Ventura County Watershed Protection District

Draft Environmental Impact Report

Fresno Canyon Flood Mitigation Project
Ventura County Watershed Protection District

Volume I

Submitted by:

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Prepared for:

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This draft environmental impact report (Draft EIR) has been prepared to evaluate specific environmental impacts associated with the proposed Fresno Canyon Flood Mitigation Project, also referred to herein as the proposed project, in the community of Casitas Springs in unincorporated Ventura County. The Ventura County Watershed Protection District (VCWPD) is the Lead Agency for the environmental review and, after the comment/response process, is the certifying agency for the Final EIR.

The Initial Study prepared by VCWPD, indicated that the proposed project may have significant effects on air quality, biological resources, scenic resources, paleontological resources, cultural resources, geologic hazards, hydraulic hazards, noise and vibration, greenhouse gas emissions, transportation and circulation, and flood control facilities. Because of these potential effects, an EIR is required to more fully evaluate potential adverse environmental impacts that may result from development of the proposed project.

This Draft EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (CEQA), as amended (Public Resources Code Section 21000 et seq.), and the *State CEQA Guidelines for Implementation of CEQA* (California Code of Regulations, Title 14, Section 15000 et seq.). This Draft EIR also complies with the County of Ventura's procedures for implementation of CEQA.

The purpose of this Draft EIR is to inform decision makers and the general public of any significant adverse environmental impacts that may be associated with the planning, construction, and operation of the proposed project, and to identify appropriate feasible mitigation measures and alternatives that may be adopted to reduce or eliminate these impacts. This Draft EIR also includes evaluation of reasonable alternatives to the proposed project, including the No Project Alternative, and two design alternatives.

1.2 PROJECT LOCATION AND SETTING

The Fresno Canyon Flood Mitigation Project is located in the community of Casitas Springs, approximately 1 mile south of Oak View and 5 miles north of the City of San Buenaventura, in the unincorporated area of Ventura County, California. A portion of the project extends into an area of the Ventura River that is located within the incorporated boundary of the City of Ventura. The project site is located approximately 0.75 mile northwest of the State Route (SR) 33/Casitas Vista Road intersection. **Figure 3.0-1, Regional Map**, illustrates the regional location of the Casitas Springs area and **Figure 3.0-2, Project Site and Vicinity**, illustrates the location of the project site.

Fresno Canyon is a tributary to the Ventura River, with a drainage area of almost 1,100 acres with a 100-year peak clear flow of 1,453 cubic feet per second (cfs). The upper half of this watershed is on steep, highly erodible slopes heavily grown with trees and brush. The bulking factor used for the 100-year flow is 1.57 bringing the bulked 100-year peak flow to 2,281 cfs. The existing lower Fresno Canyon flood control channel, a 750-foot concrete channel, was built in the late 1960s to convey Fresno Canyon runoff from the natural channel to the Ventura River and was designed for a clear flow of 700 cfs, which was considered to be the 50-year event at the time.

1.3 ALTERNATIVES TO THE PROJECT

CEQA requires that an EIR describe a range of reasonable alternatives to a proposed project that could feasibly avoid or lessen any significant environmental impacts, while attaining the basic objectives of the project. Comparative analysis of the impacts of these alternatives is required. The alternatives to the proposed project addressed in this EIR are:

- Alternative 1 – No Project Alternative
- Alternative 2 – Extended Box Culvert and Open Channel Alternative
- Alternative 3 – Debris Basin Alternative

1.4 SUMMARY OF PROJECT IMPACTS

A summary of the environmental impacts associated with implementation of the proposed Fresno Canyon Flood Mitigation Project, mitigation measures included to avoid or lessen the severity of potentially significant impacts, and residual impacts, is provided in **Table 1.0-1, Summary of Project Impacts, Mitigation Measures, and Residual Impacts**, below.

1.5 AREAS OF KNOWN CONTROVERSY

The *State CEQA Guidelines*[1] require that a draft EIR summary identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. In addition to those areas identified in the Notice of Preparation (NOP), as potentially significant, some issues of concern were expressed at a public scoping meeting for the draft EIR and through responses to the NOP. The following issues of concern were expressed:

1 California Public Resources Code, Title 14, Division 6, Chapter 3, *State CEQA Guidelines*, Section 15123.

Biological Resources: The proposed project would convey stormwater flows from Fresno Canyon to the Ventura River, and thus would have the potential to affect habitat, both through construction impacts and through changes in habitat during project operation.

Scenic Resources: The proposed project would construct an outfall facility near the Ojai Valley Trail, a popular recreational facility for many County residents used by hikers and bicyclists.

Noise and Vibration: Construction activity would occur near residential development, which could potentially disturb occupants of nearby residences.

Traffic and Circulation: The proposed project would add construction-related traffic to SR-33, which is currently subject to heavy traffic during the morning and evening peak hours.

1.6 ISSUES TO BE RESOLVED

The *State CEQA Guidelines* requires that an EIR present issues to be resolved by the lead agency. These issues include the choice among alternatives and whether or how to mitigate potentially significant impacts. The major issues to be resolved by the Ventura County Watershed Protection District, as the Lead Agency for the proposed project include whether

- recommended mitigation measures should be adopted or modified,
- additional mitigation measures need to be applied to the proposed project, and
- the proposed project should or should not be approved or an alternative approved.

Table 1.0-1
Summary of Project Impacts, Mitigation Measures, and Residual Impacts

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Scenic Resources		
The project is located within an area that has a scenic resource (the Ventura River) that is visible from a public viewing location (the Ojai Valley Trail); and would physically alter the scenic resource.	No mitigation measures are required.	Less Than Significant
Air Quality		
Construction reactive organic compounds (ROC), oxides of nitrogen (NOx), and fugitive dust emissions	**4.2-1:** 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: • The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust. • Pre-grading/excavation activities shall include watering the areas to be graded or excavated before grading or excavation operations commences. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. • Fugitive dust produced during grading excavation and construction activities shall be controlled by the following activities: • All trucks shall be required to cover their loads as required by *California Vehicles Code* Section 23114. • All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization material, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.	Less than significant

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Air Quality (continued)		
	4.2-1 (continued): • Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally safe dust suppressants to prevent excessive fugitive dust. • Signs limiting traffic to 15 miles per hour or less shall be posted on-site. • During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use discretion in conjunction with the VCAPCD in determining when winds are excessive. • A properly functioning and well-maintained track-out control device(s) shall be installed to prevent track-out of soil onto paved public roads. • Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day if visible soil material is carried over to adjacent streets and roads. • Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Air Quality (continued)		
	4.2-2: During construction contractors shall comply with the following measures, as feasible, to reduce NO_x and ROC from heavy equipment as recommended by the VCAPCD in its *Ventura County Air Quality Assessment Guidelines*: • Minimize equipment idling time. • Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications. • Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible. • All off-road 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 VCWPD.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources		
The project would have a direct or indirect physical impact to a plant or animal species by directly or indirectly: (a) reducing a species' population, (b) reducing a species' habitat, (c) increasing habitat fragmentation, or (d) restricting reproductive capacity Southern California Steelhead DPS	**4.3-1:** To reduce the adverse effects to the Southern California steelhead DPS during their migration and spawning season, VCWPD shall perform all outlet construction activities outside the migration period. Typically, construction activities would take place between June 15 and October 15. However, because the river may also provide habitat to support federally listed species under USFWS jurisdiction, the work window has been modified to between August 31 and October 31. Work upstream of the proposed outlet would occur throughout the year, depending on nesting bird survey results. VCWPD shall implement the following measures to avoid and/or minimize the potential for take of steelhead: Exclusion fences composed of silt fence material shall be installed at the margins of the work area to prevent workers or construction materials from encroaching into adjacent habitat and to prevent materials from entering the waters of Ventura River. The fence shall be monitored periodically for integrity and effectiveness. The fencing shall be maintained for the duration of construction and removed upon project completion. • A NMFS-approved biologist shall monitor construction activities that involve work within the Ventura River, dewatering activities, and installation of the outlet structure for the purpose of identifying and reconciling any condition that could adversely affect listed salmonids or their habitat. • Preconstruction surveys shall include the collection and relocation of fish, if necessary, by an NMFS-approved fisheries biologist from the construction site prior to and during dewatering. The NMFS-approved fisheries biologist shall be familiar with the life history and identification of steelhead. • All captured fish shall be held in well-oxygenated water with temperatures equivalent to ambient in stream temperatures. Once recovered, they shall be placed in suitable habitat (in stream cover and pools deeper than 1 foot) downstream of the action area.	Less than significant

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
Southern California Steelhead DPS Critical Habitat	**4.3-1: (continued):** • If any steelhead individuals are found dead or injured, the biologist shall immediately contact the NMFS Long Beach Field Office to review the activities that resulted in the take and determine whether additional protective measures are required. VCWPD shall implement the following measures to protect steelhead critical habitat: including prevention of erosion, sedimentation, potential spills, pollution, and protection and salvage of native vegetation: Disturbance to existing grades and vegetation shall be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities shall be carried out so as to avoid and limit disturbance to stream bank or stream channel habitat to the extent possible. • Erosion-control and sediment-detention devices (e.g., well-anchored sandbag cofferdams, straw bales, silt fences) shall be incorporated into the project design and implemented at the time of construction. These devices shall be in place during construction activities, and after if necessary, to minimize fine sediment and sediment/water slurry input to flowing water and to detain sediment-laden water on-site. These devices shall be placed at all locations where the likelihood of sediment input exists. Supply of erosion control materials shall be available to cover small sites that may become bare and to respond to sediment emergencies. • VCWPD shall inspect the performance of sediment-control devices at least once each day during construction to ensure that the devices are functioning properly. If a control measure is not functioning properly, the control measure shall be repaired immediately or replaced. Additional controls shall be installed as necessary. • Sediment shall be removed from sediment controls once the sediment has reached one-third of the exposed height of the control. Sediment collected in these devices shall be disposed of at approved disposal sites away from the collection site.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-1: (continued): • All disturbed soils at each site shall undergo erosion-control treatment during construction and after construction is terminated. Treatment may include temporary seeding and sterile straw mulch or other effective measures. Any disturbed soils on a gradient of over 30 percent shall have erosion-control blankets or similar effective measures put in place. • Any stockpiles of soil used for fill material during construction shall be covered with a tarp or erosion-control blanket, and silt fences shall be installed appropriately to contain soils from moving into area waterways. If the local weather forecast indicates a greater than a 50-percent chance of rain, the project site shall be "rain-proofed" with erosion-control measures so that no sediment or turbidity enters the stream. • All debris, sediment, rubbish, vegetation, or other material removed from the channel banks, channel bottom, or sediment basins shall be disposed of at an approved disposal site. All petroleum product chemicals, silt, fine soils, and any substance or material deleterious to listed species shall not be allowed to pass into, or be placed where it can pass into, the stream channel. There shall be no sidecasting of material into any waterway. • VCWPD shall exercise every reasonable precaution to protect the Ventura River from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials. • Construction byproducts and pollutants such as petroleum products, chemicals, fresh cement, or deleterious materials shall not be allowed to discharge into the Ventura River and shall be collected and transported to an authorized disposal area. • A plan for the emergency cleanup of any spills of fuel or other material shall be prepared and kept available on-site during construction activities.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-1: (continued): • Equipment shall be refueled and serviced at designated construction staging areas. All construction material and fill shall be stored and contained in a designated area that is located away from channel areas to prevent transport of materials into adjacent streams. A silt fence shall be installed to collect any discharge, and adequate materials for spill cleanup shall be maintained on-site. • Construction vehicles and equipment shall be maintained to prevent contamination of soil or water (from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease). • Good housekeeping practices, use of safer alternative products, such as biodegradable hydraulic fluids, shall be used when feasible. • An employee-training program shall be implemented. Employees shall be trained to prevent or reduce the discharge of pollutants from construction activities to waters and of the appropriate measures to take if a spill occurs. • In the event of a spill, work shall be stopped immediately, spill control shall be implemented, and NMFS shall be notified. Work will resume once cleanup is complete, the source of the spill has been resolved, and NMFS has provided authorization to proceed. • Disturbance to existing grades and vegetation shall be limited to the actual site of the project and necessary access routes. When possible, existing and proposed ingress or egress points shall be used and the contours of the action area shall be returned to pre-construction condition or better. • VCWPD shall, to the maximum extent practicable, reduce the amount of disturbance on-site to the absolute minimum necessary to accomplish the proposed action.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-1: (continued): • Whenever practicable, existing vegetation shall be salvaged from the footprint of the action area and stored for replanting after earthmoving activities have been completed. • Because a relatively small amount of riparian scrub vegetation (i.e., 0.30 acre) shall be permanently lost at the outlet location during project construction, VCWPD shall restore the temporary impact area at a 1:1 ratio through planting willows and other riparian species. For permanent impacts, mitigation shall be implemented at a 3:1 ratio followed by a five-year monitoring period to reach an 80 percent success criterion. Mitigation for permanent impacts may include exotic plant removal and riparian species revegetation, depending on the selected location. VCWPD shall take measures to prevent the introduction of invasive weeds at the construction site. The measure shall include cleaning all equipment before bringing it on-site and using only certified weed-free erosion-control and revegetation materials.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
California red-legged frog, southwestern willow flycatcher and least Bell's vireo	**4.3-2:** All measures in the BO to minimize and mitigate impacts to California red-legged frog, southwestern willow flycatcher, and least Bell's vireo shall be implemented. The following measures were taken from the 2009 Biological Assessment, accepted by USFWS, and implemented as conditions within the BO: **California Red-legged Frog** 1. Work in the Ventura River will be limited to the period outside of the California red-legged frog breeding and bird nesting seasons. The construction window would be August 31 through October 31. 2. A qualified biologist will conduct pre-construction surveys at least two days prior to start of construction activities in areas where ground disturbance would occur to determine whether California red-legged frogs are present. If California red-legged frogs are found during any preconstruction surveys, the biologist will contact the Service to determine whether moving them is appropriate. If the Service gives approval for relocation, the Service-approved biologist will be allowed sufficient time to move the California red-legged frogs from the work site before activities begin. 3. A Service-approved biologist will monitor construction activities that involve retaining wall construction and installation of rock slope protection along the Ventura River channel bank. If California red-legged frogs are found that are likely to be killed or injured by work activities, the Service-approved biologist will be allowed sufficient time to move them from the site before work activities resume. The Service-approved biologist will relocate the California red-legged frogs the shortest distance possible to suitable habitat that will not be affected by activities associated with the proposed project. Only California red-legged frogs that are at risk of injury or death by project activities will be moved.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-2: (continued): 4. Only Service-approved biologists will participate in activities associated with capture, handling, and monitoring of California red-legged frogs. VCWPD will request and receive Service approval of any other biologist whom the agency wishes to conduct activities with California red-legged frogs. 5. If more than two California red-legged frogs are found dead or injured as a result of project activities within a 12-month period, VCWPD will contact the Service immediately so the Service can review the project activities to determine whether additional protective measures are needed. 6. Exclusion fences composed of silt fence material will be installed at the margins of the work area to prevent workers from encroaching into adjacent habitat and to prevent California red-legged frogs from entering the construction area. A fine mesh (less than 0.40 inch) will be used to avoid entrapment of amphibians in the silt fence. The silt fence will be monitored periodically during construction to evaluate its effectiveness. All fencing in this area will be maintained for the duration of construction and removed on project completion. 7. To avoid attracting predators, food-related trash will be kept in closed containers and removed regularly from the project area. 8. To avoid transferring disease or pathogens, the Service-approved biologist will follow the Declining Amphibian Populations Task Force Fieldwork Code of Practice. 9 Prior to construction, a qualified biologist will conduct training sessions to familiarize all construction personnel with the following: identification of California red-legged frogs, their habitat, general provisions and protections afforded by the Act, measures implemented to protect the species for this project, and a review of the project boundaries. This training will also be provided within 30 days of the arrival of any new worker.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-2: (continued): 10. If an injured California red-legged frog is found, the Service-approved biologist will determine the extent of the injury. If the injury is minor and the frog is likely to survive without treatment, the biologist will document the injury and release the frog in an appropriate location previously designated by the Service; however, if the injured frog requires professional treatment to survive, the biologist will transport the frog to the location where a qualified professional can provide the needed treatment. The location of a qualified professional to assist the frog will have been documented prior to the start of construction. The treated frog will be released at an appropriate location as soon as its recovery allows. Within three working days, the injured frog incident will be reported to the Service and reported information will include date of injury, extent of injury, and action(s) taken. If a frog dies while being treated or a dead frog is located in the project area, the Service will be contacted within three working days. At that time, the Service will provide instructions regarding the deposition of the frog. 11. VCWPD will provide the Service with a report on the results of biological surveys and sighting records and also document the following: the number of California red-legged frogs relocated from the project area or killed or injured during the proposed project; the dates and times of capture, mortality, or injury; specific locations of capture, mortality, or injury; approximate size and age of individuals; and a description of relocation sites. 12. All areas subject to temporary disturbance will be restored on-site with native riparian species to pre-project conditions upon completion of construction. 13. VCWPD will take measures to prevent the introduction of invasive weeds at the construction site. This will include cleaning all equipment before bringing it on-site and using only certified, weed-free erosion control and revegetation materials.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-2: (continued): 14. Standard Best Management Practices and erosion control measures will be implemented during construction to minimize possible discharge of sediment into aquatic habitats. These measures will include, but will not be not limited to, installing and maintaining silt fences immediately down gradient of disturbed areas. **Least Bell's Vireo and Southwestern Willow Flycatcher** 15. To reduce adverse effects to the least Bell's vireo and southwestern willow flycatcher, VCWPD will perform all construction activities in the Ventura River bed and bank outside of their nesting season (all construction activities east of SR-33 may occur year round as SR-33 presents a noise barrier from the river). Typically, construction activities would take place outside of the least Bell's vireo's nesting season, which extends from mid-March through late September, and the southwestern willow flycatcher's nesting season, which extends from mid-May through late August; however, because the Ventura River may also provide habitat to support federally listed anadromous fish species under the National Marine Fisheries Service's jurisdiction (in-water work window is June 15 through November 1), as well as the federally listed California red-legged frog under Service jurisdiction, the work window for construction activities near the Ventura River bed and bank has been modified to August 31 to October 31 as long as the following two measures are also implemented. a. A qualified biologist will conduct preconstruction surveys of all ground disturbance areas within riparian habitats to determine if least Bell's vireos and/or southwestern willow flycatchers are present prior to the start of construction. These surveys will be completed within two weeks prior to start of construction activities in the riparian zone. If least Bell's vireos and/or southwestern willow flycatchers are found nesting in the riparian zone during any preconstruction surveys, the qualified biologist will have stop work authority and stop construction activities in that area. Work activities would resume when the chicks have fledged and left the nest.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-2: (continued): b. A 250-foot buffer would be maintained around the riparian zone during the month of September if any least Bell's vireos are present. After September, no buffer would be applied because least Bell's vireo would have migrated out of the area by then. Any southwestern willow flycatchers would have left the area in late August. **Measures to Avoid and Minimize Effects to Habitat for each Species** 16. Disturbance to existing grades and vegetation will be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities will avoid and limit disturbance to stream bank or stream channel habitat as much as possible. When possible, existing ingress or egress points will be used and the contours of the project area will be returned to pre-construction condition or better. 17. VCWPD will, to the maximum extent practicable, reduce the amount of disturbance at a site to the absolute minimum necessary to accomplish the project. Whenever practicable, existing vegetation would be salvaged from the footprint of the project area and stored for replanting after earthmoving activities are completed. 18. VCWPD will restore the native riparian habitat permanently lost at the outlet location during project construction project area through planting native willows and other riparian species within the Ventura River's riparian zone in areas adjacent to the project area. These revegetation efforts will be implemented at up to 3:1 ratio followed by a five-year monitoring period to reach an 80 percent native species cover success criterion.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
Nesting Birds	**4.3-3:** To avoid impacts to nesting birds during construction, a qualified biologist shall be retained to conduct nesting bird surveys within suitable nesting habitat prior to initiation of construction activities. Specifically, if activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. Pre-construction nesting bird surveys shall be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Surveys shall include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities. If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits to avoid an active nest shall be established in the field with high visibility flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur. The results of the survey, and any avoidance measures taken, shall be submitted to the California Department of Fish and Wildlife within 30 days of completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.	

