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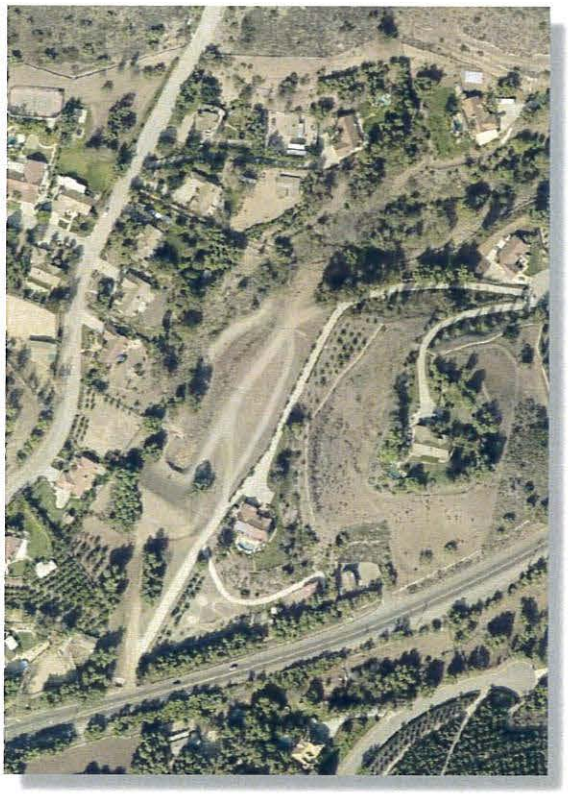
MITIGATED NEGATIVE DECLARATION

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT

Project No. 86903



Lead Agency:

Ventura County Watershed Protection District

800 S. Victoria Avenue

Ventura, California, 93009

Contact: Mr. Tyler Barns 805/654-2064

Prepared by:

Padre Associates, Inc.

1861 Knoll Drive

Ventura, CA 93003

March 2019

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PROJECT DESCRIPTION

The Santa Rosa Road No. 2 Debris Basin dam was constructed by the U.S. Soil Conservation Service in 1957 solely for debris collection (not storm water detention) and is currently maintained by the Ventura County Watershed Protection District (District). It serves a watershed area of 1,101 acres and is estimated to experience a peak inflow of 1,274 cubic feet/second (cfs) during a 100-year storm event. Accumulated sediment has been removed from the No. 2 Debris Basin eight times since it was constructed, with a total sediment removal of 18,500 cubic yards and an average annual debris accumulation of 318 cubic yards.

Development of the watershed (primarily rural residential) since 1957 has reduced the debris yield estimates for a 100-year storm event from approximately 12,500 cubic yards to 5,424 cubic yards (West Consultants 2016). Due to the low rates of observed debris collection, the No. 2 Debris Basin has very limited functionality and does not meet current District standards. Therefore, the debris basin is proposed for removal.

The proposed project consists of removal of the No. 2 Debris Basin, including the earthen dam, emergency spillway, intake and outlet piping and related facilities. Approximately 7,700 cubic yards of earth material would be excavated and re-used on site to create a 14-foot-wide flow channel and banks varying from a 2:1 to 2.5:1 (horizontal:vertical) slope. All earth material would remain on site with no export. Proposed No. 2 Debris Basin decommissioning comprises the following tasks:

- Removal of the existing earthen dam and associated fill, and distribution and compaction of this earth material within the project site to produce a low-flow channel and gradually sloping banks tying into existing topography.
- Removal of the outlet pipe and bulkhead outlet structure, primary intake pipe with trash rack and baffle, and the bleeder/riser intake pipe with pipe collar, concrete encasement, and perforated metal pipe.
- Repairing and extending of the existing down drain that connects a storm drain to the basin.
- Revegetation of the re-contoured slopes to reduce erosion with native plants. Trees removed during decommissioning would be replaced with native tree container stock.
- Extension of the existing box culvert that crosses beneath Santa Rosa Road and re-construction of the transition structure to provide space to relocate the Bridlewood Trail.
- Re-alignment of the Bridlewood Trail through the project site across the proposed box culvert extension to the east side of the Arroyo Santa Rosa Tributary.

Debris/sediment removal would be terminated, and regular maintenance of the project site would not be required. Establishment of the erosion control plantings would continue for 2 years after decommissioning, potentially including weeding and irrigation system repairs (and irrigation removal after plant establishment).

The initiation of decommissioning is planned for September 2019. Work in the flow channel would be conducted in the dry season to avoid surface water. The decommissioning period would be approximately three and a half months in duration (approximately 70 work days).

PROJECT LOCATION

The project site comprises the existing flood control easement held by the District along the Arroyo Santa Rosa Tributary, which empties into Arroyo Santa Rosa approximately 2.1 stream miles downstream of the No. 2 Debris Basin (Figure 1). The Santa Rosa Road No. 2 Debris Basin is located east of Vista Arroyo Drive in the Santa Rosa Valley within unincorporated Ventura County, approximately 1.2 miles south of the City of Moorpark and 4.6 miles east of the City of Camarillo.

PROJECT PROPONENT AND LEAD AGENCY

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

Contact: Tyler Barns (805/654-2064)

PROPOSED FINDINGS

The District has prepared this Mitigated Negative Declaration (MND) pursuant to Sections 15070-15075 of the State Guidelines for the Implementation of the California Environmental Quality Act and the County of Ventura Administrative Supplement to the State CEQA Guidelines. This Mitigated Negative Declaration documents the District's finding that there are no significantly adverse unavoidable impacts associated with the proposed project, and the project does not require the preparation of an Environmental Impact Report (EIR). The attached Initial Study identifies and discusses potential impacts, mitigation measures and residual impacts for identified subject areas.

PUBLIC COMMENTS

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, the District will accept written comments on the adequacy of the information contained in the Draft MND. Please make sure that written comments reach the District's office by 5:00 p.m. on **April 22, 2019**, the close of the public review period. As a result of this project, potentially significant, but mitigable effects on the environment are anticipated in the areas of biological resources, archaeological resources, and recreation. After the close of the public comment period, the District will make appropriate changes to the document pursuant to the comments received and will release a Final MND.

Due to the non-complex nature of this project, a separate environmental hearing will not be held. However, public testimony will be accepted at the MND approval hearing before the Board of Supervisors. For information regarding scheduling of this hearing, please contact Tyler Barns (805/654-2064)

MITIGATION MEASURES

The following mitigation measures have been integrated into the proposed project, and would reduce impacts to a level of less than significant.

Air Quality

Air pollutant emissions reduction measures recommended by the Ventura County Air Pollution Control District (APCD) Air Quality Assessment Guidelines (revised 2003) have been incorporated into the project including:

- 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 area to be graded or excavated before commencement of grading or excavation operations. 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 Vehicle Code §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 materials, 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 shall be seeded and watered until plant growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
- Signs shall be posted on site limiting traffic to 15 miles per hour or less.
- 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 his/her discretion in conjunction with the APCD in determining when winds are excessive.

- 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, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.
- Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off-site.
- All project construction and site preparation operations shall be conducted in compliance with all applicable Ventura County APCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), Rule 55 (Fugitive Dust) and Rule 10 (Permits Required).
- Signs displaying the APCD complaint line telephone number (805/645-1400 during business hours; 805/654-2797 after hours) shall be posted in a prominent location visible to the public.

Biological Resources

The following measure has been incorporated into the project to avoid take of migratory birds associated with decommissioning activities:

- Should decommissioning activities be planned during the bird breeding season (February 15 to September 1), a qualified biologist shall conduct a field survey to determine if breeding migratory birds are present. Should active nests of protected migratory birds be found within the work area, decommissioning activities shall be postponed until the young have fledged or the nest is abandoned.

Implementation of the above measure would minimize project-related disturbance of active bird nests, which would reduce impacts to migratory birds to a level of less than significant.

Archaeological Resources

The following mitigation measures have been incorporated into the project to prevent significant impacts, should resources be found during project-related earthwork:

- Should any buried archaeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.

- If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

Implementation of these measures would minimize potential adverse effects to discovered cultural resources and human remains, which would reduce archaeological resources impacts to a level of less than significant.

Recreation

The following measures have been incorporated into the project to minimize the temporary loss of use of the Bridlewood Trail within the project area:

- The project schedule (projected work start and end dates) shall be provided to the Bridlewood Homeowners Association at least two weeks prior to beginning decommissioning activities.
- Signage shall be provided on the Trail both north and south of the project site at least one week prior to the initiation of decommissioning activities, notifying Trail users of planned temporary Trail closures, and the alternative Trail route along Vista Arroyo Drive.
- Vista Arroyo Drive shall be available as an alternative temporary detour equestrian trail route from Santa Rosa Road north to the existing off-street connector trail just northeast of Saddleridge Court (Figure 5). Note that Vista Arroyo Drive is considered an existing trail in the Santa Rosa Valley Trail Master Plan.

Implementation of the above measures would minimize temporary loss of use of the Bridlewood Trail through notification, signage and designation of an alternative trail route, which would reduce project-related recreation impacts to a level of less than significant.

MITIGATION MONITORING AND REPORTING

Section 15074(d) of the State Guidelines for the Implementation of the California Environmental Quality Act and Section 21081.6 of the Public Resources Code, requires the lead agency (District) to adopt a monitoring program to ensure mitigation measures are complied with during implementation of the project. In compliance with these requirements, a Mitigation Monitoring Program Implementation Table is provided below. This Table identifies the timing, monitoring methods, responsibility and compliance verification method for all mitigation measures identified in this MND. Monitoring would be conducted by the District's construction inspectors and qualified specialists under contract to the District.

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
AIR QUALITY								
The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
All trucks shall be required to cover their loads as required by California Vehicle Code §23114.	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
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 materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.	Throughout the decommissioning period	The construction inspector will inspect roadways and other exposed soils for excessive dust generation	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
AIR QUALITY (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	Throughout the decommissioning period	The construction inspector will inspect dust control efforts and order additional measures as needed	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
Signs shall be posted on-site limiting off-road traffic speed to 15 miles per hour or less	Throughout the decommissioning period	The construction inspector will ensure signs are posted and maintained	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
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 his/her discretion in conjunction with the APCD in determining when winds are excessive	Throughout the decommissioning period	The construction inspector will coordinate with site supervisor to curtail construction operations as needed during high wind periods	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
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	Throughout the decommissioning period	The construction inspector will ensure roads are swept as needed	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
AIR QUALITY (Continued)								
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	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off-site.	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
All project construction and site preparation operations shall be conducted in compliance with all applicable Ventura County APCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), Rule 55 (Fugitive Dust) and Rule 10 (Permits Required).	Throughout the decommissioning period	The construction inspector will observe work in progress	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
Signs displaying the APCD complaint line telephone number (805/645-1400 during business hours; 805/654-2797 after hours) shall be posted in a prominent location visible to the public.	Throughout the decommissioning period	The construction inspector will ensure the signage is in place	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will review inspection reports			
BIOLOGICAL RESOURCES								
Should decommissioning activities be planned during the bird breeding season (February 15 to September 1), a qualified biologist shall conduct a field survey to determine if breeding migratory birds are present. Should active nests of protected migratory birds be found within the work area, decommissioning activities shall be postponed until the young have fledged or the nest is abandoned.	Prior to initial ground disturbance and tree removal	The construction inspector will observe work in progress, a qualified biologist will conduct bird surveys as directed	Twice, prior to initial ground disturbance and tree removal	Ventura County Watershed Protection District	District staff will review breeding bird survey reports and project inspection reports			

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
CULTURAL RESOURCES								
Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.	Throughout the decommissioning period	The construction inspector will observe work in progress and ensure work is suspended as appropriate, the project manager will ensure evaluation of the find is completed, a qualified archaeologist will complete an evaluation of any find as directed	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will prepare an incident report to be included in the project inspection report			
If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.	Throughout the decommissioning period	The construction inspector will observe work in progress and ensure work is suspended as appropriate, the project manager will notify the coroner	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will prepare an incident report to be included in the project inspection report			

SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING PROJECT
MITIGATION MONITORING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
RECREATION								
The following measures have been incorporated into the project to minimize the temporary loss of use of the Bridlewood Trail within the project area: • The project schedule (projected work start and end dates) shall be provided to the Bridlewood Homeowners Association at least two weeks prior to beginning decommissioning activities. • Signage shall be provided on the Trail both north and south of the project site at least one week prior to the initiation of decommissioning activities, notifying Trail users of planned temporary Trail closures, and the alternative Trail route along Vista Arroyo Drive. • Vista Arroyo Drive shall be available as an alternative temporary detour equestrian trail route from Santa Rosa Road north to the existing off-street connector trail just northeast of Saddleridge Court.	Prior to project initiation (signage, notification), and throughout the decommissioning period	District staff will ensure coordination with Bridlewood Homeowners Association is completed, notifications are made and signage posted	Initially and weekly thereafter	Ventura County Watershed Protection District	District staff will document completion of these measures in project inspection reports			

1.0 INTRODUCTION

1.1 PURPOSE AND LEGAL AUTHORITY

An Initial Study has been prepared for the Santa Rosa Road No. 2 Debris Basin Decommissioning Project (proposed project), which has been proposed by the Ventura County Watershed Protection District (District), the project proponent. Section 2.0 of this document provides a description of the proposed project. The District is also the "lead agency" for the proposed project. As defined by Section 15367 of the State California Environmental Quality Act (CEQA) Guidelines, the lead agency is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant impact on the environment." Based on the findings of the Impact Analysis (Section 4.0 of this Initial Study), it has been determined that the project would not have a significant impact on the environment. As such, a Mitigated Negative Declaration has been prepared for the project in accordance with CEQA.

1.2 PROJECT PROPONENT AND LEAD AGENCY

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

Contact: Tyler Barns, (805) 654-2064

1.3 PROJECT LOCATION

The project site comprises the existing flood control easement held by the District along the Arroyo Santa Rosa Tributary, which empties into Arroyo Santa Rosa, approximately 2.1 stream miles downstream of the debris basin (Figure 1). Santa Rosa Road No. 2 Debris Basin is located east of Vista Arroyo Drive and north of Santa Rosa Road in the Santa Rosa Valley. The project site falls within unincorporated Ventura County, approximately 1.2 miles south of the City of Moorpark and 4.6 miles east of the City of Camarillo.

1.4 BACKGROUND

The Santa Rosa Road No. 2 Debris Basin dam was constructed by the U.S. Soil Conservation Service in 1957 solely for debris (sediment) collection (not storm water detention) and is currently maintained by the District. It serves a watershed area of 1,101 acres and is estimated to experience a peak inflow of 1,274 cubic feet/second (cfs) during a 100-year storm event. Accumulated sediment has been removed from Santa Rosa Road No. 2 Debris Basin eight (8) times since it was constructed, with a total sediment removal of 18,500 cubic yards. The average annual debris accumulation is 318 cubic yards.

Storm water detention in the basin behind the dam is minimal. The dam's emergency spillway is activated during a 5- to 10-year storm event (approximately 600 cfs peak flow). A 10-year storm event would overtop the spillway by about 4 feet, while the 50- and 100-year storm events would overtop the spillway crest by about 6 feet. The emergency spillway on the dam is an unprotected earthen structure and could potentially fail from erosion and scour with virtually any sustained flow. The proposed project would remove the debris basin and dam, eliminating this dam breach risk.

Development of the watershed (primarily rural residential) since 1957 has greatly reduced the debris yield estimates for a 100-year storm event from approximately 12,500 cubic yards to 5,424 cubic yards (West Consultants 2016). Due to the low rates of observed debris collection, the Santa Rosa Road No. 2 Debris Basin has limited functionality. In addition, the earthen dam does not meet current District design standards of maintaining 3 feet of freeboard to the dam crest during a 100-year event. As it exists now, the basin is a significant hazard for dam breach due to the potential for earthen spillway erosion (West Consultants 2016). A dam breach during a 100-year (or greater) flood event would result in structure inundation and property loss downstream as well as overtopping of Santa Rosa Road by greater than seven feet of water (Figure 8). Hydraulic modelling indicates the extent of downstream flooding with and without the dam and the debris basin are nearly identical (Figures 6 and 7), illustrating that the storm flow detention function of the Santa Rosa Road No. 2 Debris Basin is negligible.

A Preliminary Design Study was completed in June 2016 and evaluated seven alternatives including no action (current maintenance activities), five modification alternatives, and basin removal. After evaluating all the alternatives based on potential cost, improvements to safety, changes to possible flood extent, downstream effects on debris/sediment, and anticipated public perception, the recommended alternative is basin removal (proposed project).

1.5 PROJECT PURPOSE

The purpose of the project is to decommission and remove the Santa Rosa Road No. 2 Debris Basin facility, minimize flood risk, and reduce future maintenance costs. The proposed project would meet this purpose and eliminate the potential flood risk associated with dam failure.

1.6 PREPARERS OF THE INITIAL STUDY

This document was prepared for the District by the following persons:

- Padre Associates: Matt Ingamells, Project Manager/Senior Biologist
- Padre Associates: Rachael Letter, Senior Archaeologist
- Padre Associates: Lucas Bannon, GIS Specialist
- Padre Associates: Pat McClure, Graphics Specialist

2.0 PROJECT DESCRIPTION

2.1 EXISTING FACILITIES

The existing Santa Rosa Road No. 2 Debris Basin is approximately 500 feet long and 70 feet wide, formed by an earthen dam on the downstream end which is approximately 150 feet long (perpendicular to the channel) and approximately 25 feet high (Figure 2). Photographs of the existing debris basin are provided as Figure 4. A vertical 36-inch diameter reinforced concrete pipe (RCP) and a vertical 10-inch diameter corrugated metal pipe (CMP) connect to a horizontal 24-inch diameter RCP, which routes surface water through the dam. An earthen emergency spillway directs storm water over the dam during major storm events when the pipe becomes overwhelmed. The maximum debris storage volume based on the dam elevation is 15,000 cubic yards (West Consultants 2016).

2.2 PROJECT CHARACTERISTICS

The proposed project consists of the removal of the Santa Rosa Road No. 2 Debris Basin facility and associated infrastructure, extension of the existing reinforced concrete (RC) box culvert that crosses beneath Santa Rosa Road, earthen channel reconstruction, and recontouring and revegetation of the site. In addition, the project would realign a portion of the Bridlewood Trail that currently traverses through the facility (Figures 2 and 5). Specific details of each project component are described below.

2.3 PROJECT COMPONENTS

2.3.1 Reinforced Concrete Box Culvert and Transition Structure

Currently, an equestrian trail extends upstream (northeast) from Santa Rosa Road on the west side of the facility. The trail then crosses the facility just downstream of the existing earthen dam and continues upstream along the east side of the facility (Figure 2). The equestrian trail is maintained by the Bridlewood Homeowner's Association (HOA). Removal of the dam and channelization of the debris basin would remove a portion of the existing equestrian trail. To connect to the trail from the west side to the east side of the facility, the existing 14-foot-wide by 6-foot-high RC box culvert that crosses beneath Santa Rosa Road would be extended by 45 linear feet and the existing 20-foot-long RC transition structure would be reconstructed at the upstream end of the new box culvert. Extending the RC box culvert would provide space to relocate the equestrian trail crossing to the south over the RC box culvert and expand the current unpaved shoulder clearance along Santa Rosa Road.

In addition to the extended RC box culvert and transition structure, removable bollards would be installed directly upstream of the transition structure. The purpose of the bollards would be to capture debris that may result from post-fire storm events.

2.3.2 Earthwork and Channel Construction

The proposed project involves removal of the existing earthen dam to restore a vegetated low-flow channel with a bed gradient of two percent and gradually sloping banks with slopes varying from 2:1 to 2.5:1 (horizontal:vertical). Approximately 7,700 cubic yards of earthen material would be excavated and re-used on site to re-establish (approximately to original condition) a 14-foot-wide, low-flow channel with banks that transition from a 2:1 slope on the downstream end to a 2.5:1 slope on the upstream end to transition and meet the existing topography upstream (Figure 3).

All earth material would be retained on site. The existing access road west of the channel would be connected from its downstream end to its upstream end following dam material removal. The remaining area of the dam from the edge of the western access road would be daylighted at a 2:1 slope to meet the existing topography. On the eastern side of the channel, a 10-foot-wide equestrian trail would be added with a cross slope of 2 percent. The edge of the proposed equestrian trail would meet the existing access road on the eastern side at a 2.25:1 slope that transitions at the top of the bank to a 2 percent slope to meet the edge of the access road (Figure 2). This would be achieved by redistributing the excavated earthen material and compacting it within the project site to produce the desired grading.

Following dam removal, the contiguous earthen low-flow channel would extend from the RC box culvert transition structure (Section 2.3.1) just north of Santa Rosa Road, to approximately 875 feet upstream (Figure 2). The low-flow channel would be approximately 14 feet-wide from toe of bank to toe of bank. The low-flow channel would have a 1 percent slope near the box culvert inlet. Figure 3 provides three cross-sections in the dam area, showing the proposed low-flow channel and removal and redistribution of earth material.

Twelve trees occur within the temporary work area and would be removed, including eleven Peruvian pepper trees (*Schinus molle*) and one blue gum tree (*Eucalyptus globulus*) (Table 4, Figure 9). Trees would be replaced with native blue elderberry (*Sambucus nigra* ssp. *caerulea*) and southern California black walnut (*Juglans californica*).

Two potential areas located outside the limits of earthwork (Figure 2) have been identified for temporary stockpiling of soil and staging heavy equipment during dam removal and redistribution of earth material.

2.3.3 Facilities Decommissioning

Debris basin decommissioning would include the removal and disposal of the following facility components:

- Outlet pipe: including approximately 22 linear feet of 24-inch diameter CMP, 112 linear feet of 24-inch diameter RC pipe and bulkhead outlet structure composed of concreted sand bags.
- Primary intake pipe: including the vertical section of 36-inch diameter RC pipe, trash rack, and baffle.
- Bleeder/riser intake: 10-inch diameter CMP, pipe collar, concrete encasement, and perforated metal pipe.

The existing access road along the east side of the Arroyo Santa Rosa Tributary channel would remain in place with a gravel (crushed miscellaneous base) surface.

2.3.4 Down Drain Reconstruction

Currently, a 36-inch diameter storm drain empties into the debris basin from Vista Arroyo Drive and includes concreted rock riprap erosion protection between the pipe outlet and the debris basin (Figure 2). The proposed project includes repairing and extending this erosion protection to the proposed low-flow channel. The improved erosion protection would extend approximately 50 feet and would be composed of 1.5-foot-thick concreted rock riprap. The width of the down drain would transition from the existing 20 feet (+/-) to 10 feet, with five-foot-deep concreted rock riprap cut-off walls along each edge.

2.3.5 Bridlewood Trail Realignment

A section of the access road along the eastern side of the Santa Rosa Road No. 2 Debris Basin is part of the Bridlewood Trail managed by the Bridlewood HOA. This equestrian trail is located on private property, with the public provided access under the provisions of California Civil Code Section 846. The trail extends northeast from Santa Rosa Road along the west side of the facility, crosses to the east side just downstream of the dam, then north along the east side of the facility (Figure 5). The trail then curves north and east along the Arroyo Santa Rosa Tributary channel to Vista Grande Street.

The proposed project includes the realignment of the trail to cross over the extended RC box culvert (Section 2.3.1) to the proposed 10-foot-wide equestrian trail on the eastern side of the facility. The trail would then join the existing access road and continue onto the existing equestrian trail.

2.3.6 Erosion Control Plantings

Planting of the recontoured slopes would be conducted at the end of decommissioning activities to prevent erosion and would consist of hydroseeding and/or planting container stock of native plants as shown in the Conceptual Revegetation Plan (Figure 10). A temporary irrigation system would be installed for watering the erosion control plantings until their root systems are established (approximately 2 years).

2.4 DECOMMISSIONING ACTIVITIES

2.4.1 General Characteristics

The initiation of decommissioning is planned for September 2019. Work in the flow channel would be conducted in the dry season to avoid surface water. The decommissioning period would be approximately three and a half months in duration (approximately 70 work days), including:

- Surveying and staking the approved work area;
- Temporary closure of the access road to hikers and equestrians;
- Heavy equipment mobilization;
- Removal of pipes and associated facilities;

- Removal of the dam and buried outlet piping;
- Extension of RC box culvert and construction of the transition structure;
- Channel construction and redistribution of earth material;
- Equestrian trail reestablishment;
- Down drain reconstruction;
- Compaction; and
- Erosion control (planting and/or hydroseeding).

Decommissioning activities would be limited to normal working hours between 7 a.m. and 7 p.m., Monday through Friday.

2.4.2 Work Area

The work area comprises approximately 2.2 acres, not including the existing access road which would be preserved.

2.4.3 Equipment

Typical vehicles and equipment anticipated to complete the project include: heavy-duty trucks, dump trucks, excavators, dozers, wheeled loaders, scrapers, motor-graders, soil compactors, and a hydroseeder.

2.4.4 Post-Decommissioning Management

Debris/sediment removal would be terminated, and regular maintenance of the project site would not be required. Establishment of the erosion control plantings would continue for 2 years after decommissioning, potentially including weeding and irrigation system repairs (and irrigation removal after plant establishment).

2.5 RESPONSIBLE AGENCIES AND PERMITS

Project implementation would require the following permits and/or agency consultation:

- Facility removal and recontouring within the Arroyo Santa Rosa Tributary would require a streambed alteration agreement from the California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code. This work would be conducted under a project-specific streambed alteration agreement OR the existing Streambed Alteration Agreement #1600-2004-0512-R5 which authorizes the District's Operations and Maintenance Program within identified streams in Ventura County.
- Facility removal and recontouring within the Arroyo Santa Rosa Tributary would require a Clean Water Act Section 404 permit authorization from the U.S. Army Corps of Engineers. This work would likely be conducted under a project-specific nationwide permit authorization.

- Facility removal and recontouring within the Arroyo Santa Rosa Tributary would require a Clean Water Act Section 401 water quality certification from the Regional Water Quality Control Board. This work would be conducted under a project-specific Section 401 water quality certification OR the existing Technically Conditioned Water Quality Certification (File No. 14-038) which authorizes the District's routine maintenance activities within identified streams in Ventura County.
- Facility removal and recontouring would require coverage under the General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities from the California Regional Water Quality Control Board, Los Angeles Region. However, this is not a discretionary action and the Regional Board would not be considered a responsible agency under CEQA.

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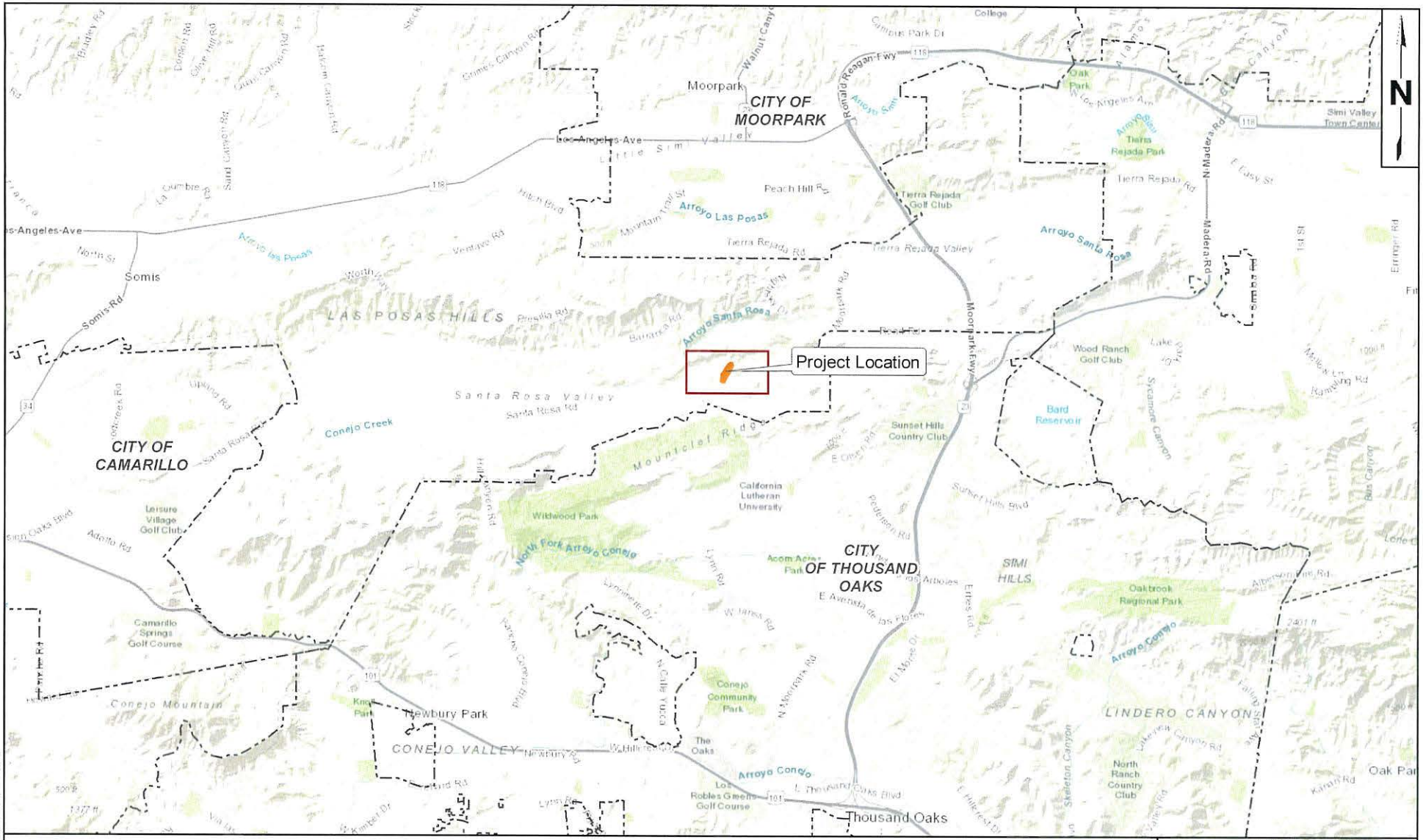

LEGEND:

Project Location City Boundary

INSET:

Source: Esri Online Topo Basemap, County of Ventura
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

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Miles

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: SANTA ROSA ROAD NO. 2 DEBRIS BASIN DECOMMISSIONING VENTURA COUNTY, CA

PROJECT NUMBER: 1702-2551

DATE: March 2019

PROJECT LOCATION MAP

FIGURE 1

3.0 LAND USE SETTING

The project site comprises the existing flood control easement, which encompasses approximately 5.9 acres on Assessor's Parcel Numbers 519-0-133-04, 519-0-133-05, 519-0-133-06, 519-0-133-07, 519-0-133-08, 519-0-133-09 and 519-0-030-15. The zoning and General Plan designations of the affected parcels is provided in Table 1. RE zoning refers to the Rural Exclusive zone, which provides for and maintains rural residential areas in conjunction with horticultural activities, and provides for a limited range of service and institutional uses which are compatible with and complementary to rural residential communities.

Table 1. Project Site Zoning and General Plan Designations

Assessor's Parcel no.	Parcel Area (acres)	Zoning	General Plan Designation
519-0-133-045	1.44	RE-1 ac	Existing Community
519-0-133-055	1.36	RE-1 ac	Existing Community
519-0-133-065	1.18	RE-1 ac	Existing Community
519-0-133-075	2.12	RE-1 ac	Existing Community
519-0-133-085	1.33	RE-1 ac	Existing Community
519-0-133-095	1.32	RE-1 ac	Existing Community
519-0-030-155	6.93	RE-5 ac	Rural

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section evaluates the potential environmental impacts of the proposed project. The analysis of potential impacts is consistent with methodology and impact threshold criteria presented in the Ventura County Initial Study Assessment Guidelines (Ventura County 2011). Impact analysis is organized by environmental topic (e.g., air quality, water resources, etc.). The determinations of significance for project-level and cumulative impacts are summarized in the Initial Study Checklist, which is attached to this document. Cumulative impacts were assessed to determine if the project's incremental contribution would be considerable, such that an environmental impact report would be required. Cumulative impacts were considered significant if project-specific impacts would be significant. Growth inducement is discussed in a separate section following cumulative impacts. In addition, a summary of project consistency with the policies of the Ventura County General Plan is provided as Table 6.

ISSUE 1: AIR QUALITY

Setting. Ventura County is located in the South-Central Coast Air Basin. The topography and climate of Southern California combine to make the basin an area of high air pollution potential. Ozone and particulate matter less than 10 microns (PM_{10}) are of particular interest in Ventura County because State air quality standards for these pollutants are regularly exceeded. The air quality of Ventura County is monitored by a network of five stations, operated by the California Air Resources Board (CARB) and the Ventura County Air Pollution Control District (APCD). The Thousand Oaks monitoring station is the nearest station to the project site, located approximately 2.2 miles to the south-southeast.

Table 2 lists the monitored maximum concentrations and number of exceedances of air quality standards for the years 2015 through 2017. As shown in Table 2, ozone concentrations monitored at the Thousand Oaks station did not exceed the State 1-hour standard and rarely exceeded the State 8-hour ozone standard from 2015 through 2017. PM_{10} concentrations exceeded the State 24-hour standard at the Simi Valley station (not monitored at the Thousand Oaks station) during 16 sampling events from 2015 through 2017.

Significance Thresholds. The APCD has prepared Air Quality Assessment Guidelines (2003) for the preparation of air quality impact analyses. The Guidelines indicate that projects within the County would have a significant impact on the environment if they would:

- Result in daily emissions exceeding 25 pounds of reactive organic compounds (ROC) or oxides of nitrogen (NO_x).
- Cause a violation or make a substantial contribution to a violation of an ambient air quality standard.
- Directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted Ventura County Air Quality Management Plan (AQMP).
- Be inconsistent with the AQMP and emit greater than 2 pounds per day ROC or NO_x.

Due to the temporary, short-term nature of construction emissions, the APCD does not apply the quantitative emissions thresholds for ROC and NO_X to construction activities. The APCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation.

Table 2. Air Quality Summary

Parameter	Standard	Year		
		2015	2016	2017
Ozone (O_3) – parts per million (Thousand Oaks station)				
Maximum 1-hour concentration monitored (ppm)		0.078	0.080	0.090
Number of days exceeding State standard	0.095 ppm	0	0	0
Maximum 8-hour concentration monitored (ppm)		0.069	0.076	0.073
Number of days exceeding State & Federal 8-hour standard	0.070 ppm	0	1	6
Particulate Matter less than 10 microns (PM_{10}) – micrograms per cubic meter (Simi Valley station)				
Maximum sample ($\mu g/m^3$)		62.8	156.3	149.8
Number of samples exceeding State standard	50 $\mu g/m^3$	3	4	9
Number of samples exceeding Federal standard	150 $\mu g/m^3$	0	1	0
Particulate Matter less than 2.5 microns ($PM_{2.5}$) – micrograms per cubic meter (Thousand Oaks station)				
Maximum sample ($\mu g/m^3$)		32.2	35.2	32.0
Number of samples exceeding Federal 24-hour standard	35 $\mu g/m^3$	0	0	0

Part 1.a Regional

Impacts (LS). Emissions would be generated during the removal of the No. 2 Debris Basin dam and associated facilities and recontouring the site, which are essentially construction-related emissions sources. No long-term air pollutant emissions would be generated by the project. Proposed decommissioning would remove the need for future debris/sediment removal activities, which would also prevent air pollutant emissions associated with these activities.

Project emissions were estimated using the OFFROAD and EMFAC2014 emissions estimation models developed by the CARB. Peak day project emissions would be 20.3 pounds NO_X and 2.5 pounds ROC. As such, NO_X emissions during peak construction periods would not exceed the 25 pounds per day threshold established by the APCD. In any case, due to the temporary, short-term nature of construction emissions, the APCD does not apply the quantitative emissions thresholds for ROC and NO_X to construction activities. The APCD does require that emission reduction measures be implemented during construction-type activities to reduce exhaust emissions and fugitive dust generation.

Projects that cause local populations to exceed population forecasts in the Air Quality Management Plan (AQMP) are considered inconsistent with the AQMP, as exceeding population forecasts can result in the generation of emissions beyond those which have been projected in the AQMP. The proposed project would not provide any housing or long-term employment opportunities; therefore, it would not result in any population growth. As such, the project would be consistent with the AQMP.

The combustion of diesel fuel in truck engines (as well as other internal combustion engines) produces exhaust containing a number of compounds that have been identified as hazardous air pollutants by EPA and toxic air contaminants by the CARB. Particulate matter (PM) from diesel exhaust has been identified as a toxic air contaminant, which has prompted CARB to develop a Final Risk Reduction Plan (released October 2000) for exposure to diesel PM. Based on CARB Resolution 00-30, full implementation of emission reduction measures recommended in the Final Risk Reduction Plan would result in a 75 percent reduction in the diesel PM Statewide inventory and the associated cancer risk by 2010, and an 85 percent reduction by 2020 in the diesel PM inventory and potential cancer risk.

Construction of the proposed project would involve diesel exhaust emissions from heavy equipment and/or heavy-duty trucks as close as 50 feet from several residences. However, these residences are currently exposed to regional diesel exhaust emissions from motor vehicle traffic on Santa Rosa Road, State Route 23, and rail traffic on the Union Pacific Railroad/Metrolink tracks. The proposed project would have a small, short-term contribution to existing diesel PM emissions associated with decommissioning activities, and impacts are considered less than significant. The proposed project would eliminate the need for future facility maintenance (e.g., debris removal from the basin), which would result in a small long-term reduction in diesel PM emissions.

APCD Emissions Reduction Measures. Air emissions reduction measures recommended by the Ventura County APCD Air Quality Assessment Guidelines (revised 2003) will be incorporated into the project including:

- 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 area to be graded or excavated before commencement of grading or excavation operations. 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 Vehicle Code §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 materials, 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 shall be seeded and watered until plant growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
- Signs shall be posted on site limiting traffic to 15 miles per hour or less.
- 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 his/her discretion in conjunction with the APCD in determining when winds are excessive.
- 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, shall be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.
- Material stockpiles shall be enclosed, covered, stabilized, or otherwise treated as needed to prevent blowing fugitive dust off site.
- All project construction and site preparation operations shall be conducted in compliance with all applicable Ventura County APCD Rules and Regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), Rule 55 (Fugitive Dust) and Rule 10 (Permits Required).
- Signs displaying the APCD complaint line telephone number (805/645-1400 during business hours; 805/654-2797 after hours) shall be posted in a prominent location visible to the public.

Part 1.b Local

Impacts (LS). State 1-hour ambient standards for carbon monoxide (CO) are sometimes exceeded at urban roadway intersections during times of peak traffic congestion. These localized areas are sometimes called CO hotspots. The project site is located near a major arterial roadway (Santa Rosa Road) and is exposed to vehicle emissions. However, ambient CO levels in the region are low due to increasingly stringent vehicle emissions standards, use of oxygenated fuels, and relatively low population density.

The number of daily vehicle trips that would be generated by the project (up to 20 one-way trips per day) would not substantially add to traffic volumes on Santa Rosa Road (22,100 average daily trips in 2018) (Ventura County Public Works Agency 2018). Considering the above, the project would not be expected to create or contribute substantially to the violation of CO standards.

Fugitive dust would be generated by the operation of heavy equipment and vehicles during dam removal and recontouring. Dust generation from these activities would be considered a significant impact if APCD Rule 51 is violated. Rule 51 states "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property." Fugitive dust generated by the project may be considered a nuisance by adjacent land uses. Therefore, fugitive dust reduction measures listed in Part 1.a above have been incorporated into the project.

ISSUE 2: WATER RESOURCES

Part 2.a Groundwater Quantity

Setting. Portions of the project site downstream of the dam are located in the Arroyo Santa Rosa Valley Groundwater Basin, which encompasses a surface area of 3,730 acres underlying the Santa Rosa Valley. Groundwater is found in alluvium and the San Pedro Formation. Groundwater is generally unconfined, except in the lower San Pedro Formation in the western part of the basin (California Department of Water Resources 2004).

The Arroyo Santa Rosa Valley Groundwater Basin includes portions of the Lower Aquifer System managed by the Fox Canyon Groundwater Management Agency. Groundwater levels are heavily influenced by surface flows in Conejo Creek, which are augmented by discharge of wastewater from the Hill Canyon Wastewater Treatment Plant and dewatering wells in Thousand Oaks. The Santa Rosa Basin Groundwater Management Plan was completed in 2013 to protect and enhance groundwater quality and provide a sustainable source of local groundwater. The Arroyo Santa Rosa Basin Groundwater Sustainability Agency was formed in 2016.

The existing No. 2 Debris Basin is located in the Conejo-Tierra Rejada Volcanic Basin, which lies (in part) between the Arroyo Santa Rosa Valley Groundwater Basin and the Tierra Rejada Groundwater Basin. The Volcanic Basin is not an important source of groundwater.

Significance Thresholds. The following significance thresholds are from the Ventura County Initial Study Assessment Guidelines (ISAG):

1. Any land use or project that will directly or indirectly decrease, either individually or cumulatively, the net quantity of groundwater in a groundwater basin that is overdrafted or creates an overdrafted groundwater basin shall be considered to have a significant groundwater quantity impact.

2. In groundwater basins that are not overdrafted, or are not in hydrologic continuity with an overdrafted basin, net groundwater extraction that will individually or cumulatively cause overdrafted basin(s), shall be considered to have a significant groundwater quantity impact.

3. In areas where the groundwater basin and/or hydrologic unit condition is not well known or documented and there is evidence of overdraft based upon declining water levels in a well or wells, any proposed net increase in groundwater extraction from that groundwater basin and/or hydrologic unit shall be considered to cause a significant groundwater quantity impact until such time as reliable studies determine otherwise.

4. Regardless of items 1-3 above, any land use or project which would result in 1.0 acre-feet, or less, of net annual increase in groundwater extraction is not considered to have a significant project or cumulative impact on groundwater quantity.

5. Any project that is inconsistent with any of the policies or development standards relating to groundwater quantity of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan, may result in a significant environmental impact.

Impacts (LS). The project would require a small amount of water for dust control and soil compaction purposes during decommissioning, and for irrigation of erosion control plantings (infrequently for two years). Water would be supplied by the Camrosa Water District from an existing irrigation valve adjacent to the southern end of the project site. Water supplied by the Camrosa Water District is primarily obtained from diversion of surface flows in Conejo Creek and imported water, with only 18 percent pumped from the Arroyo Santa Rosa Valley and Tierra Rejada Groundwater Basins (MWH 2013). Due to the small volume required (maximum of a few thousand gallons per day for up to 70 work days), and temporary water demand of the project, additional groundwater extraction would not be required to meet project demands. In any case, potentially affected groundwater basins are not overdrafted, and any project-related groundwater extraction would not result in overdraft of any groundwater basin. The proposed project would not impede sustainable groundwater management of the Arroyo Santa Rosa Valley and Tierra Rejada Groundwater Basins.

Part 2.b Groundwater Quality

Setting. Groundwater extracted from wells in the Arroyo Santa Rosa Valley Groundwater Basin frequently exceeds the primary maximum contaminant level for nitrate and occasionally the secondary maximum contaminant level for sulfate (MWH 2013).

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG:

1. Any land use or project proposal that will individually or cumulatively degrade the quality of groundwater and cause groundwater to exceed groundwater quality objectives set by the Basin Plan shall be considered to have a significant impact.

2. A land use or project shall be considered to have a significant impact on groundwater quality where there is evidence that the proposed land use or project could cause the quality of groundwater to fail to meet the groundwater quality objectives set by the Basin Plan.
3. Any land use or project that proposes the use of groundwater in any capacity and is located within two miles of the boundary of a former or current test site for rocket engines shall be considered to have a significant impact.
4. Any project that is inconsistent with any of the policies or development standards relating to groundwater quality of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan, may result in a significant environmental impact.

Impacts (NI). The project would not discharge any wastewater or other materials that may infiltrate to a groundwater basin and adversely affect groundwater quality. Fueling and maintenance of heavy equipment associated with the proposed project would be conducted in areas away from the Arroyo Santa Rosa Tributary to prevent any inadvertent spillage from affecting any underlying groundwater. In addition, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared, which would include best management practices to be implemented which would also prevent discharges to surface waters.

Part 2.c Surface Water Quantity

Setting. The proposed project includes a portion of the Arroyo Santa Rosa Tributary, which empties into Arroyo Santa Rosa approximately 2.1 stream miles downstream of the project site. Arroyo Santa Rosa empties into Conejo Creek approximately 1.1 stream miles downstream of its confluence with the Arroyo Santa Rosa Tributary.

The No. 2 Debris Basin watershed area is 1,101 acres and is estimated to experience a peak inflow of 1,274 cubic feet/second (cfs) during a 100-year storm event. The project site supports surface water only after storm events, and is dry for most of the year. A stream flow gauge (No. 838) measured peak storm flow rates in Arroyo Santa Rosa approximately 1,700 feet downstream of its confluence with the Arroyo Santa Rosa Tributary, between 1985 and 2014. The largest flow event recorded was 2,986 cfs on January 9, 2005.

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG:

1. Any project that will increase surface water consumptive use (demand), either individually or cumulatively, in a fully appropriated stream reach as designated by the State Water Resources Control Board or where unappropriated surface water is unavailable, shall be considered to have a significant adverse impact on surface water quantity.

2. Any project that will increase surface water consumptive use (demand) including but not limited to diversion or dewatering downstream reaches, either individually or cumulatively, resulting in an adverse impact to one or more of the beneficial uses listed in the Basin Plan is considered a significant adverse impact.

3. Any project that is inconsistent with any of the policies or development standards relating to surface water quantity of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan may result in a significant environmental impact.

Impacts (NI). The project would require a small amount of water for dust control and soil compaction purposes during decommissioning, and for irrigation of erosion control plantings (infrequently for two years). Water would be supplied by the Camrosa Water District which obtains water from diversion of surface flows in Conejo Creek, imported water provided by the Calleguas Municipal Water District, and local groundwater. Imported water (in part) originates as surface flows in the Sacramento River delta. The environmental impacts associated with obtaining this water have been fully addressed in CEQA documents prepared for the State Water Project. The proposed project would not result in any consumptive use of local surface water. The proposed project would be consistent with the Ventura County General Plan with regard to surface water uses.

Part 2.d Surface Water Quality

Setting. The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) has jurisdiction over waters between Rincon Point (at the western boundary of Ventura County) and the eastern Los Angeles County line. The Regional Board has developed a Water Quality Control Plan, or "Basin Plan", to protect the quality of surface and groundwaters of the region. The Basin Plan designates beneficial uses of waters within the region, sets narrative and numerical water quality objectives to protect beneficial uses, and describes implementation programs intended to meet the Basin Plan objectives.

Beneficial uses established for surface water in Arroyo Santa Rosa are groundwater recharge, intermittent water contact recreation, intermittent non-water contact recreation, intermittent warm freshwater habitat and wildlife habitat (LARWQCB 1994, revised 2013).

Surface water of Arroyo Santa Rosa is considered impaired under Section 303(d) of the Clean Water Act, due to elevated levels of indicator bacteria, ammonia, ChemA (tissue), chlordane, DDT (tissue), dieldrin, endosulfan, polychlorinated biphenyls, sedimentation/siltation, sulfates, total dissolved solids, toxaphene (tissue and sediment) and toxicity (SWRCB 2016). A water body is impaired when data indicate that adopted water quality objectives are continually exceeded or that beneficial uses are not protected.

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG:

1. Any land use or project proposal that is expected to individually or cumulatively degrade the quality of surface water causing it to exceed water quality objectives of the Basin Plan may have a significant impact.

2. Any land use or project development that directly or indirectly causes stormwater quality to exceed water quality objectives or standards in the County's Municipal Stormwater MS4 Permit or any other NPDES Permits may have a significant impact.

Impacts (LS). Although earthwork and culvert extension construction is planned for the dry season, rainfall may occur during decommissioning activities and storm water run-off from the project site may degrade surface water quality. The project would disturb over one acre of land such that it would require coverage under the National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities (Water Quality Order 2009-0009-DWQ). As required by the conditions of the General Permit, a SWPPP would be prepared, which would include best management practices to be implemented and a monitoring program. The intent of the SWPPP would be to prevent project-related pollutants from contacting surface water and prevent products of erosion from moving off site into receiving waters.

Project-related construction activities would be subject to Best Management Practices identified for construction sites exceeding one acre as identified in the County's stormwater quality management program developed for the Ventura County Municipal Separate Storm Sewer System Permit (Order R4-2010-0108, NPDES Permit no. CAS004002) and must complete a Form SW-2. Implementation of the SWPPP and best management practices identified on Form SW-2, and monitoring required under the General Permit would prevent significant impacts to surface water quality.

ISSUE 3: MINERAL RESOURCES

Part 3.a Aggregate Resources

Setting. Aggregate resources are defined as construction grade sand and gravel. The project site is located in an area designated as MRZ-1 by the State of California Division of Mines and Geology (CDMG 1993). This designation indicates the area is not expected to contain significant aggregate deposits. The nearest aggregate mining operation in the project area is the Grimes Rock quarry, located approximately 6.4 miles north of the project site.

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG:

1. Any land use or project activity which is proposed to be located on or immediately adjacent to land zoned Mineral Resource Protection overlay zone, or adjacent to a principal access road to an existing aggregate Conditional Use Permit, and which has the potential to hamper or preclude extraction of or access to the aggregate resources, shall be considered to have a significant adverse impact on the environment.
2. A project would have a cumulative impact on aggregate resources if when considered with other pending and recently approved projects in the area, hampers or precludes extraction or access to identified resources.

Impacts (LS). The project site is not located within an area that may contain significant aggregate deposits. The proposed project would require a small amount of aggregate resources for the box culvert extension and transition structure and reconstruction of the down drain, but would not generate any regional or long-term demand for aggregate resources or hamper future extraction of aggregate from the area. Therefore, the project would have a less than significant impact on aggregate resources.

Part 3.b Petroleum Resources

Setting. Petroleum resources are defined as oil and gas deposits. Known petroleum fields are mapped by the State of California Division Oil, Gas, and Geothermal Resources (DOGGR). According to DOGGR's on-line mapping system, the nearest active well to the project site is an oil well operated by California Resources Corporation, located approximately 5.1 miles to the northeast (Oak Park Field). There are no oil or gas processing facilities in the immediate project area.

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG:

1. Any land use that is proposed to be located on or immediately adjacent to any known petroleum resource area, or adjacent to a principal access road to an existing petroleum CUP, has the potential to hamper or preclude access to petroleum resources.
2. If the subject property is not located on or adjacent to land located in an oil field or containing an oil extraction CUP, then the project would not cause a significant impact on the extraction of oil resources. If the subject property is located on or adjacent to land located in an oil field or containing an oil extraction CUP, then the state Division of Oil and Gas Regulation should be consulted for their review of the project application.
3. If the subject property is not located adjacent to a road used as a principal means of access to an existing CUP for oil extraction, and the proposed use is not sensitive to the effects of truck traffic to and from the oil CUP, then the project would not cause a significant impact on access to oil resources.

Impacts (NI). As indicated above, the project site is not located within or adjacent to a petroleum resource area or petroleum production facility. Project-related activities would only use a minor amount of petroleum products for heavy equipment and vehicle fuels, and would not affect the supply of petroleum in the County. In addition, the proposed project would not create a barrier to the extraction of petroleum resources, if discovered near the project site. