly or indirectly contributes to a population increase would have the potential to impact law enforcement and emergency service personnel and equipment.

***Proposed Project Impacts:*** The proposed project would not increase the population of the project area and does not involve any structural development. Therefore, the proposed project would not cause a change in established officer-to-population ratios. No impacts to law enforcement and emergency services would occur.

As discussed in Section A.4.5 (Proposed Project), during the winter season, VCWPD personnel are continually monitoring flow conditions in channels and inspecting facilities for identification of problem areas. Work conducted during storm events is usually not routine maintenance, but instead, is considered emergency activity. Graffiti on the retaining wall would be removed as a part of regular maintenance. The VCWPD promptly removes graffiti with obscene comments or scenes; less offensive graffiti, such as tags, are removed as the VCWPD's budget allows. The VCWPD also implements the following BMP: Gates, fences, and "no trespassing" signs are kept in working order to discourage dumping and vandalism. Construction and operation of the proposed project would not increase the demand for law enforcement or

emergency services. In addition, environmental commitments identified in Section A.4.5 would further reduce or avoid potential public safety impacts associated with the Proposed Action, including by requiring a Safety Plan, and a Communication Plan, as part of the project.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. The proposed project is not growth-inducing and would not be anticipated to require the use of local law enforcement or emergency services. Consequently, it would not combine with other past, present and reasonably foreseeable projects to contribute to an impact to law enforcement and emergency services that would be cumulatively considerable. No cumulative impacts would occur.

### **C.33 FIRE PROTECTION**

#### **C.33A Distance/Response Time**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, project distance from a full time paid fire department is considered a significant impact if the project is in excess of five (5) miles, measured from the apron of the fire station to the structure or pad of the proposed structure (County of Ventura, 2011a).

***Proposed Project Impacts:*** Fire protection services for the proposed project area are provided by the Ventura County Fire Department (VCFD). The nearest fire station to the proposed project area is Fire Station 27 - Fillmore Station (also known as the U.S. Forest Service Sespe Fire Station, Engine 54), which is located approximately 0.25 mile east of the project site at 613 Old Telegraph Road. As the proposed project is located within five miles of the nearest fire station, no impacts with regard to the distance and response time of fire protection services would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, proposed construction activities would be located within five miles of the nearest fire station; therefore, the proposed project would not combine with other past, present and reasonably foreseeable projects to contribute to an impact to fire protection services (distance and response) that would be cumulatively considerable. No cumulative impacts would occur.

#### **C.33B Personnel/Equipment/Facilities**

***Significance Criteria:*** According to the Ventura County *Initial Study Assessment Guidelines*, one firefighter is required for every 3,000 to 4,000 persons, depending on density (County of Ventura, 2011a).

***Proposed Project Impacts:*** The proposed project would not increase the population of the project area; consequently, it would not increase the demand for fire protection service personnel, equipment, or facilities. In addition, the proposed project would not involve any type of structural development that would require an increase in long-term fire protection service. No impacts with regard to the personnel, equipment, or facilities of fire protection services would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, the proposed project would not increase the population of the project area and does not involve any structural development; therefore, the proposed project would not combine with other past, present and reasonably

foreseeable projects to contribute to an impact to fire protection services that would be cumulatively considerable. No cumulative impacts would occur.

## C.34 EDUCATION

### C.34A Schools

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the following criteria would result in a significant impact under this issue area (County of Ventura, 2011a).

- Substantially interfere with the operations of an existing school facility.

**Proposed Project Impacts:** The Mountain Vista Elementary School is the closest educational institution, located at 918 5<sup>th</sup> Street, which is approximately 0.26 miles (1,390 feet) northeast of the proposed project area near Shiells Park. The proposed project would not involve the construction or removal/displacement of any residences; consequently, it would not affect the demand for schools within the County. No impacts to schools would occur.