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-4: No earlier than 30 days prior to the commencement of construction activities, a preconstruction survey shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the Project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California generally extends from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have dispersed, as determined by the biologist.	
The proposed project would have a substantial effect on any Sensitive Plant Communities by construction, grading, clearing, or other activities that would temporarily or permanently remove sensitive plant communities.	**4.3-5:** Areas of Oak-Walnut Woodland and Venturan Sage Scrub that are temporarily impacted by project development shall be replaced in kind and in-situ at a 1:1 ratio. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) as the affected vegetation communities. A habitat replacement plan shall be developed to replace, at a 3:1 ratio, areas of Riparian Scrub, and at 2:1 for Oak-Walnut Woodland, and Venturan Sage Scrub permanently impacted by project development. The plan shall specify, at a minimum, the following: • the location of mitigation sites • the quantity and species of plants to be planted • procedures for creating additional vegetation communities • methods for the removal of non-native plants • a schedule and action plan to maintain and monitor the enhancement/restoration area • a list of criteria by which to measure success of the mitigation sites (e.g., percent cover of native species, survivorship/establishment of plantings, wildlife use) • measures to exclude unauthorized entry into the creation/enhancement areas; and • contingency measures in the event that mitigation efforts are not successful.	Less than significant

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Biological Resources (continued)		
	4.3-5: (continued): The goal will be to create and enhance these habitat types on-site in currently disturbed areas. Through consultation with CDFW, it may also be appropriate to remove invasive species as part of the mitigation, which may alter the final mitigation ratio if approved by CDFW.	
The proposed project would have a substantial effect on any waters and wetlands by: a. removal of vegetation; b. grading; c. obstruction or diversion of water flow; d. change in velocity, siltation, volume of flow, or runoff rate; e. placement of fill; f. placement of structures; g. construction of a road crossing; h. placement of culverts or other underground piping; and/or i. any disturbance of the substratum.	**4.3-6:** Prior to project implementation VCWPD shall obtain a Section 401 Water Quality Certification, a Nationwide Permit from USACE and a Streambed Alteration Agreement (SAA) from CDFW. Some or all of those permits are anticipated to require specific mitigations for both temporary and permanent impacts. Implementation of **Mitigation Measure 4.3-5** is anticipated to be consistent with the 401, Nationwide, and SAA mitigation requirements with respect to vegetation. However, should any agency require conflicting mitigations in their conditions of approval, the more stringent measure shall apply.	Less than significant
The project would require removal of 5 coast live oak trees and one sycamore tree and encroach within the protected zone of one oak measured at 9.5 inches in circumference or larger (measured 4.5 feet above ground).	**4.3-7:** All removals and encroachments to native protected trees shall be mitigated for in conformance with the County of Ventura Protected Tree Ordinance.	Less than significant

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Cultural Resources		
The project may affect currently undiscovered archaeological resources during construction.	**4.4-1:** In the event that archeological resources are unearthed during project construction on the proposed residential portion of the proposed project, all earth-disturbing work within the vicinity of the find shall be temporarily suspended until a qualified archeologist has evaluated the nature and significance of the find. **4.4-2:** If human remains are encountered during excavations associated with the proposed project a public or private construction (earthmoving) activity, State Health and Safety Code 7050.5 states that no further disturbance shall occur until the Ventura County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Ventura County Coroner must be notified within 24 hours. If the coroner determines that the burial is not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted to determine the most likely descendent (MLD) for this area. The MLD may become involved with the disposition of the burial following scientific analysis. Upon clearance by the coroner and the NAHC for Native American remains, construction (earthmoving) activities may resume.	Less than significant
The project may affect currently undiscovered fossil resources during construction.	**4.4-3**: In the event that paleontological resources are unearthed during project construction, all earth-disturbing work within the vicinity of the find shall be temporarily suspended until a qualified paleontologist has evaluated the nature and significance of the find.	Less than significant

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Geology and Seismic Hazards		
The proposed project is located in an area subject to slope instability, landslide hazards, and subsidence.	**4.6-1:** Project plans and specifications, and other pertinent documents, shall be prepared in accordance with the recommendations provided in the project geotechnical report prepared by Geocon West, Inc., with particular regard to subsidence mitigation as follows: **4.6-1.1** The in-situ soils and bedrock can be excavated with moderate effort using conventional excavation equipment. The upper portions of the bedrock are moderately weathered and highly fractured. Medium to heavy-duty excavation equipment may be required if thick zones of well-cemented bedrock or clasts over 4-feet in size are encountered. Caving and sloughing should be anticipated in unshored vertical excavations, especially where loose, granular, or uncemented soils are encountered. **4.6-1.2** It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored in accordance with applicable OSHA rules and regulations to maintain safety and stability of adjacent existing improvements. **4.6-1.3** All on-site excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load. Penetrations below this 1:1 projection will require special excavation measures such as sloping and shoring. Temporary sloping and shoring recommendations Geocon West, Inc. report, January 17, 2013.	Less than significant

<table>
<tr><th>Project Impacts</th><th>Mitigation Measures</th><th>Residual Impact after Mitigation</th></tr>
<tr><td colspan="3">Geology and Seismic Hazards (continued)</td></tr>
<tr><td>Expansive Soils</td><td>4.6-2 Project plans and specifications, and other pertinent documents, shall be prepared in accordance with the recommendations provided in the project geotechnical report prepared by Geocon West Inc., 2013 with particular regard to expansive soil mitigation as follows:

4.6-2.1 To aid in earthwork quantity estimates, estimates were made of the amount of volume shrinkage and bulking expected from on-site, in-situ volumes to compacted soil volumes. Average in-situ soil density and moisture content and maximum dry density were based on American Society for Testing and Materials (ASTM) D1557 test procedure. The following table presents the shrinkage and bulking factors to be anticipated when excavating and compacting the earth materials per the recommendations of the Geocon West Inc., 2013 report.

<table>
<tr><th>Material</th><th>Shrinkage (-)/ Bulking (+) Factors</th></tr>
<tr><td>Artificial Fill (Af)</td><td>-5% to -10%</td></tr>
<tr><td>Colluvium (Qcol)</td><td>-4% to +6%</td></tr>
<tr><td>Holocene Age Terrace Deposits (Qht)</td><td>+5% to +10%</td></tr>
<tr><td>Pleistocene Age Terrace Deposits (Qht)</td><td>-5% to -10%</td></tr>
<tr><td>Rincon Shale (Tr)</td><td>-10% to +10%</td></tr>
</table>
4.6-2.2 It should be understood that volume shrinkage factors presented above are estimates only and are based on a limited number of soil samples. Actual volume changes can vary from our estimates due to variations in soil density, moisture content, and the degree of compaction achieved during grading. Removal of oversize materials and deleterious materials may result in a higher shrinkage factor based on loss of material.</td><td>Less than Significant</td></tr>
</table>

Project Impacts	Mitigation Measures	Residual Impact after Mitigation
Noise and Vibration		
Project construction would not exceed Ventura County daytime construction noise thresholds at sensitive receptors located near the project site.	No mitigation measures are required.	Less than Significant
Transportation and Circulation		
The proposed project would add one peak-hour trip to SR-33, an identified impacted roadway. However, implementation of project design features would ensure that no significant impacts would occur.	No mitigation measures are required.	Less than Significant

2.0 INTRODUCTION

2.1 PROJECT OVERVIEW

The Ventura County Watershed Protection District (VCWPD) is proposing to construct a storm drain diversion facility to transport floodwaters, sediment, and debris from Fresno Canyon to the Ventura River to reduce the risk of flooding in the community of Casitas Springs. The facility will be designed to convey the fully bulked flows resulting from the 100-year flood event. The proposed project includes a 12-foot diameter reinforced concrete (RC) conveyance pipe installed via horizontal boring beneath State Route (SR) 33 and via open trench method for the remaining approximately 395 linear feet.

The entire length of the facility would be approximately 1,400 feet and would comprise (from upstream to downstream) an entrance structure approximately 300 feet long, a 12-foot diameter RC conveyance pipe approximately 975 feet long, an approximately 40-foot-long ungrouted rock riprap outlet to the Ventura River, and a graded flow path approximately 70 feet long. The following describes the new facility features in more detail.

At the upstream end, the project includes a 265-foot floodwall above the northwest bank of the existing natural canyon. To protect the floodwall from potential scour damage, ungrouted rock riprap would be placed on the adjacent portion of the northwest bank. The inlet consists of a 50-foot-long rock riprap trapezoidal channel with 2 to 1 horizontal to vertical (2H:1V) side slopes (50-foot top width, 11-foot bottom width) and approximately 100 linear feet of RC transition structure adjacent to the existing detention basin.

Where the proposed bypass and existing channel diverge, a notch in the north RC channel wall would allow emergency overflows to leave the bypass channel and enter the existing channel. Concreted rock riprap would be placed in the existing channel for a length of 40 feet to protect against erosion and would essentially function as an emergency spillway. This modified existing channel section would be trapezoidal with 2H:1V side slopes, top width of 51 feet, and bottom width of 15 feet.

The transition structure connects to approximately 580 linear feet of 12-foot diameter RC pipe which would be jacked under SR-33 using a horizontal boring method. The jacking would be continued for about 145 linear feet west of SR-33, where the pipe would be day-lighted and then installed by open trench method for the remainder of the distance (i.e., approximately 395 feet) to the outlet apron comprised of 1-ton ungrouted rock riprap to be constructed on the left bank of the Ventura River. The existing retaining wall located along the base of slope at the terminus of Edison Drive would be removed and a new retaining wall (of varying height) would be constructed along the pipe conveyance alignment.

The proposed project would require relocation of the existing 21-inch sewer line operated by the Ojai Valley Sanitation District (OVSD). A new sewer line would be constructed 1 to 2 feet north of the existing line to allow for OVSD access and maintenance. The existing line would be abandoned in place. A new sewer manhole would be added at the end of Edison Drive and another manhole would be added along the sewer line just west of the Ojai Valley Trail and south of the new outlet.

The project would include two maintenance roads. A 15-foot-wide maintenance access road would extend from SR-33 west along the top of the buried RC pipe alignment to the outlet structure. The road would be surfaced with 6-inch-thick layer of aggregate base. A vehicle turn area would be created on uplands north of the outlet structure to facilitate maintenance of the outlet. The voids within a 15-foot-wide portion of the ungrouted rock on the outlet structure's north slope would be filled with aggregate base to create a drivable ramp from the turn area down to the outlet invert. The access ramp would lie adjacent and parallel to the Ojai Valley Trail. A second maintenance road would be constructed at the eastern end of the facility and immediately north of the proposed floodwall. It would be approximately 265 feet long and connect to an existing access route from SR-33.

2.2 ENVIRONMENTAL REVIEW PROCESS

The California Environmental Quality Act (CEQA) requires that an environmental review be conducted for activities and approvals that involve discretionary actions. CEQA applies to all California government agencies at all levels, including local agencies; regional agencies; and state agencies, boards, and commissions. An environmental impact report (EIR) is an informational document required by CEQA when substantial evidence exists that a project may have a significant physical environmental effect. The EIR is intended to provide information to decision makers, agency staff, and the public about (1) the potential environmental impacts of a project, (2) ways in which the significant effects of a project might be minimized or avoided, and (3) alternatives to the project that could reduce or avoid the significant impacts associated with the project.

CEQA applies to projects for which a governmental agency can use its judgment or discretion in deciding whether to carry out or approve the project. The public agency that has the principal responsibility for carrying out or approving the project is termed the Lead Agency. For the purpose of this EIR, VCWPD is the Lead Agency. This EIR will also be used by other agencies in their decision-making processes. Responsible Agencies include any public agencies other than the Lead Agency that have discretionary approval power over the project. Trustee Agencies are those state agencies that have jurisdiction by law over natural resources held in trust for the people of the State of California. Additionally, Reviewing Agencies include those agencies that do not have discretionary power over the project but that are expected to review the EIR for adequacy and accuracy.

VCWPD, acting as Lead Agency, circulated a Notice of Preparation (NOP) and an Initial Study for the project on March 25, 2013, beginning a 30-day review period. Comments received in response to the NOP are provided below and in **Appendix A**.

Table 2.0-1
Agency Comments Received in Response to the Notice of Preparation

Agency	Name	Date Received	Comments
Governor's Office of Planning and Research, State Clearinghouse	Scott Morgan, Director	3/26/13	Acknowledged receipt of NOP and distribution to state agencies.
US Department of Homeland Security, FEMA Region IX	Gregor Blackburn, CFM, Branch Chief	3/29/13	General comment letter requesting that the Draft EIR consider current Flood Insurance Rate Maps (FIRMs) and the National Flood Insurance Program (NFIP) floodplain management building requirements.
Native American Heritage Commission	Dave Singleton, Program Analyst	3/29/13	General comment letter requesting that the Draft EIR list known cultural resources on or adjacent to the APE and include a professional report and mitigation measures. Provided a current Native American Contacts list.
California Department of Fish and Wildlife	Betty Courtney, Environmental Program Manager, South Coast Region	4/26/13	General comment letter recommending items to be included/considered in the Draft EIR with regard to biological resources.
Ventura County Watershed Protection District	Tom Wolfington, Permit Section Manager	3/27/13	Confirmed that previous comments made 2/15/13 during internal agency review have been adequately incorporated.
Ventura County Public Works Agency	Jim O'Tousa, Development and Inspection Services	4/16/13	Requested that the Draft EIR include further analysis on topic of landslides and include a discussion of load carrying capacity with respect to debris flows.
Ventura County Air Pollution Control District	Alicia Stratton, Air Quality Analyst	4/22/13	Reiterated previous comments made 2/13/13 during internal agency review; concurred with Initial Study air quality section findings; requested that the Draft EIR evaluate all emissions from construction activities.
Ventura County General Services Agency, Parks Department	Theresa Lubin, Parks Maintenance	4/23/13	Acknowledged receipt of NOP. Requested that the Draft EIR include analysis of potential temporary impact to the Ojai Valley Trail.

Table 2.0-2
Fresno Canyon Scoping Hearing Comments from April 9, 2013

Commenter	Comment
David Burch	Is the funding not allocated yet?
	Once the project is approved, will the bid process be public for construction? Will the County hire a local contractor?
	Is there going to be a debris basin at the entrance to catch debris and sediment before it enters the pipe?
Dennis Lachaine	Concerned about groundwater flow where Fresno Canyon used to be. The project needs to allow the groundwater flow to be unimpeded through the project area. Interruptions to groundwater flow by compaction during sewer line work caused impacts to property.
Rufus Fink	Where will the traffic be rerouted during the project construction period?
Alan Davis	Will street parking be interrupted? Many residents park on the street in the neighborhood.
Virgil Davis	How will the new channel pipe be cleaned out? The current condition plugs quickly resulting in flooding. Self-cleaning may not be the outcome with a 2 percent gradient. Concerned about small flows building up debris in the pipe that will block the larger flows when they occur. Will the pipeline be underground? Will the relocation of the sewer line require more of my property?
	What is the fate of the existing channel? Will it be torn out and given back to the property owners?
	How long with the project take during construction? (project duration)
Victoria Beecham	Please explain what the drawings mean? Are elevations and cross sections available to view? What does staging area mean? How does the project affect the Edison slope area? Will we lose any street area?
Peti Tarrant	Is there more export than import of construction materials?
Buz Bonsall	Parkview drain will also be draining to the existing Fresno Channel that stays in place.
Ginnette Waterman	Agrees that Alternative 1 would be horrendous. The last Caltrans repair to Hwy 33 was poor and increased noise due to a bump meant to prevent flooding. Alternative 2: Are there lines of sight from streets to Hwy 33 that will be improved or impaired?

Written comments were received from agencies and from interested individuals and community groups in response to the NOP and the public scoping meeting held at the Casitas Springs Community Center on April 9, 2013. Copies of the Notice of Preparation, comments on the NOP, and the Initial Study are provided in **Appendix A**.

2.3 DOCUMENT ORGANIZATION

This Draft EIR is organized into the following sections.

1.0, Executive Summary, presents an overview of the significant effects of the project, proposed mitigation, and alternatives.

2.0, Introduction, provides an overview of the project, the public review process, and the contents of the EIR.

3.0, Project Description, presents a description of the project, including the objectives, location, and characteristics of the project as well as a description of existing conditions at the project site.

4.0, Consideration and Discussions of Environmental Impacts, contains analysis of each of the environmental topics addressed in this EIR. Each topic is addressed in separate subsections. The environmental topics addressed in this EIR include the following:

4.1 Scenic Resources

4.2 Air Quality

4.3 Biological Resources

4.4 Cultural Resources

4.5 Flood Control Facilities

4.6 Geology and Soils

4.7 Greenhouse Gases

4.8 Hydraulic Hazards

4.9 Noise and Vibration

4.10 Transportation and Circulation

4.11 Utilities

4.12 Surface Water Quality

4.13 Recreation

5.0, Alternatives, provides analysis of alternatives to the project. As required by the *State CEQA Guidelines*, a discussion of the reasons for selection of the alternatives analyzed is provided with a comparative analysis of each alternative with the project.

6.0, Growth-Inducing Impacts, provides discussion of the ways in which the project could foster economic or population growth.

7.0, Significant Irreversible Environmental Changes provides a discussion of changes associated with the project that would be significant and irreversible.

8.0, Effects Found Not to be Significant, provides a discussion of those topics that do not require detailed analysis in the EIR because impacts would be less than significant.

9.0, List of EIR Preparers, and Organizations and Persons Consulted, provides a list of all persons and organizations contributing to the preparation of the EIR.

10.0, References, lists persons contacted and documents used as a basis of information for the EIR.

Appendices to this EIR include the NOP, comments on the NOP, and various supporting technical studies and data summarized in this Draft EIR.

2.4 AVAILABILITY OF THE DRAFT EIR

The Draft EIR is subject to a 45-day public review period starting from the date of the Notice of Availability. Copies of this Draft EIR have been sent to the State Clearinghouse, Responsible Agencies, agencies that have commented on the NOP, and all other interested parties that have requested notices and copies of the Draft EIR. The Draft EIR can be accessed via Ventura County Watershed Protection District (VCWPD) website at http://vcwatershed.org and copies are available for review at the following locations:

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

Ventura County Clerk & Recorder Office
800 South Victoria Avenue
Ventura, California 93009

Meiners Oaks Library
114 N. Padre Juan
Meiners Oaks, California 93023-2227
(805) 646-4804

Ojai Library
111 E. Ojai Avenue
Ojai, California 93023-3295
(805) 646-1639

Oak View Library
555 Mahoney Avenue
Oak View, California 93022
(805) 649-1523

Avenue Library
606 N. Ventura Avenue
Ventura, California 93001-1943
(805) 643-6393

Interested individuals, organizations, Responsible Agencies, and other agencies are encouraged to provide written comments during the 45-day public review period to:

Elizabeth Martinez
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009
Email: Elizabeth.Martinez@ventura.org

Agency responses should include the name of a contact person within the commenting agency.

3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

The purpose of the project description is to describe the project in a way that will be meaningful to the public, reviewing agencies, and decision makers. *California Environmental Quality Act (CEQA) Guidelines* Section 15124 requires that a complete project description contain the following information: (1) the precise location and boundaries of the proposed project shown on a detailed map, including a regional map; (2) a statement of objectives sought by the proposed project (the underlying purpose should be included); (3) a general description of the project's technical, economic, and environmental characteristics; and (4) a statement briefly describing the intended uses of the environmental impact report (EIR), including a list of the agencies that are expected to use the EIR in their decision making, a list of the permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements from federal, state, or local laws, regulations, or policies.

The project description is the starting point for all environmental analysis required by CEQA. Section 15146 of the *State CEQA Guidelines* states that the level of detail in an EIR should correspond to the level of specificity defined in the project description. This project description section serves as the basis for the environmental analysis contained in this EIR.

3.2 LEAD AGENCY

Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, California 93009
Attention: Elizabeth Martinez, Environmental Planner

3.3 PROJECT LOCATION AND SITE CHARACTERISTICS

The Fresno Canyon Flood Mitigation Project is located in the community of Casitas Springs, approximately 1 mile south of Oak View and 5 miles north of the City of San Buenaventura, in the unincorporated area of Ventura County, California. The project site is located approximately 0.75 mile northwest of the State Route (SR) 33/Casitas Vista Road intersection. **Figure 3.0-1, Regional Map**, illustrates the location of the project within the region, and **Figure 3.0-2, Project Site and Vicinity**, shows the project site and surrounding areas.

Fresno Canyon is a tributary to the Ventura River, with a drainage area of almost 1,100 acres with a 100-year peak clear flow of 1,453 cubic feet per second (cfs). The upper half of this watershed is on steep, highly erodible slopes heavily grown with trees and brush. The bulking factor used for the 100-year flow

is 1.57 bringing the bulked 100-year peak flow to 2,281 cfs. The existing lower Fresno Canyon flood control channel, a 750-foot concrete channel, was built in the late 1960s to convey Fresno Canyon runoff from the natural channel to the Ventura River and was designed for a clear flow of 700 cfs, which was considered to be the 50-year event at the time.

The Ventura County Watershed Protection District (VCWPD) has acquired three parcels currently occupied by single-family residential development in order to allow for a right-of-way that has the proper alignment for the conveyance pipeline. The early acquisition of right of way for this project has not influenced the environmental assessment, including the decision relative to the need to construct the project or the selection of a specific location.

3.4 STATEMENT OF PROJECT OBJECTIVES

The existing Fresno Canyon flood control channel in Casitas Springs is inadequate for the proper transport of water and debris associated with flood events. Storm water and debris flows from Fresno Canyon flooded the community of Casitas Springs in Ventura County, California, three times between 1995 and 2005, damaging dozens of homes and requiring the closure of SR-33 for up to two days during each flood event. An average of more than 24,500 vehicles travel on SR-33 in the Casitas Springs area every day. Residential areas on both sides of Fresno Canyon are subject to flooding at an estimated frequency of once every 10 years. In addition, the existing flood control channel clogs and overflows frequently, and water from the Ventura River frequently flows up the channel, creating a "backwater effect" that floods property adjacent to the channel.

The purpose of the Fresno Canyon Flood Mitigation Project is to provide flood control protection for the residents and properties located in Casitas Springs from a 100-year flood. The primary objectives of the project are:

- Flood protection – improve storm flow conveyance from Fresno Canyon to provide capacity for 100-year fully bulked flood flows to protect residents and properties in Casitas Springs;
- Minimize impacts to SR-33, both emergency closings due to flooding and potential temporary impacts during project construction, since SR-33 is a major arterial between the Ojai Valley and Highway 101 in Ventura;
- Minimize effects on water quality of the Ventura River and minimize potential adverse impacts to special-status species, specially Endangered steelhead (*Oncorhynchus mykiss*).

SOURCE: USGS, 2012

FIGURE **3.0-1**

Regional Map

1137.001•08/13

SOURCE: Impact Sciences, Inc., August 2013

FIGURE **3.0-2**

Project Site and Vicinity

1137.001•11/13

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide Pre-disaster Mitigation (PDM) Program federal financial assistance (PDM-PJ-09-CA-2007-013) to VCWPD through the California Emergency Management Agency in support of the Fresno Canyon Flood Mitigation Project to reduce the risk of flooding in Casitas Springs and on SR-33. The PDM Program assists states and communities by providing federal financial assistance to implement sustained, pre-disaster, natural-hazard mitigation programs to reduce the risk of injury and damage from natural disasters and also to reduce reliance of funding from disaster declarations.

3.5 DESCRIPTION OF PROJECT CHARACTERISTICS

VCWPD proposes to construct a storm drain diversion facility to transport floodwaters, sediment, and debris from Fresno Canyon to the Ventura River to reduce the risk of flooding in the community of Casitas Springs. The facility will be designed to convey the fully bulked flows resulting from the 100-year flood event by constructing a 12-foot-diameter reinforced concrete (RC) conveyance pipe installed via horizontal boring beneath SR-33 and via open trench method for the remaining approximately 395 linear feet.

The proposed facilities that would be constructed in the project area shown in **Figure 3.0-3, Project Plan**. At the upstream end, the project design includes a 265-foot floodwall above the northwest bank of the existing natural canyon. To protect the floodwall from potential scour damage, ungrouted rock riprap would be placed on the adjacent portion of the northwest bank. The inlet consists of a 50-foot-long rock riprap trapezoidal channel with 2:1 horizontal to vertical (2H:1V) side slopes (50-foot top width, 11-foot bottom width) and approximately 100 linear feet of RC transition structure adjacent to the existing detention basin. The existing detention basin would no longer be required with the proposed diversion system, and the basin would be filled to the original surrounding ground contours. The new 12-foot-diameter RC pipe is designed to carry bulked flow.

Where the proposed diversion and existing channel diverge, a notch in the north RC channel wall would allow emergency overflows to leave the diversion channel and enter the existing channel. Concreted rock riprap would be placed in the existing channel for a length of 40 feet to protect against erosion and would essentially function as an emergency spillway. This modified existing channel section would be trapezoidal with 2H:1V side slopes, top width of 51 feet, and bottom width of 15 feet.

The transition structure connects to approximately 580 linear feet of 12-foot diameter RC pipe which would be jacked under SR-33 using a horizontal boring method (avoiding the need to detour traffic on SR-33 during construction). The jacking would be continued for about 145 linear feet west of SR-33, where the pipe would be day-lighted and then installed by open trench method for the remainder of the distance (i.e., approximately 395 feet) to the outlet apron comprised of 1-ton ungrouted rock riprap to be constructed on the left bank of the Ventura River. The existing retaining wall located along the base of

slope at the terminus of Edison Drive would be removed and a new retaining wall (of varying height) would be constructed along the pipe conveyance alignment (**Figure 3.0-3**).

A 120-foot-long by 6-inch-wide RC retaining wall (height varies) would be installed along the western edge of the Ojai Valley Trail beginning about 70 feet north of and ending about 35 feet south of the conveyance pipe. The retaining wall is required to support the trail, a portion of which would need to be elevated to clear the proposed 12-foot-diameter pipe. The wall would include an underground RC footing for proper anchoring.

Immediately west of the Ojai Valley Trail, the pipe would connect to a 40-foot-long trapezoidal outlet apron on the east bank of the Ventura River. The apron would comprise 1-ton ungrouted rock riprap and would be 30 feet wide at the invert, 50 feet wide at the top, and 4 feet deep. A 4-foot-wide ungrouted rock cutoff wall that would extend 5 feet deeper underground would further stabilize the downstream edge of the outlet apron, increasing the total depth of rock at this edge to 9 feet. The ground immediately west of the outlet apron would be bladed or graded for approximately 70 feet to facilitate flows from the facility into the Ventura River.

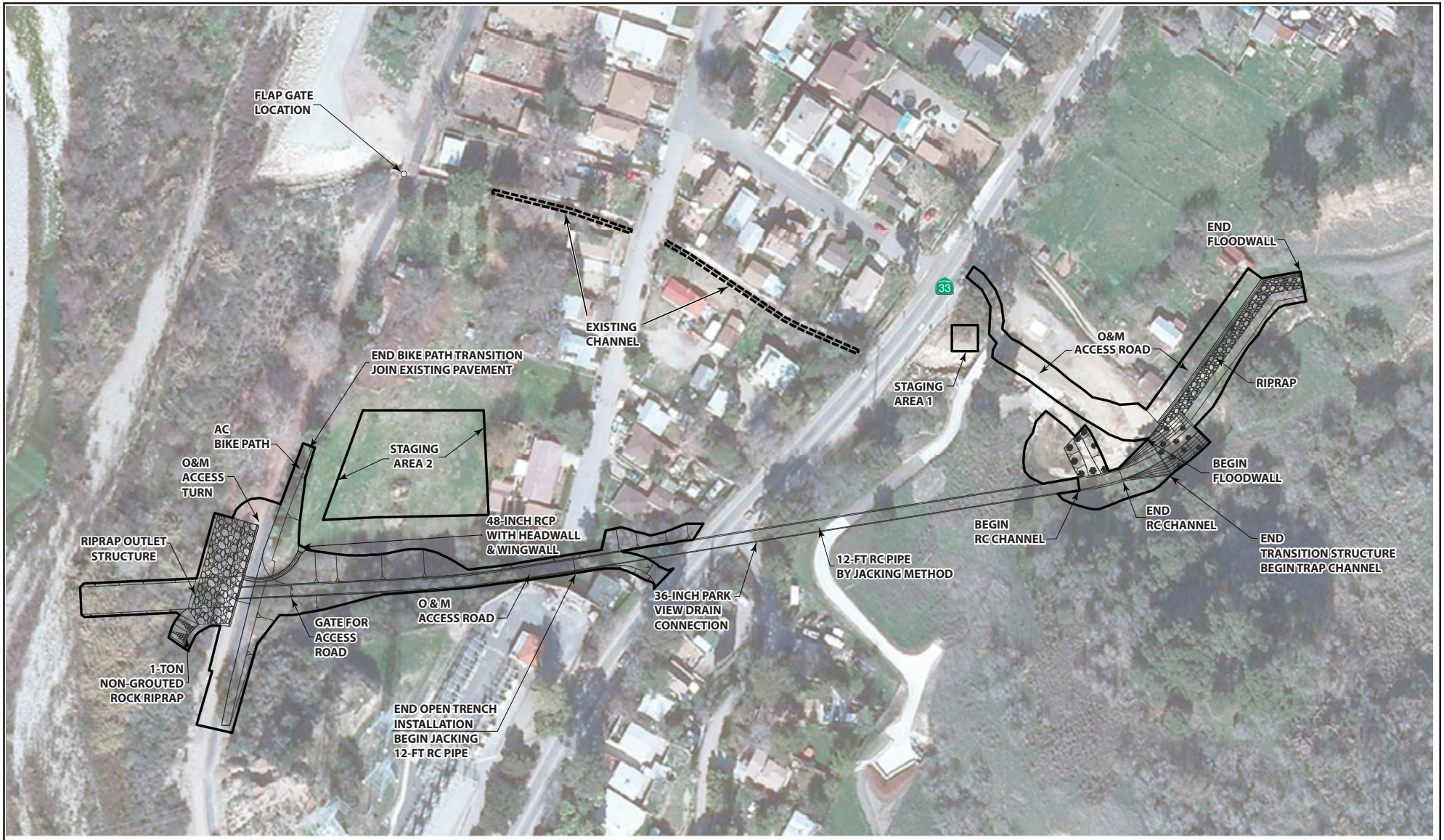
The outlet apron would tie into adjacent higher ground by continuing the ungrouted 1-ton rock riprap and leading edge rock cutoff wall to the immediate north for a distance of 70 feet. To the south, a 4-foot thickness of ungrouted 1-ton rock would curve over a distance of about 40 feet to match the existing east bank of the Ventura River. The rock bank protection toe would be buried 9 feet below the bottom. A 3-foot-wide by 5-foot-deep ungrouted 1-ton rock cutoff wall would further stabilize the downstream end of the bank protection, increasing the overall depth of rock to 9 feet at that location.

A pair of existing 42-inch corrugated metal pipe culverts conveying flow from private property east of the Ojai Valley Trail would be replaced with a single 48-inch RC pipe terminating at the proposed outlet.

To prevent the backwater effect from the Ventura River in the existing flood-control channel, a flapgate would be constructed at the outlet of the existing flood-control channel that would prevent river water from traveling up the channel.

The existing 36-inch Parkview Drain located southeast of SR-33 would be connected to the new Fresno Canyon conveyance structure.

The proposed project would require relocation of the existing 21-inch sewer line operated by the Ojai Valley Sanitation District (OVSD). As part of the project, a new sewer line would be constructed 1 to 2 feet north of the existing line to allow for OVSD access and maintenance. The old line would be abandoned in place. A new sewer manhole would be added at the end of Edison Drive and another manhole would be added along the sewer line just west of the Ojai Valley Trail and south of the new outlet.



SOURCE: Impact Sciences, Inc., August 2013

FIGURE **3.0-3**

Project Plan

The project would include two maintenance roads. A 15-foot-wide maintenance access road would extend from SR-33 west along the top of the buried RC pipe alignment to the outlet structure. The road would be surfaced with 6-inch aggregate base. A vehicle turn area would be created on uplands north of the outlet structure to facilitate maintenance of the outlet invert. The voids within a 15-foot-wide portion of the ungrouted rock on the outlet structure's north slope would be filled with 6-inch aggregate base to create a drivable ramp from the turn area down to the outlet invert. The access ramp would lie adjacent and parallel to the Ojai Valley Trail. A second maintenance road would be constructed at the eastern end of the facility and immediately north of the proposed floodwall. It would be approximately 265 feet long and connect to an existing access route from SR-33.

To summarize, project construction features include:

- New inlet structure with emergency spillway/rock riprap protection in Fresno Canyon, upstream (east) of SR-33;
- Flood wall and adjacent rock riprap revetment along the northwest bank of the existing natural canyon (about 242 feet long);
- 12-foot diameter RC conveyance pipe (approximately 975 feet long);
- RC retaining wall with footing along the west edge of the Ojai Valley Trail (about 120 feet long);
- Outlet facility with tie-in to adjacent high ground on the north and south, cut-off wall along the west edge, and cut-off wall at the downstream edge of the south tie-in, all consisting of ungrouted 1-ton rock riprap;
- Graded flow path extending 70 feet westward from the outlet facility;
- New RC pipe culvert to replace existing culverts draining private property east of the Ojai Valley Trail;
- Maintenance road from SR-33 west to the outlet structure with turn area on uplands immediately west of the Ojai Valley Trail;
- Maintenance road for access from SR-33 east to the new inlet;
- Flapgate on existing Fresno Canyon outlet.

3.6 PROJECT CONSTRUCTION

Construction Schedule

Construction of the proposed project is anticipated to occur over an eight-month period from April 2015 through November 2015. Construction activities would occur between the hours of 7:00 AM and 7:00 PM, 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 areas. **Table 3.0-1, Construction Schedule**, provides an integrated construction schedule which indicates the duration and timing of separate work tasks associate with the proposed project.

Table 3.0-1
Construction Schedule

#	Task	Duration	Start Date	Finish Date	Months 1-2				Months 3-4				Months 5-6				Months 7-8			
					April		May		June		July		Aug		Sep		Oct		Nov	
1	Mobilization	5 days	4/1/15	4/15/15																
2	Clearing and Grubbing	5 days	4/6/15	4/10/15																
3	Jacking & Receiving Pits	5 days	4/8/15	4/14/15																
4	RC Pipe Installation by Jacking	22 days	4/15/15	5/14/15																
5	Removal of Existing Facilities	5 days	4/22/15	4/28/15																
6	Sewer Line Relocation and Installation	25 days	4/28/15	6/1/15																
7	RC Pipe Installation by Open Trench	25 days	5/29/15	7/2/15																
8	Inlet Structure (RCC, RC Transition & Trap Channel, 0.5-Ton riprap, overflow)	21 days	7/3/15	7/31/15																
9	Floodwall & Foundation (including ½-Ton Rock riprap)	20 days	8/3/15	8/28/15																
10a	Retaining Wall & Pile foundation (North of Pipe)	20 days	8/19/15	9/15/15																
10b	Retaining Wall (end of Edison Street)	5 days	9/16/13	9/22/15																
10c	Retaining Wall near Bike Path (@ Outlet)	10 days	9/23/15	10/6/15																
11	Outlet Structure Rock (1-ton)	10 days	10/7/15	10/20/15																
12	RCP Drain Connect (48″ RCP d/s & 36″ RCP at Park View)	3 days	10/21/15	10/23/15																
13	Bike Path (grade elevation & repaving)	3 days	10/26/15	10/28/15																
14	O&M Access Road & Turn Around	2 days	10/29/15	10/30/15																
15	CMB Access Road U/S (sub base prep & pavement)	3 days	11/2/15	11/4/15																
16	AC Access Road Pavement	3 days	11/5/15	11/9/15																
17	Fence & Gate	5 days	11/10/15	11/16/15																
18	Cleanup & Demobilization	5 days	11/12/15	11/18/15																

Staging Areas

As shown on **Figure 3.0-3, Project Plan**, two areas within the project site would be used for staging of construction vehicles, equipment, and materials. The first staging area is located east of SR-33 adjacent to the existing flood control channel and is approximately 2,500 square feet. The second potential staging area is located on an undeveloped portion of a privately owned parcel (APN 061-0-230-340) north of the proposed pipe conveyance alignment, between Edison Drive and the Ojai Valley Trail, and is approximately 0.5 acre in size.

Materials and Waste

Construction of the proposed project would require soil excavation and fill/backfill for the installation of the 12-foot-diameter RC conveyance pipe, inlet structure, floodwall and foundation, OVSD sewer line relocation, retaining walls, outlet structure, and access roads. The soil balance calculation for the proposed project shows that about 500 cubic yards of fill import would be required for the project. It is anticipated that import fill would be obtained locally from a private landowner in Casitas Springs (less than 3 miles from the project site). At 10 cubic yards (cy) per truckload, about 50 truck trips would be required to import soil fill for the project.

The project would require about 975 linear feet of 12-foot-diameter RC pipe for the conveyance structure. For the purposes of this EIR, it is anticipated that the RC pipe would be obtained from a vendor within Southern California, such as the Rialto Pipe Company in San Bernardino. Other materials required for construction of the project include approximately 350 cy of concrete, approximately 900 cy of 0.5-ton rock riprap for the inlet structure, approximately 685 cy of 1-ton rock riprap for the outlet apron, approximately 1,400 square yards of crushed miscellaneous base for the maintenance access road, and 800 feet of fencing. **Table 3.0-2, Construction Material Quantities and Equipment**, provides estimates of the types and quantities of materials associated with construction of the proposed project, as well as the typical equipment that would be required for construction and installation. For the purposes of this EIR, it is anticipated that concrete would be obtained from one of two local vendors in Saticoy, and rock riprap would be obtained from a quarry in Ojai or Camarillo, California.

Table 3.0-2
Construction Material Quantities and Equipment

Task No.	Task	Duration	Equipment	Quantity
1	Mobilization	5 days	N/A	N/A
2	Clearing and Grubbing	5 days	Chainsaw, Woodchipper, Backhoe, Dump Truck	N/A
3	Jacking & Receiving Pits	5 days	Excavator, Dump Truck, Loader	Excavation = 860 cy Fill/Backfill = 800 cy
4	RC Pipe Installation by Jacking	22 days	55-Ton Crane, TK#13 Welder/Generator, 0.75-Ton Utility Truck, Fans, Micro Alert Gas Detectors, 911 Mining Loader, 912 Mining Loader, Generator, Excavator, Dump Truck, Water Truck	Length = 580 ft Excavation = 2,750 cy
5	Removal of Existing Facilities	5 days	Dump Truck Loader/Excavator	N/A
6	Sewer Line Relocation and Installation	25 days	Backhoe, Loader, Excavator, Compactor	Excavation = 667 cy Fill/Backfill = 511 cy Length = 364 lf
7	RC Pipe Installation by Open Trench	25 days	55-Ton Crane, Welder/Generator, 0.75-Ton Utility Truck, Generator, Backhoe, Excavator, Dump Truck, Water Truck	Excavation = 3,043 cy Fill/Backfill = 1,202 cy
8	Inlet Structure (RCC, RC Transition & Trap Channel, 0.5-Ton Rock riprap, overflow path)	21 days	Dump Truck Loader/Excavator, Cement Truck, Concrete Pump. Truck – supply steel/forms/lumber, Forklift, Concrete Truck, Concrete Vibrator, Compactor, Portable generator	Excavation = 3,162 cy Fill/Backfill = 2,750 cy Concrete =80 cy Rock quantity = 373 cy
9	Floodwall & Foundation (including 0.5-Ton Rock riprap floodwall protection)	20 days	Excavator, Dump Truck, Loader, Cement Truck, Concrete Pump. Truck – supply steel/forms/lumber, Forklift, Concrete Truck, Concrete Vibrator, Portable Generator	Excavation = 2,107 cy Fill/Backfill = 2,000 cy Concrete = 70 cy Rock quantity = 521 cy
10a	Retaining Wall & Pile foundation (North of Pipe)	20 days	Drill Rig, Flat Bed Trailer with Augers, Vacuum Tank, Sky Tack Reach Lift, Link Belt Crane, Backhoe, Loader, Excavator, 10-Wheel Dump Truck, Water Truck, Light Tower/Generator	Length =175 lf Concrete = 110 cy
10b	Retaining Wall (end of Edison Street)	5 days	Backhoe, Loader, Excavator, Crane Truck, 10-Wheel Dump Truck, Water Truck, Light Tower/Generator	Excavation = 300 cy Fill/Backfill = 280 cy Concrete = 30 cy Length = 50 ft
10c	Retaining Wall near Bike Path (@ Outlet)	10 days	Backhoe, Loader, Excavator, 10-Wheel Dump Truck, Water Truck, Light Tower/Generator, steel/forms/lumber, Forklift, Concrete Truck	Cut = 1,625 cy Backfill = 1,625 cy Concrete = 70 cy Length = 120 lf
11	Outlet Structure Rock (1-ton)	10 days	Dump Truck Loader/Excavator	Rock quantity = 685 cy

Task No.	Task	Duration	Equipment	Quantity
12	RCP Drain Connections (48" RCP d/s & 36" RCP at Park View Drive)	3 days	Backhoe, Loader, Excavator, Compactor	(included in item #13)
13	Bike Path (grade elevation & repaving)	3 days	Backhoe, Loader, Excavator, 10-Wheel Dump Truck, Water Truck, Roller, Grader	Cut = 70 cy Fill = 2,740 cy Pavement Area = 506 sy
14	O&M Access Road & Turn Around	2 days	Backhoe, Loader, Excavator, 10-Wheel Dump Truck, Water Truck	Cut = 400 cy Fill = 3,580 cy Area = 320 sy
15	CMB Access Road U/S (sub base preparation & pavement)	3 days	Backhoe, Loader, Excavator, 10-Wheel Dump Truck, Water Truck, Roller, Grader	Cut = 500 cy Fill = 520 cy Area = 1,396 sy
16	AC Access Road Pavement	3 days	Roller, Grader	Area = 905 sy
17	Fence & Gate	5 days	Dump Truck	Length =800 lf
18	Cleanup & Demobilization	5 days	N/A	N/A

cy = cubic yard;, sy = square yards; ft = feet; lf = linear feet.

Water for soil compaction and dust suppression during construction would be obtained via a water meter placed on a local fire hydrant. A water tank truck would be used to transport water to the project site. It is estimated that approximately 0.0625 inch of water coverage per acre per day would be required to provide dust control on the project site. As mentioned above, concrete would be obtained from a vendor located within 30 miles of the project site; 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 nearest facility to accept green waste would likely be Ojai Valley Organics (located on Old Baldwin Road near the intersection of SR-33 and Highway 150 in the Ojai Valley). Solid waste generated during construction of the project would be disposed of in accordance with Ventura County Ordinances #4445 (solid waste handling, 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. VCWPD will incorporate the requirements of these ordinances into the project's contract specifications. 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 above in **Table 3.0-2, Construction Material Quantities and Equipment**. During the construction period, one operator would be required for each piece of equipment specified in **Table 3.0-2,** as well as 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 on-site daily.

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

Access and Parking

Construction access to the project site would be via Ranch Road, Edison Drive, Sycamore Drive, and an existing maintenance road east of SR-33. These roads would be used for importing equipment and materials to the project site. An average of approximately seven truck trips per day would occur during construction of the project.

Prior to the commencement of construction, a photo record and inventory of the condition of the study-area roadways and intersections along the truck route shall be made. During construction, periodic inspections shall be made to note any changes in the condition of the study-area roadways and intersections. After construction is completed, the study-area roadways shall be inspected and repairs made to return the roadway to the condition prior to construction if necessary.

The access route for construction trucks and employees arriving to the site shall be properly signed during periods of construction activity.

Construction hauling will be limited from the north to occur only during non-peak hours outside the 6:30 AM to 9:00 AM southbound commute period and hauling from the south will only occur outside the 3:30 PM to 6:30 PM northbound commute period. VCWPD would hire local contractors with employees that live south of the project site or have employees which already travel south from Ojai to work which would mitigate the potential impact to SR-33. Since this is a temporary impact, construction employees that live in Ojai already travel southbound on SR-33 to work and would not be considered new trips added to the impacted section.

Parking of heavy construction equipment would occur within the two designated staging areas. The project would also require an average of 5 and a peak of 15 construction worker vehicles per day. At the upstream end of the project (east of SR-33), construction workers would park their vehicles in the staging

area adjacent to the existing detention basin. West of SR-33, it is anticipated that construction worker vehicle parking would occur in the staging area on private property west of Edison Drive. On-street neighborhood parking of worker vehicles should not be necessary. Additional parking may be provided within the lot at the Casitas Springs Community Center located at 8437 Edison Drive, as needed.

Public access to the active construction work area shall be prohibited in order to maintain public safety. Due to the close proximity of the Ojai Valley Trail, a segment of the Ojai Valley Trail would be temporarily detoured around the active construction area for approximately six weeks toward the end of project construction to accommodate installation of the outlet structure and flood conveyance features nearest to the trail. It is anticipated that the Ojai Valley Trail would remain open to users during the initial six and a half months of construction, with temporary security fencing erected along the perimeter of the trail to maintain public safety during this time.

3.7 OPERATIONS AND MAINTENANCE

A draft operation, maintenance and repair manual has been prepared for the proposed project that identifies all actions that will be required to operate and maintain all aspects of the flood mitigation project including both the existing box culvert and new diversion conveyance. The draft manual will be finalized to meet all the requirements of the final approved project.

Operations involve all activities required to maintain unobstructed flow within the new conveyance pipe, inlet, and outlet. The system is designed to operate passively, without manual or remote actions. Periodic inspections by qualified staff will detect and quantify any conditions within the conveyance system which either adversely affect the project's function, or adversely affect the natural resources of either Fresno Creek or the Ventura River. Maintenance is defined as the routine conditioning of system components and the correction of any conditions within the system that might adversely affect the project's function. Inspections and maintenance shall be documented by VCWPD and, if required, may be reported to regulatory agencies.

Inspection criteria have been outlined in the manual to aid the inspector in determining if deviations from the design have occurred. Typical corrective measures are outlined in the manual, but the superintendent shall be responsible for determining the appropriate maintenance action to restore any damaged feature or deviated condition back to operable conditions and for assuring that the corrective maintenance is carried out. If the corrective action does not comply with the conditions set forth in the project permits or exceeds the original project footprint with either temporary or permanent impacts, additional authorization may be required prior to taking such maintenance actions.

Routine maintenance actions have also been outlined for each project element to ensure proper operation and longevity. Basic maintenance actions will include, but are not limited to, periodic concrete patching and repairs, debris and sediment removal, and lubrication, adjustment, cleaning and painting of the flapgate and other metal parts. It is anticipated that the new conveyance pipe will be self-flushing and self-cleaning. Annual inspection of the conveyance pipe will be conducted by VCWPD maintenance staff.

In addition to operational maintenance of the flood control structures, the manual also outlines requirements for maintenance and operation of the access roads and fencing around the flood control structures. Steps to be taken in case of emergency are also outlined.

All maintenance activities at the Fresno Canyon Flood Mitigation Project would occur in compliance with the appropriate Environmental Best Management Practices (BMPs) developed as part of VCWPD's Operation, Maintenance, and Repair Manual.

VCWPD has formally developed 25 environmental BMPs to reduce the environmental effects of its routine maintenance program for this and other flood control projects. The BMPs represent precautions and procedures to be used when planning and implementing maintenance activities that could affect sensitive environmental resources including wetlands, riparian habitat, aquatic habitat, Threatened and Endangered species, species of special concern, water quality, and hydraulic conditions in the watershed. The BMPs are designed to be feasible and practical. They will not curtail, reduce, or otherwise inhibit the District's maintenance requirements and activity guidelines. Implementation of the BMPs is standard practice for the maintenance crews. The following BMPs were originally taken from the Program EIR with some additional clarification language added for this project. The regulatory agencies participating in the development and approval of the BMPS included: the California Department of Fish and Wildlife (CDFW), Los Angeles Regional Water Quality Control Board (LARWQCB), US Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS). Below is a summary of the BMPs. BMPs not included herein are not applicable to this specific project. Full BMP descriptions are available in the manual.

- BMP 1 Avoid Channel Work during the Rainy Season
- BMP 2 Prevent Discharge of Silt-Laden Water during Concrete Channel Cleaning
- BMP 3 Location of Temporary Stockpiles
- BMP 4 Survey for Habitat Prior to Routine Maintenance Work
- BMP 5 Survey for Steelhead Migration Conditions and Sensitive Aquatic Species
- BMP 6 Survey for Steelhead Rearing Habitat and Sensitive Aquatic Species

- BMP 8 Avoid Disturbance to Native Beach or Wetland Species
- BMP 9 Aquatic Pesticide BMPs
- BMP 12 Leave Herbaceous Wetland Vegetation in Channel Bottom (Not Applicable in Concrete Box or Concrete Channel Sections)
- BMP 13 Maximum 15-foot Vegetation-Free Zone at the Toe of the Bank
- BMP 14 Avoid Road Base Discharge
- BMP 15 Mitigate/Replace Temporary Impacts to Habitat
- BMP 16 Oak Tree Mitigation Ratio
- BMP 17 Concrete Wash-Out Protocols
- BMP 18 Water Diversion Guide
- BMP 20 Implementation of Integrated Pest Management Program
- BMP 21 Avoid Spills and Leaks
- BMP 22 Biological Surveys in Appropriate Habitat Prior to Vegetation Maintenance
- BMP 23 Invasive Plant Removal Protocols
- BMP 24 Air Quality BMPs
- BMP 25 Construction Noise BMPs

3.8 CUMULATIVE PROJECTS

Cumulative impacts refer to the combined effects of project impacts with the impacts of other past, present, and reasonably foreseeable future projects. Both CEQA and the *State CEQA Guidelines* require that cumulative impacts be analyzed in an EIR. As set forth in the *State CEQA Guidelines*,[1] the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."[2]

1 *State CEQA Guidelines* Section 15130(b).

2 13 PRC Section 21083(b).

According to the *State CEQA Guidelines*,

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable and which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*[3]

In addition, the *State CEQA Guidelines* require

> *Either:*
>
> *A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside control of the agency, or*
>
> *A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.*[4]

As previously stated, and as set forth in the *State CEQA Guidelines*, related projects consist of "closely related past, present, and reasonable foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area."[5] Specific projects proposed or currently under development were identified in the Initial Study. These related projects are listed in **Table 3.0-3, Related Projects**.

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3 *State CEQA Guidelines* Section 15355.

4 *State CEQA Guidelines* 15130(a)(1).

5 California Public Resources Code, Title 14, Division 6, Chapter 3, *State CEQA Guidelines*, Section 15355.

Table 3.0-3
Related Projects

Permit Number	Permit Type/Status	Location	Description
LU09-0082	Planned Development	North Ventura Avenue	Planned Development Permit LU09-0082 is to legalize outdoor storage of recreational vehicles. The subject property is 6.63 acres of which 2.74 acres is proposed for the development. The remaining 3.89 acres will be subject to a restrictive covenant for environmentally sensitive habitat preservation related to Conditional Certificate of Compliance SD06-0046. The proposal includes an asphalt parking lot that can accommodate 112 RVs. The project includes a 533 square foot caretaker dwelling to be provided in a premanufactured home. Access is provided to the site by a 20-foot-wide private driveway of crushed misc. base
LU10-0100	Minor Modification	North Ventura Avenue	Minor Modification to Conditional Use Permit 4926 (CUP 4926) to extend the CUP an additional 10 years. CUP 4926 is a wireless communication facility with a 120-foot-tall monopole with four-panel antennas in two sectors with two additional whip antennas.
LU11-0048	Minor Modification	North Ventura Avenue	Minor Modification to Conditional Use Permit 5163 to process a 10-year time extension for ongoing operation of a dog kennel located in the AE Zone addressed as 4692 N. Ventura Avenue.
LU11-0093	Planned Development	North Ventura Avenue	Major Modification to a PD1867 to establish an entitlement for each of the industrial properties that were originally approved under a single entitlement and subsequently subdivided via Parcel Map 5792. 100 Shell Road (APN 063-0-220-14) is proposed to entitle a fruit warehouse, packing, and distributing company within an existing 25,187.5-square-foot building that was approved for concrete form cast manufacturing.
LU11-0103	Planned Development/Pending	North Ventura Avenue	The applicant requests that the DP 99-6 permit be modified to include the 2.74-acre property (i.e., the southerly portion of APN 063-0-220-110) upon which the current Aera Energy operations are conducted in a separate permit. Other than this modification of the permit boundary, no changes in the authorized uses or structures are proposed in this 2.74-acre area. The existing permit requirements and conditions of approval will remain applicable in this permit area.
LU11-0091	Major Modification	North Ventura Avenue	Major Modification to a PD1867 to establish an entitlement for each of the industrial properties that were originally approved under a single entitlement and subsequently subdivided via Parcel Map 5792. 100 Shell Road (APN 063-0-220-14) is proposed to entitle a fruit warehouse, packing, and distributing company within an existing 25,187.5-square-foot building that was approved for concrete form cast manufacturing.

Permit Number	Permit Type/Status	Location	Description
LU07-0047	Minor Modification/Pending	North Ventura Avenue	As of November, 2010, the applicant proposes to (1) legalize the operation of oilfield related contractor service and storage yards for two contractors (MJ Tank lines, KAG Tank lines); (2) legalize an existing 1,200-square-foot structure (Phase II warehouse) constructed without building permit on APN 068-0-040-13 which was originally shown on DP99-6 as located on another APN and proposed for 3,000 sf.; (3) modify and update the site plan to revise the permit boundaries down to 32.45 acres and lot coverage to be 25,581 square feet of total roof area of buildings; (4) modify and update the site plan to indicate relocation and size reduction of proposed phase 1 warehouse (4,800 square feet), relocation of the existing dispatcher office to APN 068-0-040-13, relocation of the existing diesel fuel tank facility to 068-0-010-01; (5) relinquish PD 1992; (6) modify and update the site plan to remove the auto impound yard property (APN 068-0-040-120 and 050), bike path (APN 068-0-020-01), Towing yard (APN 068-0-040-08); and the truck wash area property (APN 068-0-040-02 portion) from the DP 99-7 boundary; (7) Removal of the previously approved under DP 99-6 Main office addition and Warehouse Phase I both not yet built; and (8) add fire hydrants, waterline for fire and detention basin.
SD10-0034	Lot Line Adjustment/Pending	North Ventura Avenue	Approval of a ministerial Lot Line Adjustment No. SD10-0034 to transfer 0.07 acre from a 2.06-acre parcel (APN 060-0-270-220) zoned Rural Exclusive 2 acre minimum to a 0.86-acre parcel (APN 060-0-220-195) zoned Rural Exclusive 1 acre minimum.
SD10-0035	Merger/Pending	North Ventura Avenue	Approval of the ministerial Lot Line Adjustment No. SD10-0034 to transfer 0.07 acre from a 2.06-acre parcel (APN 060-0-270-220) zoned Rural Exclusive 2 acre minimum to a 0.86-acre parcel (APN 060-0-220-195) zoned Rural Exclusive 1 acre minimum.
SD11-0021	Conservation Subdivision/Pending	North Ventura Avenue	The applicant is proposing a Parcel Map Waiver-Conservation Subdivision of an 85.7-acre parcel (Parcel "B" of SD11-0001 PMW LLA recorded June 8, 2011) into 2 parcels, Parcel "1" 65.1 acres, zoned OS 40, as a conservation parcel for the restoration and preservation of river habitat by the Ojai Valley Land Conservancy and Parcel 2 a 20.6-acre parcel zoned OS 40 also owned by Ojai Valley Land Conservancy and to be transferred to private ownership in the future. Parcel 1 will be conforming for the minimum lot size and Parcel 2 will be non-conforming as allowed by ordinance. Each proposed parcel has an existing SFR. No new development is proposed at this time for either parcel.
SD12-0002	Parcel Map	Ojai Valley Area	A subdivision (TPM) to create 4 parcels. TPM 5878, 2 in the OS 40 and 2 in the R1-20,000-square-foot zoning designation.
SD05-0041	Conditional Certificate of Compliance/Pending	Oak View	CCC for lot legalization, PM 5616. Date of conditions is November 4, 1997.
LU11-0052	Conditional Use Permit/Pending	Ojai Valley Area	Discretionary Parcel Map Waiver/Voluntary Merger (PMW/VM) to merge two illegal lots to create one 14,374-square-foot parcel. SFR on parcel.
SD12-0003	Merger/Pending	Ojai Valley Area	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.
SD10-0010	Lot Line 04/11/2012 Adjustment/Approved	Ojai Area	Four lot line adjustments, resulting lots meet 1-acre lot minimum, qualifies for ministerial processing.

In addition to the projects listed in **Table 3.0-3**, three projects with the potential to impact the Ventura River watershed have been identified by VCWPD. These projects are listed in **Table 3.0-4, Ventura River Watershed Related Projects**.

Table 3.0-4
Ventura River Watershed Related Projects

Project	Location	Distance from Project Site	Description
VCWPD Arundo Removal	San Antonio Creek	5.5 miles	The objective of the project is to control the regrowth of non-native plants (*Arundo donax* and *Ricinus communis*) through retreatment of approximately 6 acres along selected segments of San Antonio, McNell, Thacher, and Reeves creeks.
Caltrans Rock Stabilization Project	Near Matilija Dam	8.0 miles	The proposed project is located outside the City of Ojai, along SR-33 in Ventura County at postmile 15.7/15.8. The proposed project will remove the severely undermined grouted rock slope protection (RSP) and construct a soil nail wall approximately 500 feet in length in its place. It will also include a water diversion of approximately 900 feet. Once all existing RSP has been removed and the soil nail wall has been built, the newly widened creek will be restored to match the natural landscape, with a stream simulation rock weir design implemented within the widened portion of the streambed. The creek floodplain will be widened and no permanent encroachment will occur.
Matilija Dam Ecosystem Restoration Project	Matilija Dam	8.0 miles	Successful completion of the Matilija Dam Ecosystem Restoration Project (MDERP) would restore ecosystem habitat (terrestrial and aquatic) to the Ventura River and Matilija Creek, improve the natural hydrologic and sediment transport regimes to support coastal sand replenishment via the Ventura River, and enhance recreational use along the Ventura River and Matilija Creek in a way that is compatible with ecosystem restoration efforts.

4.0 CONSIDERATIONS AND DISCUSSIONS OF ENVIRONMENTAL IMPACTS

4.0.1 ENVIRONMENTAL ISSUES ADDRESSED

A Notice of Preparation (NOP) was prepared for the proposed project on March 25, 2013, and is incorporated by reference as part of this EIR. The NOP is attached hereto as **Appendix A**. Based on the findings of the Initial Study, as listed in the NOP, Ventura County Watershed Protection District (VCWPD), as lead agency, determined that an EIR was warranted for the project. Agency and public input received during the NOP comment period (March 25, 2013 through April 23, 2013) and at the public scoping meeting on April 9, 2013 were used to determine the scope of the evaluation for the EIR. The environmental issues considered in this EIR and their corresponding section numbers are listed below:

4.1 Scenic Resources

4.2 Air Quality

4.3 Biological Resources

4.4 Cultural Resources

4.5 Flood Control Facilities

4.6 Geology and Seismic Hazards

4.7 Greenhouse Gas Emissions

4.8 Hydrology and Flooding

4.9 Noise and Vibration

4.10 Transportation and Circulation

4.11 Utilities

4.12 Surface Water Quality

4.13 Recreation

Sections 4.1 through **4.13** provide a detailed discussion of the environmental setting, applicable project design features, impacts associated with the proposed project, cumulative impacts, and mitigation measures designed to reduce significant impacts.

4.0.2 ORGANIZATION OF ENVIRONMENTAL ANALYSIS

To assist the reader in comparing information about the various environmental issues, each section contains the following information:

- Introduction
- Applicable Regulations
- Environmental Setting
- Thresholds of Significance
- Project Impacts
  - Impacts
  - Mitigation Measures
  - Residual Impacts
- Cumulative Impacts

4.0.3 TERMINOLOGY USED IN THIS ANALYSIS

For each impact identified in the EIR, a statement of the level of significance is provided. Impacts are categorized as follows:

- A designation of "no impact" is given when no adverse changes in the environment are expected.
- A "less than significant impact" would cause no substantial adverse change in the environment.
- A "significant impact" would have a substantial adverse impact on the environment but could be reduced to less than significant with incorporation of mitigation measures.
- A "significant unavoidable impact" would cause a substantial adverse effect on the environment, and no feasible mitigation measures would be available to reduce the impact to a less than significant impact.
- A "beneficial impact" would result in an improvement over existing conditions.

4.1 SCENIC RESOURCES

4.1.1 INTRODUCTION

The analysis of impacts to scenic resources in this section is based on site surveys and includes a consideration of scenic resource preservation policies provided in the *Ventura County General Plan* and the *Ojai Valley Area Plan*. The assessment of impacts to scenic resources is consistent with the *Ventura County Initial Study Assessment Guidelines*.

4.1.2 ENVIRONMENTAL SETTING

The project site bisects the Ojai Valley Trail, a public viewing location. As discussed in **Section 4.3, Biological Resources**, the project is located within known oak woodland areas. Oak woodlands are considered a scenic resource according to the *Initial Study Assessment Guidelines*. In addition, the project is located adjacent to designated scenic resource protection overlay zone for prominent ridgelines and would construct within portions of the Ventura River.[1] Construction of the proposed project would occur adjacent to, and underneath, the Ojai Valley Trail. In addition, the proposed project is located adjacent to SR-33 which is an eligible State Scenic Highway.[2]

As the majority of project construction would be underground and would not require surface disturbance, the areas in which project development could affect scenic resources are limited to the inlet and outfall areas. As discussed in **Section 3.0, Project Description**, the inlet consists of a 50-foot-long rock-riprap trapezoidal channel with 2:1 horizontal to vertical (2H:1V) side slopes (50-foot top width, 11-foot bottom width) and approximately 100 linear feet of RC transition structure adjacent to the existing detention basin. The jacking would be continued for about 145 linear feet west of SR-33, where the pipe would be day-lighted and then installed by open trench method for the remainder of the distance (i.e., approximately 395 feet) to the outlet apron comprised of 1-ton ungrouted rock riprap to be constructed on the left bank of the Ventura River. **Figures 4.1-1** and **4.1-2** illustrate existing conditions at these portions of the project site. **Figure 4.1-1** shows views of the existing Ventura County Watershed Protection District (VCWPD) facility located east of SR-33 opposite Sycamore Drive, where inlet facilities would be constructed. This area is currently disturbed, and contains a detention basin and conveyance pipes that pass underneath SR-33 to convey stormwater flows to the Ventura River. **Figure 4.1-2** shows the proposed pipeline and access road alignment and the outfall area. This area is generally undisturbed, and views consist primarily of native and non-native vegetation.

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1 Ventura County General Plan, Ojai Valley Area Plan, (2008) Figure 2.

2 Ventura County General Plan, *Resources Appendix, Figure 1.7.3b, Designated and Eligible Scenic Highways (South Half)*, 2008.

4.1.3 REGULATORY FRAMEWORK

State Regulations

California Department of Transportation – California Scenic Highway Program

California's Scenic Highway Program was created by the legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the *Streets and Highways Code*.[3]

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the *Streets and Highways Code*. A list of California's scenic highways and a map identifying their locations is available from the Caltrans Scenic Highway Coordinators.

For a specific route to be included on a list of highways eligible for scenic highway designation, it must be added to the list prior to being considered for official designation. A highway may be designated scenic depending on the extent of the natural landscape that can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

When a local jurisdiction nominates an eligible scenic highway for official designation, it must also identify and define the scenic corridor of the highway. A scenic highway designation protects these scenic values of an area. Jurisdictional boundaries of the nominating agency are also considered, and the agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program.

To receive official designation, the local jurisdiction must follow the same process required for official designation of State Scenic Highways. The minimum requirements for scenic corridor protection include:

- Regulation of land use and density of development
- Detailed land and site planning
- Control of outdoor advertising (including a ban on billboards)
- Careful attention to and control of earthmoving and landscaping
- Careful attention to design and appearance of structures and equipment

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3 California Streets and Highways Code, Sec. 260 et seq.

View of project site and new access road alignment looking west toward SR-33

View of access road and staging area looking east towards Fresno Canyon inlet from SR-33

View of existing culvert and debris basin area looking east toward Fresno Canyon Area

View of existing debris basin looking south from Fresno Canyon inlet on project site

SOURCE: Impact Sciences, Inc., August 2013

FIGURE **4.1-1**

Existing Views of the Project Site

1137.001•11/13

View of proposed 12-foot-diameter RC pipe conveyance alignment looking west from end of Edison Road

View of proposed 12-foot-diameter RC pipe conveyance alignment looking west from 8251 Edison Drive property

View of proposed 12-foot-diameter RC pipe conveyance alignment looking west from SR-33

View of proposed 12-foot-diameter RC pipe conveyance alignment looking west toward Ojai Valley Trail and outlet to Ventura River

SOURCE: Impact Sciences, Inc., August 2013

FIGURE **4.1-2**

Existing Views of the Project Site

Local Regulations

Ventura County General Plan

The following goals and policies from Section 1.7, Scenic Resources, of the *Ventura County General Plan* would apply to the proposed project:

Goals

1. Preserve and protect the significant open views and visual resources of the County.

2. Protect the visual resources within the viewshed of lakes and state- and County-designated scenic highways, and other scenic areas as may be identified by an area plan.

3. Enhance and maintain the visual appearance of buildings and developments.

Policies

1. Notwithstanding Policy 2, discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

2. Scenic Resource Areas, which are depicted on the Resource Protection Map, shall be subject to the Scenic Resource Protection (SRP) Overlay Zone provisions and standards set forth in the Non-Coastal Zoning Ordinance, which include the following:

   (1) Any request for grading, structures, or vegetation removal per the standards of the SRP Overlay Zone shall be evaluated through a discretionary permit.

   (2) Removal, damaging or destruction of protected trees shall be in compliance with the County's "Tree Protection Regulations" of the Non-Coastal Zoning Ordinance.

   (3) All discretionary development shall be sited and designed to:

      a. Prevent significant degradation of the scenic view or vista;

      b. Minimize alteration of the natural topography, physical features and vegetation;

      c. Utilize native plants indigenous to the area for re-vegetation, whenever possible;

      d. Avoid silhouetting of structures on ridge tops that are within public view.

      e. Use colors and materials that are designed to blend in with the natural surroundings.

      f. Minimize lighting that causes glare, illuminates adjacent properties, or is directed skyward in rural areas.

(4) No on-site freestanding advertising signs in excess of 4 feet in height and no freestanding off-site advertising signs shall be permitted. Federally owned land is not subject to the Scenic Resource Protection Overlay Zone and is not subject to any permit requirements as specified under (1) or (2) above. To the extent possible, the agencies responsible for the administration of land use activities on federally owned land should consider Policies 1.7.2-2(3) and (4) above in the planning and administration of new land uses within Scenic Resource Areas.

3. Proposed undergrounding of overhead utilities within Scenic Resource Areas shall be given first priority by the Public Works Agency in utilizing the County's allocation of Utility Undergrounding Funds.

4. The Planning Division shall continue to implement the landscaping requirements of the Zoning Ordinance and the "Guide to Landscape Plans" to enhance the appearance of discretionary development.

Ojai Valley Area Plan

The following goals and policies from the *Ojai Valley Area Plan* would apply to the proposed project:

Goals

1. Preserve and protect the significant visual quality and aesthetic beauty of the Ojai Valley which includes, but is not limited to, surrounding mountains, hills, and ridgelines, arroyos, barrancas and protected trees.

2. Preserve the scenic view of state, federal, and local parkland in and around the Ojai Valley.

3. Ensure that discretionary development on or near ridgelines minimizes impacts from grading activities in order to preserve the natural beauty of the area.

4. Discourage the proliferation of antenna and satellite dish facilities from developing on ridgelines.

Policies

1. Discretionary development/grading which will significantly degrade or destroy a scenic view or vista from public roads or publicly owned land shall be prohibited, unless the development/grading is a public project, or a private project for which there is a substantial public benefit, and overriding considerations are adopted by the decision-making body.

2. The area within 400 feet (horizontal) of prominent ridgelines as shown in Figure 2 shall be zoned "Scenic Resource Protection Overlay" in order to ensure that visual impacts of grading and attendant structures are minimized to the maximum extent feasible. Discretionary development shall be located and designed to minimize visibility and silhouetting against the skyline as viewed from nearby public roads, and shall incorporate as many of the following planning techniques as feasible:

    a. Limit construction to single-story structures on or near ridgelines;

    b. Utilize large building pad setbacks (50 feet or more) from the edge of a ridgeline;

c. Utilize berms and landscaping to soften the visual impact of homes and graded areas;

d. Utilize raised foundations, split-level designs, roof materials consisting of clay or concrete plate tile with a natural color, and other techniques to fit the home to the hillside terrain, and to minimize the amount of grading required.

4. As a result of any discretionary development, the reshaping of the natural terrain to permit access and construction shall be kept to the absolute minimum. Where possible, improvements shall be designed to conform to the terrain rather than the reverse and shall comply with the following:

   a. Transition Design: The angle of the graded slope shall be gradually adjusted to the angle of the natural terrain.

   b. Angular Forms: Angular forms shall generally not be permitted. The graded form shall reflect the natural rounded terrain, unless exposed rock faces can be used as a desirable visual element.

   c. Exposed Slopes: Graded slopes shall be concealed by landscaping, berms, or other measures.

   d. The toe and crest of all cut and fill slopes in excess of 5 feet vertical height shall be rounded with vertical curves.

   e. Where cut or fill slopes exceed 100 feet in horizontal length, the horizontal contours of the slope shall be curved in a continuous, undulating fashion in conformance with natural slopes.

   f. Where cut and fill slopes in excess of 5 feet in height are created, detailed landscape and irrigation plans shall be submitted to and approved by the Planning Division and Public Works Agency prior to the issuance of any grading permit, conditional use permit or building permit. The plan will be reviewed for type and density of ground cover, seed-mix, hydromulch mix, plant sizes, and irrigation systems.

5. Discretionary development on parcels containing protected trees as defined in the County's Tree Protection Ordinance, shall design necessary grading to ensure the survival and health of all such trees, except those which have been expressly authorized for removal or encroachment into the protected zone. These trees shall be protected from grading activities. If a permit has been issued for encroachment into the protected zone, the grading plan shall be accompanied by details for retaining walls and drainage devices prepared by a landscape architect.

7. Cut or fill slopes for discretionary development which exceed a vertical height of 25 feet shall be subject to a Planning Commission hearing.

4.1.4 IMPACT ANALYSIS

Thresholds of Significance

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*.

Threshold 4.1-1 **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,**
- **It would physically alter the scenic resource either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects; or**
- **It would substantially obstruct, degrade, or obscure the scenic vista, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects.**

As discussed above, the project site is located adjacent to two important public viewing locations: SR-33 which is an eligible State Scenic Highway in the project vicinity, and the Ojai Valley Trail which provides hikers and bicyclists views of the Ventura River.

Views from SR-33

SR-33 passes to the west of the proposed inlet facilities, which would be constructed in an area that currently contains existing flood control facilities, including a detention basin and channel conveying stormwater flows under SR-33 to an outfall at the Ventura River. **Figure 4.1-1, Existing Views of the Project Site**, illustrates the existing conditions at the proposed inlet area. Construction of the proposed project would result in views to the east from SR-33 that would be similar to existing views, which consist of existing VCWPD facilities. Construction activities may temporarily alter existing views from SR-33 but they would be short-term and temporary in nature. This change would not be considered a significant impact, as project development would not substantially alter existing views. The project outfall into the Ventura River is located to the west of SR-33 and would not be visible from vehicles traveling on the highway due to distance and intervening existing residential development. Since views of scenic vistas would not be substantially degraded as a result of short-term construction impacts and project development, impacts to scenic resources as viewed from SR-33 would be considered less than significant.

Views from the Ojai Valley Trail

Views to the east from the Ojai Valley Trail are obscured by existing residential development, and therefore the proposed inlet facilities would not be visible from this location. The proposed outfall to the Ventura River would be visible from the Ojai Valley Trail, and would constitute a change from existing views, which, as shown in **Figure 4.1-2**, are primarily of native and non-native vegetation. Upon the completion of project construction, views of the project site from the Ojai Valley Trail would include the proposed access road and riprap outfall structure, with natural vegetation in the Ventura River bottom in the background. Please see **Subsection 4.1.2** for a description of that portion of the proposed project that would be visible during construction and **Section 3.0, Project Description**, for a description of the project in its entirety.

Users of the Ojai Valley Trail would perceive project facilities as a change from existing conditions at the proposed outfall location by viewing riprap, maintenance roadway and the outfall structure itself. The majority of the project is unseen so the recreational user would see riprap and concrete associated with the outfall and roadway. A user of the Ojai Valley Trail would see vegetation, housing and concrete and riprap outlet associated with the project. Users would see the floodway improvements for a short time as they passed by but the viewtime would be limited. While a literal change from existing conditions, flood control facilities along a river are common visual improvements. Similar flood control facilities are currently visible from the Ojai Valley Trail, as illustrated in **Figure 4.1-3, Existing Views from the Ojai Valley Trail**. See also **Figure 4.1-4, Existing Views of the Ojai Valley Trail**. These project facilities would not significantly alter viewshed perspectives as similar facilities already exist along other areas of the Ojai Valley Trail. Consequently, the project would not substantially change views along the Ojai Valley Trail, and would not be considered a significant impact.

As discussed in **Section 3.0, Project Description**, the proposed project incorporates a number of best management practices (BMPs) intended to reduce potential project impacts, including impacts to scenic resources. These include mitigation for oak tree removal, leaving wetland vegetation in the channel bottom undisturbed, avoidance of native wetland species, removal of invasive plant species, the mitigation or replacement of temporary habitat impacts, and a maximum 15-foot vegetation free zone at the toe of the Ventura River bank. Implementation of these BMPs would reduce project impacts to scenic resources to the extent feasible.

Level of Significance Before Mitigation

Impacts would less than significant because of the BMPs outlined above and the low-impact nature of the outlet facility.

Mitigation Measures

Mitigation measures for impacts to natural scenic resources typically consist of avoidance where possible, the replacement of vegetation where avoidance is not possible, and the screening of aboveground structures. As discussed above, the proposed project includes a number of BMPs intended to reduce impacts to scenic resources through avoidance of existing vegetation where possible and replacement of vegetation as feasible.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4.1-2 **A project has the potential to create a significant impact to scenic resources if it is inconsistent with any of the applicable policies of the *Ventura County General Plan Goals, Policies, and Programs***

The *Ventura County General Plan* and the *Ojai Valley Area Plan*, as discussed above, provide goals and policies intended to preserve scenic resources within the County. The nearest County-designated Scenic Resource Area is Lake Casitas, approximately 1 mile northwest of the project site. The project site is not located on a ridgeline, and thus the project would not conflict with policies addressed to the protection of those resources. The project site is visible from SR-33 and the Ojai Valley Trail, and would include the construction of flood control facilities in the Ventura River.

The proposed project consists of flood control facilities intended to reduce flooding in the community of Casitas Springs, and includes minimal aboveground facilities, which, as previously discussed, would be limited to inlet and outfall structures and access roads for maintenance of those facilities. The proposed project includes BMPs (discussed in **Section 3.0, Project Description**) intended to reduce potential project impacts, including impacts to scenic resources. These include mitigation for oak tree removal, leaving wetland vegetation in the channel bottom undisturbed, avoidance of native wetland species, removal of invasive plant species, the mitigation or replacement of temporary habitat impacts, and a maximum 15-foot vegetation-free zone at the toe of the Ventura River bank. Implementation of these BMPs would reduce project impacts to scenic resources to the extent feasible.

The project would result in changes to scenic resources visible from public roads or publicly owned land. However, the *Ojai Valley Area Plan* does not prohibit such development for public projects, or for projects that provide a public benefit, as would the proposed project by reducing potential flooding in the Casitas Springs area. The project therefore would not conflict with applicable policies of the *Ventura County General Plan* or the *Ojai Valley Area Plan*.

View of proposed alignment and Ojai Valley Trail from outlet area looking northeast

View of proposed outlet area in Ventura River from Ojai Valley Trail looking southwest

View of existing channel from Ojai Valley Trail looking east

View of existing channel outlet to Ventura River from Ojai Valley Trail looking southwest

SOURCE: Impact Sciences, Inc., August 2013

FIGURE **4.1-3**

Existing Views from the Ojai Valley Trail

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View of Ojai Valley Trail and proposed outlet area in Ventura River looking west

View of Ojai Valley Trail looking north from area of pipe undercrossing to outlet (left)

View of Ojai Valley Trail looking south and view of outlet area (right) from area of pipe under crossing

SOURCE: Impact Sciences, Inc., August 2013

FIGURE **4.1-4**

Existing Views of the Ojai Valley Trail

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Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.1.5 CUMULATIVE IMPACTS

Each related project has the potential to result in significant impacts to visual resources. The cumulative projects identified in **Section 3.0, Project Description**, are located at the Matilija Dam, approximately 8 miles north of the project site, and San Antonio Creek, approximately 5 miles northeast of the project site. Due to the distance of the related projects from the project site, there is no potential for a significant cumulative impact to scenic resources. Each related project would be required to mitigate its impacts to scenic resources to the extent feasible, and the proposed project, as discussed above, is not expected to result in significant impacts to such resources.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

4.2 AIR QUALITY

4.2.1 INTRODUCTION

This section describes the ambient air quality of the local and regional area and provides a comparison of existing air quality to applicable state and federal pollutant standards. This section also identifies the plans and policies developed in efforts to improve air quality. Finally, this section evaluates potential air quality impacts associated with construction and operation of the proposed project and identifies mitigation measures to reduce those potential impacts. Sources utilized in this discussion include the Ventura County Air Pollution Control District (VCAPCD) Air Quality Management Plan, air quality data from the California Air Resources Board (CARB), and the Ventura County Air Quality Assessment Guidelines. Air emission calculations conducted for the proposed project are contained within **Appendix B** of this environmental impact report (EIR).

4.2.2 ENVIRONMENTAL SETTING

Climate and Meteorology

Southern California lies in a semi-permanent high-pressure zone of the Eastern Pacific region. The Mediterranean-type climate of Ventura County, as with all of Southern California, is regulated by the strength and location of the semi-permanent high-pressure center over the Pacific Ocean and the moderating effect of the nearby oceanic heat reservoir. Local climate conditions are characterized by dry, warm summers; mild, wet winters; infrequent rainfall; moderate daytime onshore breezes; and relatively low humidity. Summertime weather is dominated by the movement and intensity of the semi-permanent high-pressure system that is normally centered several hundred miles southwest of California. In the spring, summer, and fall, the climate is heavily influenced by marine air. Light winds in the region allow marine air to regulate temperatures and airflow during these periods. In the winter, low-pressure weather systems originating in the northern Pacific Ocean bring clouds, wind, and rain into Southern California. Santa Ana winds, caused by high pressure in the high plateau region northeast of California, occur intermittently during winter and fall.

Precipitation in the region averages 18.4 inches per year and is highly variable throughout the seasons. Nearly all rainfall in Ventura County falls during the winter and early spring (December through March). Summer rainfall is uncommon and is normally restricted to scattered thundershowers in lower elevations, increasing to somewhat heavier activity in the mountains.

The Southern California area has been divided into several geographical air basins. The County of Ventura is located within the South Central Coast Air Basin (SCCAB), which comprises Ventura, Santa Barbara, and San Luis Obispo Counties. The County of Ventura experiences the mild, Mediterranean climate typical of Southern California. Average high temperatures in the Ventura area range from 68 to 82 degrees Fahrenheit and average low temperatures range from 41 to 57 degrees Fahrenheit.

There are four main meteorological conditions that affect air quality in the valley: a regional, semi-permanent high-pressure system; wind currents created or affected by local topography; Santa Ana winds; and seasonal storms. The dispersion of air pollutants in the Oxnard Plain Airshed is often restricted by frequent temperature inversions created by the semi-permanent high-pressure system. The temperature inversion is normally just below the summit areas of the surrounding mountains, which tend to trap air pollutants in a limited, near-surface atmospheric volume. From April through October, an onshore flow dominates the local wind patterns during daytime hours. This sea breeze flow is caused by surface heating from the sun. As the sun drops toward the horizon in the late afternoon, surface cooling precipitates a flow reversal or land breeze that lasts until just after sunrise. The combination of low wind speeds and strong inversion layers during this period results in high concentrations of pollutants near the ground. With the migration of the semi-permanent high-pressure system northward from October through March, frontal systems are allowed to move through the area bringing unstable conditions, and higher-speed northeasterly winds dilute and disperse pollutants that accumulate in coastal areas and inland valleys resulting in pollutant concentration reductions within the airshed. These storms account for much of the rainfall that Southern California receives annually and the periods of lower air pollutant concentrations.

Under undisturbed conditions, daily sea breeze/land breeze conditions are channeled by the local topography. During daytime conditions the westerly sea breeze pushes maritime air into the canyons and inland valleys, while nighttime drainage flows create an easterly flow that descends back through the coastal canyons and onto the coastal plain. The predominant wind direction March through November is northwesterly with west-southwesterly winds occurring December through February. Santa Ana conditions, characterized by hot, dry, easterly, high-speed winds, normally begin in the late summer lasting through October or mid-November. These winds are generated by high pressure that settles over the Great Basin in Nevada. The clockwise wind flow around these high-pressure centers push through the mountains located between the high desert and the Southern California basins where the winds gain speed passing through narrow mountain passes and increase in temperature due to compression as they descend to the lower coastal elevations.

Regional Setting

Regional Ambient Air Quality

Air emissions are generated by a variety of sources in the Ventura County. Motor vehicles traveling along local roadways are a major source. Agricultural activities such as diesel- and gasoline-powered equipment (e.g., tractors, trucks) and pesticide spraying also emit air pollutants. Finally, the residential land uses in proximity to the site also emit air pollutants in the form of household products and cleaners.

The topography and climate of Ventura County combine to make it an area of significant smog potential. Temperature inversions occur frequently at approximately 800 to 1,000 feet above mean sea level in Ventura County, and are most persistent during late summer and early fall. Temperature inversions occur when a warm air mass descends over a lower, cooler, moist marine air layer. The warm upper layer forms a cap over the marine layer and inhibits the air pollutants generated near the ground from dispersing upward. Light summer winds and the surrounding mountains further limit the horizontal dispersal of pollutants. Concentrating volumes of pollutants in this manner allows the summer sunlight to generate high levels of photochemical smog. In the winter, cool ground temperatures and very light winds can cause extremely low inversions and air stagnation, trapping pollutants during the late night and early morning hours.

The determination of whether a region's air quality is healthful or unhealthful is made by comparing contaminant levels in ambient air samples to national and state standards. California and the federal government have established health-based air quality standards for the following criteria air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), Sulphur dioxide (SO_2), respirable particulate matter (PM10), fine particulate matter (PM2.5), and lead (Pb). These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards, and in the case of PM10 and SO_2, much more stringent. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of the monitored pollutants and their effects on health are summarized in **Table 4.2-1, Ambient Air Quality Standards**.

Table 4.2-1
Ambient Air Quality Standards

Air Pollutant	Concentration/Averaging Time: State Standard (CAAQS)	Concentration/Averaging Time: Federal Primary Standard (NAAQS)	Most Relevant Health Effects
Ozone	0.09 ppm, 1-hour avg. 0.070 ppm, 8-hour avg.	0.075 ppm, 8-hour avg. (three-year average of annual 4th-highest daily maximum)	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage
Nitrogen Dioxide[1]	0.18 ppm, 1-hour avg. 0.030 ppm, annual arithmetic mean	0.100 ppm, 1-hour avg. (3-year avg. of the 98th percentile of the daily maximum 1-hour avg.) 0.053 ppm, annual arithmetic mean	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extrapulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration
Carbon Monoxide	20 ppm, 1-hour avg. 9.0 ppm, 8-hour avg.	35 ppm, 1-hour avg. (not to be exceeded more than once per year) 9 ppm, 8-hour avg. (not to be exceeded more than once per year)	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses
Sulfur Dioxide[2]	0.25 ppm, 1-hour avg. 0.04 ppm, 24-hour avg.	0.075 ppm, 1-hour avg. (three-year avg. of the 99th percentile)	Bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in person with asthma
Respirable Particulate Matter (PM10)	50 μg/m^3, 24-hour avg. 20 μg/m^3, annual arithmetic mean	150 μg/m^3, 24-hour avg. (not to be exceeded more than once per year on average over three years)	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
Fine Particulate Matter (PM2.5)	12 μg/m^3, annual arithmetic mean	35 μg/m^3, 24-hour avg. (three-year average of 98th percentile) 15 μg/m^3, annual arithmetic mean (three-year average)	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in the elderly
Lead[3]	1.5 μg/m^3, 30-day avg.	1.5 μg/m^3, calendar quarter 0.15 μg/m^3, three-month rolling average	(a) Increased body burden, and (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	Reduction of visual range to less than 10 miles at relative humidity less than 70 percent, 8-hour avg. (10:00 AM–6:00 PM)	None	Visibility impairment on days when relative humidity is less than 70%.

Air Pollutant	Concentration/Averaging Time: State Standard (CAAQS)	Concentration/Averaging Time: Federal Primary Standard (NAAQS)	Most Relevant Health Effects
Sulfates	25 µg/m³, 24-hour avg.	None	(a) Decrease in ventilatory function, (b) Aggravation of asthmatic symptoms, (c) Aggravation of cardio-pulmonary disease, (d) Vegetation damage, (e) Degradation of visibility, and (f) Property damage
Hydrogen Sulfide	0.03 ppm, 1-hour avg.	None	Odor annoyance
Vinyl Chloride[3]	0.01 ppm, 24-hour avg.	None	Known carcinogen

Source: South Coast Air Quality Management District, Final Program Environmental Impact Report for the 2007 Air Quality Management Plan*, (2007) Table 3.1-1, p. 3.1-3.*

California Ambient Air Quality Standards (CAAQS); National Ambient Air Quality Standards (NAAQS).

µg/m³ = microgram per cubic meter; ppm = parts per million by volume.

[1] *On January 25, 2010, the US EPA promulgated a new 1-hour NO_2 standard. The new 1-hour standard is 0.100 parts per million (188 micrograms per cubic meter [µg/m³]) and became effective on April 12, 2010.*

[2] *On June 3, 2010, the US EPA issued a new 1-hour SO_2 standard. The new 1-hour standard is 0.075 parts per million (196 µg/m³). The US EPA also revoked the existing 24-hour and annual standards citing a lack of evidence of specific health impacts from long-term exposures. The new 1-hour standard becomes effective 60 days after publication in the Federal Register.*

[3] *CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.*

Air quality of a region is considered to be in attainment of state standards if the measured ambient air pollutant levels for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM10, PM2.5, and visibility-reducing particles do not exceed the standards, and all other standards are not equaled or exceeded at any time in any consecutive three-year period.

Local Ambient Setting

Local Ambient Air Quality

To identify ambient concentrations of the criteria pollutants, the VCAPCD operates air quality monitoring stations throughout Ventura County. These stations are located in El Rio, Ojai, Piru, San Nicolas Island, Simi Valley, Thousand Oaks, and Ventura. The monitoring stations located closest to the proposed project site and most representative of air quality within the project area are the Ojai and El Rio stations. Both stations monitor O_3 and PM2.5 while the El Rio monitoring station also monitors NO_2 and PM10. As the El Rio station provides more complete data, it was chosen as the best source of ambient air quality. CO monitoring was eliminated in Ventura County in 2004 as part of network changes in response to the proposed National Monitoring Strategy set forth by the US EPA. The decision to eliminate CO monitoring was approved by both the US EPA and CARB. Ventura County has met the CO standard

for some time now. In addition, SO_2 monitoring in Ventura County was eliminated in 2004 and ambient concentrations for lead and sulfate are well below the state standards.[1]

A summary of the monitored values for O_3, NO_2, PM10, and PM2.5 at the El Rio monitoring station for the past three years is presented in **Table 4.2-2, El Rio Air Monitoring Station Ambient Pollutant Concentrations**. The values show that the El Rio monitoring station has registered values above state standards for O_3 and PM10.

Table 4.2-2
El Rio Air Monitoring Station Ambient Pollutant Concentrations

Pollutant	Standards[1]	Year		
		2010	2011	2012
OZONE (O_3)				
Maximum 1-hour concentration monitored (ppm)		0.083	0.081	0.082
Maximum 8-hour concentration monitored (ppm)		0.072	0.068	0.065
Number of days exceeding state 1-hour standard	0.09 ppm	0	0	0
Number of days exceeding state 8-hour standard	0.070 ppm	1	0	0
Number of days exceeding federal 8-hour standard[2]	0.075 ppm	0	0	0
NITROGEN DIOXIDE (NO2)				
Maximum 1-hour concentration monitored (ppm)		0.060	0.090	0.057
Annual average concentration monitored (ppm)		0.007	0.007	0.007
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
RESPIRABLE PARTICULATE MATTER (PM10)				
Maximum 24-hour concentration monitored ($\mu g/m^3$)		59.9	50.6	56.3
Annual average concentration monitored ($\mu g/m^3$)		21.7	22.2	21.0
Number of samples exceeding state standard	50 μg/m3	1	1	1
Number of samples exceeding federal standard	150 μg/m3	0	0	0
FINE PARTICULATE MATTER (PM2.5)				
Maximum 24-hour concentration monitored ($\mu g/m^3$)		21.4	18.3	30.8
Annual average concentration monitored ($\mu g/m^3$)		8.4	8.8	8.7
Number of samples exceeding federal standard	35 μg/m3	0	0	0

Source: California Air Resources Board, "Air Quality Data Statistics," http://www.arb.ca.gov/adam/. 2010.
NA = not available
[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air ($\mu g/m^3$), or annual arithmetic mean (aam).*
[2] *The 8-hour federal O_3 standard was revised from 0.08 ppm to 0.075 ppm in March 2008. The statistics shown are based on the 2008 standard of 0.075 ppm.*

4.2.3 REGULATORY FRAMEWORK

Air quality within the South Central Coast Air Basin (SCCAB) is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as

1 Ventura County Air Pollution Control District, *2009 Ambient Air Monitoring Network Plan*, (2009).

individually, to improve air quality through legislation, regulations, planning, policymaking, education, and other programs. The agencies primarily responsible for improving the air quality within the SCCAB (Ventura County Area) include the US Environmental Protection Agency (EPA), CARB, Southern California Association of Governments (SCAG), VCAPCD, and the City of Ventura.

Federal

US Environmental Protection Agency

The US EPA is responsible for enforcing the federal Clean Air Act (CAA) and the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for seven criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM10), fine particulate matter (PM2.5), and lead (Pb). The prescribed levels are considered to be the maximum levels of ambient (background) air pollutants determined to be safe (with an adequate margin of safety) for the public health and welfare.

The 1990 CAA Amendments were enacted to better protect the public's health and create more efficient methods of lowering pollutant emissions. The major areas of improvement addressed in the amendments include air basin designations, automobile/heavy-duty engine emissions, and toxic air pollutants. The US EPA designates air basins as being in attainment or nonattainment for each of the seven criteria pollutants. Nonattainment air basins are ranked (marginal, moderate, serious, severe, or extreme) according to the degree of nonattainment. An air basin in nonattainment is then required to submit a State Implementation Plan (SIP) that describes how the state will achieve federal standards by specified dates. The Ventura County portion of the SIP consists of the *Ventura County Air Quality Management Plan* (discussed later in this EIR section) and the *Ventura County Air Pollution Control District Rules and Regulations.* The extent of a given SIP depends on the severity of the air quality condition within the state or specific air basin. The status of the Ventura County portion of the SCCAB with respect to attainment with the NAAQS is summarized in **Table 4.2-3, National Ambient Air Quality Standards and Status – South Central Coast Air Basin (Ventura County)**.

In response to rapid population growth and the associated rise in motor vehicle operations, the 1990 CAA Amendments addressed tailpipe emissions from automobiles, heavy-duty engines, and diesel fuel engines. The amendments established more stringent standards for hydrocarbons, nitrogen oxides (NO_X), and CO emissions in order to reduce the ozone and carbon monoxide levels in heavily populated areas. Under the 1990 Amendments, new fuels were required to be less volatile, contain less sulfur (particular to diesel fuels), and have higher levels of oxygenates (oxygen-containing substances to improve fuel combustion). The US EPA also has regulatory and enforcement jurisdiction over emission sources beyond

state waters (outer continental shelf), and sources that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. Due to the lack of a substantial reduction in toxic emissions under the 1977 CAA, the 1990 CAA Amendments listed 189 hazardous air pollutants (HAPs), which are carcinogenic, mutagenic, and/or reproductive toxicants, to be reduced. This program (the 1990 CAA Amendments) involves locating all major (greater than 10 tons/year) and area emission sources and implementing Maximum Achievable Control Technology (MACT) to reduce HAP emissions and their associated health impacts.

Table 4.2-3
National Ambient Air Quality Standards and Status
South Central Coast Air Basin (Ventura County)

Pollutant	Designation/Classification
Ozone (O_3)	Nonattainment/Serious
Carbon Monoxide (CO)	Attainment/Unclassifiable
Nitrogen Dioxide (NO_2)	Attainment/Unclassifiable
Sulfur Dioxide (SO_2)	Attainment/Unclassifiable
Respirable Particulate Matter (PM10)	Attainment/Unclassifiable
Fine Particulate Matter (PM2.5)	Attainment/Unclassifiable
Lead (Pb)	Attainment

Source: United States Environmental Protection Agency, "Region 9: Air Programs, Air Quality Maps," http://www.epa.gov/region9/air/maps/maps_top.html. 2013.

General Conformity

In November 1993 the US EPA promulgated regulations known as the General Conformity Rule to ensure that federal actions do not cause or contribute to a new or existing violation of NAAQS, or delay attainment of NAAQS. The General Conformity Rule is based on the CAA, and requires that a federal agency must demonstrate that every action that it undertakes, approves, permits, or supports will conform to the appropriate SIP. A project located in an area covered by a SIP can be shown to conform in the following ways:

- By showing that the emissions increases caused by an action are included in the SIP;
- By demonstrating that the state agrees to include emissions increases in the SIP;
- By offsetting the action's emissions in in the same area or a nearby area;
- Through mitigation to decrease the action's emissions; or

- Through an air quality modeling demonstration in some circumstances.

Some emissions are excluded from General Conformity determination, including emissions subject to a New Source Review and emissions for which the responsible Agency has no ability to exercise continuing program responsibility. Additionally, if the emissions resulting from an action are below *de minimis* levels no conformity determination is required. The *de minimis* levels in a serious nonattainment region for ozone are 50 tons per year of NO_x and volatile organic compound (VOC) emissions, i.e., actions resulting in less than 50 tons per year of NO_x or VOC emissions in Ventura County would not require a conformity determination.

State

California Air Resources Board

The California Air Resources Board (CARB), a branch of the California Environmental Protection Agency (Cal/EPA), oversees air quality planning and control throughout California. It is primarily responsible for ensuring the implementation of the California Clean Air Act (CCAA), responding to federal CAA requirements, and regulating emissions from motor vehicles and consumer products within the state. In addition, CARB also sets health-based air quality standards and control measures for toxic air contaminants (TACs). However, CARB's research primarily focuses on automobile emissions, as they are the largest contributor to air pollution in California. CARB establishes new standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The CCAA established a legal mandate for air basins to achieve the California ambient air quality standards by the earliest practicable date. These standards apply to the same seven criteria pollutants as the federal CAA and also include sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. State standards are more stringent than the federal standards, and in the case of PM10 and SO_2, far more stringent.

CARB supervises and supports the regulatory activities of local air quality districts, and monitors ambient air quality itself. *Health and Safety Code* Section 39607(e) requires CARB to establish and periodically review area designation criteria. These designation criteria provide the basis for CARB to designate areas of the state as "attainment," "nonattainment," or "unclassified" according to state standards. In addition, *Health and Safety Code* Section 39608 requires CARB to use the designation criteria to classify areas of California and to annually review those area designations. CARB makes area designations for 10 criteria pollutants: O_3, CO, NO_2, SO_2, PM10, PM2.5, sulfates, lead, hydrogen sulfide, and visibility-reducing particles. The status of the SCCAB with respect to attainment under the California

Ambient Air Quality Standards (CAAQS) is summarized in **Table 4.2-4, California Ambient Air Quality Standards and Status – South Central Coast Air Basin (Ventura County)**.

Table 4.2-4
California Ambient Air Quality Standards and Status
South Central Coast Air Basin (Ventura County)

Pollutant	Designation/Classification
Ozone (O_3)	Nonattainment[1]
Carbon Monoxide (CO)	Attainment
Nitrogen Dioxide (NO_2)	Attainment
Sulfur Dioxide (SO_2)	Attainment
Respirable Particulate Matter (PM10)	Nonattainment
Fine Particulate Matter (PM2.5)	Nonattainment
Lead (Pb)[2]	Attainment
Sulfates (SO_4)	Attainment
Hydrogen Sulfide (H_2S)	Unclassified
Vinyl Chloride[2]	Unclassified
Visibility-reducing Particles	Unclassified

Source: California Air Resources Board, "Area Designations Map/State and National," http://www.arb.ca.gov/desig/adm/adm.htm. 2013.

[1] *CARB has not issued area classifications based on the new state 8-hour standard. The previous classification for the 1-hour ozone standard was Severe.*

[2] *CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined.*

County

Local governments, such as the County of Ventura, have the authority and responsibility to reduce air pollution through their police power and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in the Air Quality Management Plan (AQMP). The AQMP assigns local governments certain responsibilities to assist the VCAPCD in meeting air quality goals and policies. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies, and implementation measures in its general plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality by requiring such improvements as bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with California Environmental Quality Act (CEQA) requirements and the CEQA review process, local governments assess air quality impacts,

require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.

Ventura County Air Pollution Control District

The management of air quality in Ventura County is the responsibility of the VCAPCD. The VCAPCD is responsible for bringing air quality in the County into conformity with federal and state air quality standards. Specifically, the VCAPCD has the responsibility to monitor ambient air pollutant levels throughout the County and to develop and implement attainment strategies to ensure that future emissions will be within federal and state standards. These attainment strategies form the basis for the AQMP, which is continuously updated to reflect changes in control strategies mandated by updates of the federal and state CAAs.

To implement these strategies, the VCAPCD Board has adopted specific rules and regulations to limit emissions from stationary and mobile sources and activities within the County. These rules and regulations identify specific pollution-reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of criteria pollutants, but also emissions of TACs and HAPs. The rules and regulations are subject to ongoing refinement by the VCAPCD. Enforcement of these rules and regulations is carried out through a permitting process that monitors emissions generated by stationary sources, such as power plants, manufacturing operations, and large and small businesses, that use products that release ozone-forming precursors or TACs into the atmosphere. The proposed project would be subject to the VCAPCD rules and regulations to reduce project-related emissions and minimize potential air quality impacts.

In addition to permitting stationary sources, the VCAPCD Air Quality Planning and Evaluation Section administers the CEQA program for Ventura County, which is used to review and comment on the adequacy of environmental documents such as this EIR. It recommends thresholds for determining whether projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. The *Ventura County Air Quality Assessment Guidelines*, adopted in October 2003, is the most up-to-date document that local government agencies and consultants use to prepare environmental documents for projects subject to CEQA. This document describes the criteria and methods required to mitigate construction and operational emissions from planned developments to ensure compliance with the VCAPCD AQMP.

VCAPCD is responsible for limiting the amount of emissions that can be generated throughout Ventura County by various stationary and area sources. Specific rules and regulations have been adopted by the

VCAPCD that limit the allowed amount of emissions generated by various uses and activities, and that identify specific pollution-reduction measures that must be implemented for various uses and activities.[2]

Stationary emission sources subject to these rules are generally regulated through VCAPCD's permitting process. Some activities associated with the project may be subject to VCAPCD rules and regulations. With regard to project development, the following rules may apply:

- **Rule 10 (Permits Required) –** This rule requires permits to construct and operate new sources. This rule would apply during construction and operation of the proposed project.
- **Rule 50 (Opacity) –** This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the proposed project, specifically grading activities.
- **Rule 51 (Nuisance) –** This rule prohibits any person from discharging air contaminants or any other material from a source that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or the public, or which endangers the comfort, health, safety, or repose of a considerable number of persons or the public.
- **Rule 55 (Fugitive Dust) –** This rule sets restrictions on activities, including grading, demolition, and construction that could potentially cause visible dust emissions.

Ventura County Air Quality Management Plan

As discussed previously, the federal and state CAAs require preparation of plans to reduce air pollution to acceptable levels. The VCAPCD has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs), the most recent of which is the 2007 AQMP and was approved by the VCAPCD Board on May 13, 2008. The 2007 AQMP is designed to comply with the provisions of the 1990 amendments to the federal CAA and the 1988 CCAA, accommodate growth, reduce the levels of pollutants within the County, and identify a control strategy to reduce ozone-forming emissions from mobile and stationary sources. Based upon the emission control strategies proposed in the 2007 AQMP, it was predicted that Ventura County would attain the federal 8-hour ozone standard by the year 2013.

The 2007 AQMP aimed to achieve the federal 8-hour ozone standard by June 15, 2013. Ventura County was previously designated a moderate nonattainment area for the 8-hour ozone standard. Typically, moderate nonattainment areas are required to achieve attainment by June 15, 2010; however, VCAPCD and CARB requested that the County be redesignated a "serious" nonattainment area in order to receive a new attainment date of June 15, 2013. Accordingly, the US EPA redesignated Ventura County as a "serious" nonattainment area in May 2012. Although serious nonattainment areas are required to

2 Ventura County Air Pollution Control District, Rules and Regulations.

implement more stringent control measures than a moderate nonattainment area, the 2007 AQMP was prepared to satisfy the CAA planning requirements for serious federal 8-hour nonattainment areas. Control programs to achieve the federal 8-hour ozone standard described in the 2007 AQMP focus on mobile sources, consumer products, and pesticides.

Southern California Association of Governments

SCAG is a council of governments for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. As a regional planning agency, SCAG serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG also serves as the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews projects to analyze their impacts on SCAG's regional planning efforts.

Although SCAG is not an air quality management agency, it is responsible for several air quality planning issues. Specifically, as the designated Metropolitan Planning Organization (MPO) for the Southern California region, it is responsible for providing current population, employment, travel, and congestion projections for regional air quality planning efforts and for determining conformity with the applicable air quality management plan, pursuant to Section 176(c) of the 1990 CAA Amendments. It is required to quantify and document the demographic and employment factors influencing expected transportation demand, including land use forecasts. Pursuant to *California Health and Safety Code* Section 40460(b), SCAG is also responsible for preparing and approving portions of the basin's air quality management plans relating to demographic projections, and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. Though the most recent population, housing, and transportation measures and strategies are contained in the *2008 Regional Transportation Plan*, the current air quality management plan was adopted in May 2008 and was based on the 2008 SCAG *Integrated Growth Forecast.*

4.2.4 IMPACT ANALYSIS

Thresholds of Significance

In accordance with *State CEQA Guidelines* (Appendix G) and as stated in the *VCAPCD Air Quality Assessment Guidelines*, the following significance threshold criteria should be used to evaluate the potential air quality impacts of proposed projects within the City of Camarillo and Ventura County. The project would have a significant air quality impact if it would:

- conflict with or obstruct implementation of the applicable air quality plan,

- violate any air quality standard or contribute substantially to an existing or projected air quality violation,
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors),
- expose sensitive receptors to substantial pollutant concentrations, or
- create objectionable odors affecting a substantial number of people.

Ozone Precursors

The VCAPCD has issued thresholds for determining the level of significance for project-specific developments within Ventura County, with separate thresholds for the Ojai Valley planning area. The project site is within the Ojai Valley planning area, so those thresholds will be applied. Projects exceeding any of the criteria in the long term are considered to have significant impacts. The following are ROC and NO_X thresholds that the VCAPCD has determined will individually and cumulatively jeopardize attainment of the federal ozone standard, which will result in a significant adverse impact on air quality in the Ojai Valley:

- Reactive Organic Compounds (ROC): 5 pounds per day.
- Nitrogen Oxides (NO_X): 5 pounds per day.
- A project which may cause an ambient air quality standards (state or federal) to be exceeded, or makes a substantial contribution to an already existing air quality standard. Substantial is defined as making measurably worse an existing or federal ambient air quality standard that is exceeded.

Toxic Air Contaminants

The *VCAPCD Guidelines* include significance thresholds for evaluating the health effects of TACs. The VCAPCD suggests the following thresholds in determining the significance of TACs from the construction and operation of proposed projects:

- If the proposed project would result in a lifetime probability of contracting cancer that is greater than 10 in 1 million (10×10^{-6}), and;
- If the proposed project would cause a Health Hazard Index of 1 or greater when evaluating for non-carcinogenic effects of TACs.

Odors

The VCAPCD Guidelines recommend that a proposed project include an assessment of the potential to cause a public nuisance by subjecting surrounding land uses to objectionable odors. A public nuisance is defined by VCAPCD Rule 51 (Nuisance) as "such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."[3] The assessment also should evaluate the potential for a proposed project to be impacted by objectionable odors from nearby existing or proposed land uses. Any project that has the potential to create a public nuisance by subjecting members of the public to objectionable odors should be deemed to have a significant odor impact.

Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus Coccidioides immitis. Infection is caused by inhalation of Coccidioides immitis spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil and is found in the southwestern United States. In its primary form, symptoms appear as a mild upper respiratory infection, acute bronchitis, or pneumonia. The most common symptoms are fatigue, cough, chest pain, fever, rash, headache, and joint aches, although 60 percent of people infected are asymptomatic and do not seek medical attention. In the remaining 40 percent, symptoms range from mild to severe.

There is no recommended threshold for a significant San Joaquin Valley Fever impact. However, the following factors may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the top soil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).

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3 Ventura County Air Pollution Control District, *Ventura County Air Quality Assessment Guidelines*, (2003) 6-10.

- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

The lead agency should consider the factors above that are applicable to the project or the project site. Based on these or other factors, if a lead agency determines that project activities may create a significant Valley Fever impact, the VCAPCD recommends that the lead agency consider the Valley Fever mitigation measures listed in the VCAPCD Guidelines. These mitigation measures focus on fugitive dust control to minimize fungal spore entrainment, as well as minimizing worker exposure.

Cumulative-level Air Quality Significance Thresholds

The *VCAPCD Guidelines* recommend the following thresholds for determining the level of significance for cumulative long-term impacts within Ventura County:

- Any individual general development project located outside the Ojai Valley Planning Area and Ventura 1 Non-Growth area capable of emissions of 25 pounds per day of ROC and NO_x both individually and cumulatively have a significant impact on air quality in the County.
- Any cumulative project group which may cause an ambient air quality standard (state or federal) to be exceeded, or makes a substantial contribution to an already exceeded air quality standard.
- Any individual project with emissions greater than 2 pounds per day of ROC or 2 pounds per day of NO_x that is found to be inconsistent with the AQMP will have a significant cumulative air quality impact.
- Any General Plan Amendment or revision which would provide directly or indirectly for increased population growth above that forecasted in the most recently adopted AQMP will have a significant air quality impact.

Methodology

Emissions modeling was conducted using the California Emissions Estimator Model (CalEEMod) and information provided in the CalEEMod *User's Guide*.[4] CalEEMod is a program that calculates air pollutant emissions from land use sources and incorporates the CARB on-road and off-road vehicle emissions models. The model also incorporates factors specific to air basins in California, such as vehicle fleet mixes. Air quality impacts are also estimated based on information and estimated activity levels of project operation. The potential for the project to cause health impacts is assessed in accordance with land

[4] South Coast Air Quality Management District, *California Emissions Estimator Model User's Guide*, (2011). The model and User's Guide may be downloaded from the following website: http://www.caleemod.com.

use planning recommendations described in CARB's *Air Quality and Land Use Handbook*.[5] The purpose of the *Air Quality and Land Use Handbook* is to provide information that will help keep vulnerable populations out of harm's way with respect to nearby sources of air pollution. Other sources of information relied upon are provided as footnote citations where applicable.

Analysis, Mitigation Measures, and Residual Impacts

Construction

Emissions and Fugitive Dust

During grading and construction of the project, air emissions (ROC and NO_x) would be generated by heavy-duty construction vehicles, construction worker vehicles, and energy use during the construction phase. In addition to grading and construction vehicle emissions, fugitive dust (PM10 and PM2.5) would also be generated during grading and construction activities. While much of this airborne dust would settle out of, or near, the development area, smaller particles would remain in the atmosphere, increasing existing particulate levels within the surrounding area. Regular watering of unpaved areas, which is one of the VCAPCD recommended measures, can reduce expected fugitive dust emission by 50 percent.[6] With the implementation of the other recommended measures as identified by the VCAPCD, fugitive dust would be further reduced.

The construction period for the project is anticipated to begin in April 2015 and last approximately eight months. The construction schedule and equipment list for each activity was input to CalEEMod. Construction equipment was assumed to be stored on-site in the staging areas during construction to minimize disruption of the surrounding land uses.

Table 4.2-5, **Estimated Construction Emissions**, identifies estimated daily emissions that are associated with construction. These estimates are based on the expected location, size, and development of the project. The analysis assumes that all of the construction equipment and activities would operate continuously for 8 hours each day and that activities (e.g., demolition, grading, construction, and asphalt paving) would overlap, as indicated in the construction schedule. The values presented in **Table 4.2-5** represent the maximum daily emissions occurring at any time during the entire construction period.

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5 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, (2005). The document may be downloaded from the following website: http://www.arb.ca.gov/ch/landuse.htm.

6 US Environmental Protection Agency, *Compilation of Air Emissions Factors, Volume I: Stationary and Point Sources*, AP-42, (1985).

Table 4.2-5
Estimated Construction Emissions

Construction Year	Emissions in Pounds per Day					
	ROC	NO_x	CO	SO_2	PM10	PM2.5
2015	7.59	88.25	43.03	0.09	3.94	3.62

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix B**.*
Assumes compliance with VCAPCD's fugitive dust control measures.

The primary construction-related source of NO_x and ROC emissions is heavy construction equipment. Construction emissions of NO_x and ROC are not counted toward the adopted significance thresholds because VCAPCD considers them temporary. VCAPCD recommends mitigation if the proposed project could exceed the daily threshold of 25 pounds per day.

The VCAPCD does not identify construction air quality impacts as the cause of significant air quality impacts assuming standard construction control measures, as called for by the district, are implemented during construction activities. Therefore, although short-term construction impacts would be considered a nuisance, with the implementation of recommended construction control measures, construction air quality impacts would be considered less than significant.

Valley Fever

Some health problems, particularly those of the eye and respiratory tract may be aggravated by fugitive dust. Such health problems include Coccidioidomycosis (also known by its common name, Valley Fever). Valley fever is contracted through breathing spores that become airborne through disturbance of the soil. However, Ventura County is not recognized as an area where Coccidioidomycosis is highly endemic.[7] The only large-scale outbreak in the County occurred in Simi Valley between January 24 and March 15, 1994, following the Northridge earthquake due to uncontrolled dust clouds created by landslides.[8] Consequently, potential impacts to on- and off-site sensitive receptors are considered to be less than significant.

7 Eileen Schneider and others, "A Coccidioidomycosis Outbreak Following the Northridge, Calif. Earthquake," *Journal of American Medicine* Vol. 277, No. 11 (March 19, 1997): 904.

8 Eileen Schneider and others, "A Coccidioidomycosis Outbreak Following the Northridge, Calif. Earthquake," *Journal of American Medicine* Vol. 277, No. 11 (March 19, 1997): 904.

Operation

The proposed project would consist of new flood conveyance facilities, with no substantial operational emissions. While there would be occasional vehicle trips in order to provide inspections and/or maintenance, there would otherwise be no new traffic associated with the proposed project. Likewise, there are no new stationary or area sources of emissions included with the proposed project. Therefore, the project would have a less than significant impact with respect to operational emissions.

Carbon Monoxide Concentrations

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed state standards are termed CO "hotspots." The VCAPCD recommends the use of CALINE4, a dispersion model developed by Caltrans for predicting CO concentrations near roadways, as the preferred method of estimating pollutant concentrations at various locations. CALINE4 adds roadway-specific CO emissions calculated from peak traffic volumes to ambient CO air concentrations. However, as mentioned, the proposed project would not result in any new operational vehicle trips, and would not cause any additional traffic congestion. Based on this analysis, the proposed project would not cause or contribute to the formation of CO hotspots at impacted intersections and impacts would be less than significant.

Toxic Air Pollutants

The proposed project would not include any new sources of TACs, nor would it result in any new residents or other potential receptors that could be exposed to existing sources of TACs in the area. As a result, the proposed project would result in a less than significant impact to on- and off-site sensitive receptors with respect to TACs.

Odors

Facilities such as wastewater treatment plants, sanitary landfills, petroleum refineries, and chemical manufacturing plants are the typical types of land uses that would emit objectionable odors. The offensiveness and degree of odor impacts ultimately depends on the sensitivity of the receptors exposed to the odor and the magnitude of the odorous emissions. The proposed project would not result in any substantial odorous emissions and impacts to on- and off-site sensitive receptors would be less than significant.

Level of Significance before Mitigation

Impacts would be less than significant.

Mitigation Measures

4.2-1: 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:

- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the areas to be graded or excavated before grading or excavation operations commences. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
- All trucks shall be required to cover their loads as required by *California Vehicles Code* Section 23114.
- All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization material, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally safe dust suppressants to prevent excessive fugitive dust.
- Signs limiting traffic to 15 miles per hour or less shall be posted on-site.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or

on-site. The site superintendent/supervisor shall use discretion in conjunction with the VCAPCD in determining when winds are excessive.

- A properly functioning and well-maintained track-out control device(s) shall be installed to prevent track-out of soil onto paved public roads.
- Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day if visible soil material is carried over to adjacent streets and roads.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

4.2-2: During construction contractors shall comply with the following measures, as feasible, to reduce NO_x and ROC from heavy equipment as recommended by the VCAPCD in its *Ventura County Air Quality Assessment Guidelines*:

- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturer's specifications.
- Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.
- All off-road 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 VCWPD.

Level of Significance After Mitigation

Impacts would be less than significant.

4.2.5 CUMULATIVE IMPACTS

Operational

The proposed project would not generate substantial emissions during operation, and would not exceed the VCAPCD's thresholds for ROC and NO_x. Consequently, the project's impacts would be considered both individually and cumulatively less than significant without mitigation.

AQMP Consistency

As discussed earlier in this air quality impact analysis, the 2007 AQMP is designed to accommodate growth, to reduce the high levels of pollutants within the County, and to identify a control strategy representing the full implementation of known technology to reduce ozone-forming emissions from mobile and stationary sources.

According to the VCAPCD, inconsistent projects are usually those which cause the jurisdiction's AQMP population projections to be exceeded by a substantial amount, or for an indefinite period of time.[9] For residential projects, a finding of inconsistency would be made if the project would cause the area in which it would be located to exceed the AQMP population forecasts.[10] Inconsistency is considered a significant cumulative air quality impact.

The proposed project would not result in any new residents or additional traffic. It would not have any effect on the County's population or traffic, either as it currently exists or as projected. Therefore the proposed project is consistent with both County and VCAPCD planning efforts, and would have a less than significant cumulative impact.

9 Ventura County Air Pollution Control District. *Ventura County Air Quality Assessment Guidelines*, October, 2003.

10 VCAPCD. *Ventura County Air Quality Assessment Guidelines*, October, 2003, p. 4-2.