Any potential impact on school facilities (public or private) that is not related to demand is discussed and analyzed under the appropriate subject area (e.g., noise, traffic) of this initial study.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, the proposed project would not interfere with the operation of educational facilities and would not affect the demand for schools in the County. As such, the proposed project would not combine with other past, present or reasonably foreseeable projects to contribute to an impact to educational facilities that would be cumulatively considerable. No cumulative impacts would occur.

### C.34B Libraries

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, any project that meets one of the following criteria would result in a significant impact under this issue area (County of Ventura, 2011a).

- Substantially interfere with the operations of an existing public library facility.
- Put additional demands on a public library facility that is currently deemed overcrowded.
- Limit the ability of individuals to access public library facilities by private vehicle or alternative transportation modes.

**Proposed Project Impacts:** The nearest public library to the proposed project area is the Fillmore Library, located at 502 2<sup>nd</sup> Street, approximately 0.9 mile (4,650 feet) east of the proposed project site. As the proposed project would not involve the in-migration or removal of any residents, temporarily or permanently, it would not affect the demand for public library facilities; and given the distance of the Fillmore Library from the proposed project site, construction and operation activities would not interfere with the operations of this library or limit the ability of individuals to access this public library by private vehicle or alternative transportation modes. No impacts to library facilities and services would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, the proposed project would neither affect the demand for public library facilities, nor interfere with the operations of or accessibility to the Fillmore Library. As such, the proposed project would not combine with other past,

present of reasonably foreseeable projects to contribute to an impact to public libraries that would be cumulatively considerable. No cumulative impacts would occur.

## C.35 RECREATION

As described in the Ventura County *Initial Study Assessment Guidelines*, a project will have a significant impact on recreation if it would cause an increase in the demand for recreation, parks, and/or trails and corridors or would cause a decrease in recreation, parks, and/or trails or corridors when measured against the standards discussed below.

### C.35A Local Parks/Facilities

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would result in a significant impact if it would cause an increase in the demand for recreation when measured against the following standards (County of Ventura, 2011).

- Local Parks/Facilities - 5 acres of developable land (less than 15% slope) per 1,000 population.

**Proposed Project Impacts:** Shiells Park is a local County park that is adjacent to the northeast end of the project site for approximately 980 feet. The park consists of three baseball diamonds, bleachers, field markings for soccer and football, restroom facilities, and a parking lot. There is an existing row of medium to large mature trees located along the western border of Shiells Park, within the Corps-required 15-foot VFZ; 23 of these trees would be removed from the VFZ, and would be replaced at a 1:1 ratio. In addition, a new access ramp would be constructed at the southern boundary of the park in order to allow access to the landward levee toe for maintenance and occasional flood-fighting activities. Construction activities associated with the tree removal and installation of the access ramp may interfere with recreation activities occurring at the park. However, these activities would not result in an increase in the demand for recreation opportunities at Shiells Park.

The Sespe Creek Bike Trail runs the length of the proposed project, aligned adjacent to the riverward side of the SC-2 Levee. It is estimated that approximately 25 to 50 recreationalists use the Sespe Creek Bike Trail per day. Currently there are two formal public access points, one at the north end of the levee at Old Telegraph Road, and one at the south end of the levee at E Street. In addition, other informal and unauthorized entrances to the trail have been established by public users, in particular, there are openings in the garden walls at the end of Robin Court and Mallard Street. These informal entrances have resulted in structural damage to the levee where foot traffic has displaced rip-rap on the riverward side of the levee.

As part of the proposed project, the unauthorized entrance at the end of Robin Court would be closed, and a new formal access ramp would be installed at the end of Mallard Street (see Figure A-6), which would provide improved access to the bike trail. Due to the close proximity of the Sespe Creek Bike Trail to the project work area, the Sespe Creek Bike Trail between SR 126 and Old Telegraph Road would be temporarily closed for public safety reasons during the five- to six-month project construction period. Temporary exclusionary fencing and signage would be erected at the entrances to this section of the bike path notifying the public of the temporary closure. A temporary detour for bicyclists and recreationists would be available along neighboring residential streets. A suggested temporary detour route is from the E Street entrance along to Cottonwood Lane, east along Waterford Lane, north along D Street, east along Sespe Avenue, and north along C Street to the trail entrance north of Old Telegraph Road, as shown in

Figure A-8. The impact to local parks and facilities due to this temporary construction-related detour would be less than significant.

During the operation period, access to the bike trail would be more formalized than in current conditions, but the improvements associated with the proposed project would not increase the demand for access to the bike trail. Therefore, impacts to local parks and facilities would be less than significant.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. The impacts associated with the proposed project would not increase the demand for local parks or facilities; consequently, it would not contribute to local park or facility impacts that would be cumulatively considerable. No cumulative impacts to local parks or facilities would occur.

### C.35B Regional Parks/Facilities

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would result in a significant impact if it would cause an increase in the demand for recreation when measured against the following standards (County of Ventura, 2011).

- Regional Parks/Facilities - 5 acres of developable land per 1,000 population.

In addition, a project will have a significant impact on recreation if it would impede future development of Recreation Parks/Facilities (County of Ventura, 2011). Los Padres National Forest is less than two miles north of the project site and Toland Park is the closest County regional park located approximately 2.5 miles west of the proposed project site.

**Proposed Project Impacts:** While the proposed project would be improving existing flood protection for residences and would remove parcels from the 100-year floodplain, which could induce development of these parcels, these parcels are already developed within the City of Fillmore. As such, the project would not induce growth in the area. Therefore, the proposed project would not increase the demand for recreational facilities. As such, no adverse impacts to regional parks or facilities would occur.

**Cumulative Impacts:** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. These projects may affect regional recreational facilities as a result of either their construction or operation. However, the proposed project would not be growth-inducing and thus would not affect the long-term operation of any regional recreational facilities. Consequently, the proposed project's incremental contribution to impacts associated with regional parks would not be cumulatively considerable. Cumulative impacts would be less than significant.

### C.35C Regional Trails/Corridors

**Significance Criteria:** According to the Ventura County *Initial Study Assessment Guidelines*, a project would result in a significant impact if it would cause an increase in the demand for recreation when measured against the following standards (County of Ventura, 2011).

- Regional Trails/Corridors - 2.5 miles per 1,000 population.

In addition, a project will have a significant impact on recreation if it would impede future development of Regional Trails/Corridors (County of Ventura, 2011).

***Proposed Project Impacts:*** The closest County-designated trails are located Ojai, approximately 16 miles northwest of the project site. As noted above, the proposed project would not induce growth in the project area; thus, it would not increase the long-term demand for recreational facilities, including trails and corridors. Therefore, no adverse impacts to regional trails or corridors would occur.

***Cumulative Impacts:*** The introduction to Section C, as supported by Appendix 1, provides a list of the reasonably foreseeable projects located in the proposed project area. As discussed above, the proposed project would not increase the demand for recreational trails or corridors. Therefore, the proposed project would not combine with other past, present or reasonably foreseeable projects in a manner that is cumulatively considerable. No cumulative impacts would occur.

**D. INITIAL STUDY FINDINGS AND DETERMINATION**

MANDATORY FINDINGS OF SIGNIFICANCE	YES/ MAYBE	NO
<b>Based on the information contained within Sections B and C:</b>		
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		X
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).		X
3. Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effect of other current projects, and the effect of probable future projects. (Several projects may have relatively small individual impacts on two or more resources, but the total of those impacts on the environment is significant).		X
4. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

**Discussion**

**1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

The proposed Sespe Creek Levee Improvements Project would not result in any significant and unavoidable impacts to the quality of the environment. Potentially significant impacts of the proposed project would be mitigated to less-than-significant levels, and would be primarily short-term in duration during the project’s five- to six-month construction period. As discussed in Initial Study Chapter C, mitigation measures would be applied for potential impacts to the following environmental issue areas: Air Quality (Section C.1), Mineral Resources (Section C.3), Biological Resources (Section C.4), Cultural Resources (Section C.8), and Noise and Vibration (Section C.21). Project-specific mitigation measures presented in the aforementioned Initial Study sections would be implemented to ensure that potential environmental impacts associated with the project would be less than significant.

Initial Study Section C.4 (Biological Resources) describes the existing environmental setting in the project area relevant to the availability of vegetation and wildlife habitat and the presence of vegetation and wildlife communities, including rare and endangered species, and provides a thorough characterization of potential impacts of the proposed project to these resources, including identification of applicable mitigation measures. Potential impacts and mitigation measures associated with fish and

wildlife habitat, fish and wildlife populations, plant and animal communities, and rare or endangered plants and animals are summarized below.

The permanent and temporary disturbance of native vegetation communities resulting from proposed project activities, long-term herbicide application, and removal of native and non-native trees would result in less than significant impacts and no mitigation is required. Ground disturbing activities would not be conducted in natural areas and therefore the proliferation of non-native species resulting from levee repairs and modifications would also be less than significant with no mitigation required. Permanent and temporary impacts to special-status plants are not expected to occur from the placement of levee improvements and modifications, as the Project Area (see Figure C.4-1 for definition of area) does not support suitable habitat for sensitive plants identified as federally or State listed threatened or endangered, California Rare Plant Rank (CRPR) list 1 – 4, or recognized by the County of Ventura as locally important plant species; impacts to special-status plant species would be less than significant with no mitigation required. Potential indirect impacts to sensitive plants in off-site areas would be minimized through dust control (Mitigation Measure AQ-4) and through implementation of the conditions and requirements of the Ventura Countywide Stormwater Quality Management Program and NPDES Permit Number CAS004002.

Section C.4 of the Initial Study describes a variety of listed (Federally Endangered and/or California Species of Special Concern [CSC]) wildlife species that are known to be present in the project area and/or have the potential to be present in the project area and could be directly or indirectly affected by project construction and operational activities. The modifications to the existing levee would largely be restricted to disturbed and developed areas where wildlife species are generally not expected to occur. However, should they occur, direct impacts to these species could include crushing or trampling and loss of habitat, while indirect impacts may include increased noise and human presence. Operational impacts would be limited to periodic inspection and maintenance of the levee, during which species could be affected from noise, human disturbance, and fugitive dust. A number of project-specific mitigation measures have been developed to ensure that potential impacts to listed and special-status wildlife species are reduced to a less-than-significant level; these mitigation measures are summarized below and presented in detail in Initial Study Section C.4.

- **Mitigation Measure (MM) B-1.** There is a moderate potential for least Bell's vireo to occur in adjacent riparian habitat during the breeding season and therefore, if project activities occur during the breeding season for this species, there is potential for adverse impacts to occur. Per MM B-1, VCWPD would not clear riparian vegetation during the migratory bird breeding season (March 15 to September 15), and if construction activities extend into the bird breeding season protocol surveys for least Bell's vireo would be conducted in areas that support riparian habitat within 500 feet of the construction footprint. As such, MM B-1 would reduce potential impacts to least Bell's vireo and other listed species to less-than-significant levels.
- **MM B-2.** The pre-construction surveys required per MM B-2 would reduce potential impacts of the project to special-status species to less-than-significant levels by ensuring that the occurrence of any sensitive plants, fish, or wildlife species is identified prior to construction, and that avoidance of such species is applied where feasible.
- **MM B-3.** All personnel involved in project activities, including contractors and VCWPD staff, would receive training on sensitive biological resources that may be encountered in the project area, per the requirements of MM B-3, in order to ensure that potential impacts to such resources are reduced to less-than-significant levels.
- **MM B-4.** The limits of construction disturbance areas, including location(s) for the storage and stockpiling of equipment and materials, will be clearly delineated on the project plans and in the

field in order to avoid project-related disturbance to adjacent habitat areas and reduce potential impacts to biological resources to less-than-significant levels.

- **MM B-5.** A qualified biologist(s) with expertise with listed and/or special-status plants, invertebrates and gastropods, birds, amphibians, terrestrial mammals, and reptiles will conduct monitoring, reporting, and coordination activities throughout the project construction period in order to minimize disturbance to species in the area and ensure that potential impacts to listed species are reduced to less-than-significant levels.
- **MM B-6.** Best Management Practices (BMPs) specified in MM B-6 will be implemented throughout the construction period in order to avoid adverse impacts to biological resources, and ensure that potential impacts are reduced to less-than-significant levels.
- **MM B-7.** A project-specific Spill Prevention and Contingency Plan will be implemented to avoid potential impacts to habitats and populations associated with an accidental spill or release of hazardous materials during project construction, ensuring that associated impacts would be reduced to less-than-significant levels.
- **MM B-8.** Any project activities occurring during the recognized breeding season of March 15 through September 15 will be preceded by surveys for nesting birds located within 500 feet of project components and to establish buffer areas where necessary to ensure that potential impacts to bird species would be reduced to less-than-significant levels.
- **MM B-9.1.** A qualified biologist(s) will conduct pre-construction surveys for sensitive bats, and maternity season (March 1 through July 31) surveys should construction activities extend into the maternity season. Active maternity roosts shall be avoided or alternative roost sites identified at a nearby maternity colony in order to ensure that potential impacts of the project to sensitive bat species are reduced to less-than-significant levels.
- **MM B-9.2.** If a sensitive bat species' maternity roost will be impacted by the project, as identified per MM B-9.1, and no alternative roosts are available, substitute roosting habitat for the maternity colony shall be provided per MM B-9.2 in order to ensure that potential impacts to sensitive bat species are reduced to less-than-significant levels.
- **MM B-9.3.** If non-breeding bat hibernacula (hibernation sites) are identified in trees scheduled to be removed under the proposed levee improvements, any individuals present will be removed from the hibernacula per the measures identified in MM B.9-3 in order to ensure that potential impacts to sensitive bat species are reduced to less-than-significant levels.

With implementation of the mitigation measures summarized above, the proposed project would not result in a significant impact to biological resources. Neither construction nor operation and maintenance of the project would substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

With regards to paleontological and cultural resources, it is considered unlikely that environmental impacts would occur as a result of the proposed project; however, mitigation measures have been identified to ensure that if such impacts arise, they would remain less than significant. Initial Study Sections C.8A (Archaeological Resources) and C.8B (Historic Resources) describe that no previously recorded prehistoric or historic archaeological resources or historic properties that meet eligibility or significance criteria under the National Register of Historic Places, or appear eligible as State, county or local landmarks, exist within the boundaries of the proposed project site. Implementation of the proposed project would not involve the modification or demolition of any existing structures, other than the SC-2 Levee, and would have no known adverse physical or visual impacts on known prehistoric and historic archaeological resources. However, in the unlikely event that a potentially significant cultural or historic resource is encountered during ground-disturbing activities associated with the proposed project, mitigation measures have been identified to ensure that customary caution is utilized during

earth-disturbing activities within the project area; project-specific mitigation measures relevant to cultural and historic resources are summarized below.

- **MM C-1.** If archaeological resources are encountered during project implementation, an approved archaeological consultant will be contacted immediately and project-related activities will be diverted until the discovery has been evaluated and properly addressed to ensure that potential impacts to archaeological resources would be less than significant.
- **MM C-2.** If human remains are encountered during excavations associated with this project, all work must halt, and the County Coroner will determine whether the remains are of forensic interest, and the Native American Heritage Commission will be consulted if the remains are prehistoric, in order to ensure that potential impacts to historic resources would be less than significant.

With implementation of the mitigation measures summarized above, the proposed project would not result in a significant impact to cultural, historic, or archaeological resources. Neither construction nor operation and maintenance of the project would eliminate important examples of the major periods of California history or prehistory. No impacts to paleontological resources would occur as a result of project construction or operational activities.

The proposed project would not, individually or cumulatively, result in significant adverse effects on any attribute of the environment or its quality.

**2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).**

The proposed project would result in potentially significant short-term impacts under the following environmental issue areas: Air Quality (Section C.1), Mineral Resources (Section C.3), Biological Resources (Section C.4), Cultural Resources (Section C.8), and Noise and Vibration (Section C.21). However, as addressed in the noted Initial Study sections, all project-related impacts would be mitigated to a less-than-significant level, and would be primarily limited to the project's five- to six-month construction period. The proposed project would provide flood protection to the City of Fillmore resulting in environmental benefits that far outweigh the short-term environmental impacts that would occur during construction. Therefore, the proposed project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.

**3. Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effect of other current projects, and the effect of probable future projects. (Several projects may have relatively small individual impacts on two or more resources, but the total of those impacts on the environment is significant).**

All of the environmental issue area analyses provided in Chapter C of this Initial Study assess the proposed project's potential impacts, both individually and cumulatively. Cumulative impact significance determinations are summarized below and in the Initial Study checklist table provided in Section B.

No cumulative impacts would result from the proposed project in the following environmental issue areas: Water Resources (Groundwater Quantity; Groundwater Quality; Surface Water Quantity), Mineral Resources (Aggregate; Petroleum), Agricultural Resources (Soils), Scenic Resources, Paleontological Resources, Cultural Resources (Historical), Coastal Beaches and Sand Dunes, Fault

Rupture, Seiche & Tsunami Hazards, Landslide/Mudflow, Expansive Soils, Subsidence, Hydraulic Hazards (Non-FEMA), Hydraulic Hazards (FEMA), Fire Hazards, Aviation Hazards, Noise and Vibration, Housing, Transportation/Circulation (Roads and Highways – Safety/Design of Private Access Roads, Roads and Highways – Tactical Access, Pedestrian/Bicycle Facilities, Bus Transit, Railroads, Airports, Harbors, Pipelines, Water Supply (Quality; Quantity; Fire Flow), Waste Treatment/Disposal (Individual Sewage Disposal Systems; Sewage Collection/Treatment Facilities), Flood Control/Drainage (WPD Facilities/Watercourses; Other Facilities/Watercourses), Law Enforcement/Emergency Services, Fire Protection (Distance/Response Time; Personnel/Equipment/Facilities), Education (Schools; Libraries), and Recreation.

Less than significant cumulative impacts with no mitigation required would result from the proposed project in the following environmental issue areas: Water Resources (Surface Water Quality), Biological Resources (Endangered, Threatened, or Rare Species; Ecological Communities; Habitat Connectivity), Agricultural Resources (Land Use Incompatibility), Cultural Resources (Archaeological), Ground Shaking, Liquefaction, Hazardous Materials/Waste (Hazardous Materials; Hazardous Waste), Daytime Glare, Public Health, Greenhouse Gases, Community Character, Transportation/Circulation (Roads and Highways – Level of Service; Roads and Highways – Safety / Design of Public Roads), Waste Treatment/ Disposal (Solid Waste Management; Solid Waste Facilities), and Utilities.

Less than significant cumulative impacts with mitigation required (MM AQ-5) would result from the proposed project in the environmental issue area of Air Quality.

No cumulatively considerable adverse impacts would result from the proposed project that would be significant and unavoidable. The proposed project would not result in impacts that would be individually limited but cumulatively considerable.

**4. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

The proposed project would not cause any adverse impacts on human beings, either directly or indirectly, that cannot be mitigated to a level of less than significant. Potential direct and indirect impacts on human beings would be temporary in nature, and would be limited to the project's five- to six-month construction period. No adverse impacts would occur following completion of the project construction period, which is anticipated to occur from approximately April 4, 2014 to September 19, 2014. To the contrary, implementation of the proposed project would result in beneficial impacts associated with flood hazard protection, and long-term net benefits to human beings would include protection of the developed areas behind the SC-2 Levee from hazards associated with large storm events. As such, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

<b>DETERMINATION OF ENVIRONMENTAL DOCUMENT</b>	
<b>On the basis of this initial evaluation:</b>	
<input type="checkbox"/>	I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION should be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measure(s) described in Chapter C of the Initial Study will be applied to the project. A MITIGATED NEGATIVE DECLARATION should be prepared.
<input type="checkbox"/>	I find the proposed project, individually and/or cumulatively, MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.*
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
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Tully Clifford, Director  
Ventura County Watershed Protection District

Date 4/24/2013

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### **INITIAL STUDY SECTION C.34 - EDUCATION**

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## F. INITIAL STUDY LIST OF PREPARERS AND REVIEWERS

In accordance with CEQA Guidelines Section 15063(d)(6), the following tables list the individuals that assisted with the preparation and review of this Initial Study.

### Ventura County Initial Study Reviewers

Name	Affiliation	Role
Elizabeth Martinez	Ventura County Watershed Protection District	Project Environmental Planner
Kirk Norman	Ventura County Watershed Protection District	Project Engineer
Brian Trushinski	Ventura County Watershed Protection District	Floodplain Manager
Robin Jester	Ventura County Watershed Protection District	Permits Manager
Rick Viergutz	Ventura County Watershed Protection District	Groundwater Resources Manager
Yugal Lall	Ventura County Watershed Protection District	Water Quality Engineer
Melinda Talent	Ventura County Resource Management Agency Environmental Health Division	Local Enforcement Agency Environmental Planner
Theresa Lubin	Ventura County General Services Agency	Parks Maintenance
Kari Finley	Ventura County Resource Management Agency Planning Department	Planner
Jim Myers	Ventura County Public Works Agency	Development Services –Erosion/Siltation
Jim O-Tousa	Ventura County Public Works Agency	Development Services – Geology
Ben Emami	Ventura County Public Works Agency Transportation Department	Transportation Engineering Manager
Pandee Leachman	Ventura County Public Works Agency Integrated Waste Management Division	Environmental Resource Analyst
John Dodd	Ventura County Fire Protection District	Senior Fire Inspector
Alicia Stratton	Ventura County Air Pollution Control District	Air Quality Analyst
Rudy Martel	Office of the Agricultural Commissioner	Agricultural Land Use Planner
Allan Coulson	Ventura County Department of Airports	Airports Project Manager
Laura Hernandez	Ventura County Sheriff's Department	Law Enforcement Officer

### Initial Study Preparers

Name	Affiliation	Role
Lisa Blewitt	Aspen Environmental Group	Project Manager, Noise and Vibration
Aubrey Mescher	Aspen Environmental Group	Project Description, Water Resources, Hydraulic Hazards, Water Supply, Flood Control Facilities, Mandatory Findings of Significance
Susanne Huerta	Aspen Environmental Group	Scenic Resources, Daytime Glare, Mineral Resources, Agricultural Resources, Coastal Beaches and Sand Dunes, Recreational Facilities
Will Walters	Aspen Environmental Group	Air Quality, Greenhouse Gases (Supervisor)
Insun Hwang	Aspen Environmental Group	Air Quality, Greenhouse Gases
Chris Huntley	Aspen Environmental Group	Biological Resources (Supervisor)
Jared Varonin	Aspen Environmental Group	Biological Resources, Preliminary Jurisdictional Waters/ Wetlands Delineation Report (Appendix 3)
Tracy Valentovich	Aspen Environmental Group	Preliminary Jurisdictional Waters/ Wetlands Delineation Report (Appendix 3)
Scott DeBauche	Aspen Environmental Group	Fire Hazards, Aviation Hazards, Cultural Resources, Hazardous Materials / Waste, Community Character, Housing
Stan Yeh	Aspen Environmental Group	Public Health, Public Services, Utilities, Waste Treatment & Disposal, Law Enforcement, Fire Protection, Education

**Sespe Creek Levee Improvements Project**

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Name	Affiliation	Role
<b>SUBCONTRACTORS</b>		
Aurie Patterson	Geotechnical Consultants, Inc. (G.T.C.)	Paleontological Resources, Seismic Hazards, Geologic Hazards
Robert Wlodarski	Historical Environmental Archaeological Research Team (H.E.A.R.T.)	Phase 1 Archaeological Study (Appendix 4)
Richard Garland	Garland & Associates	Transportation & Circulation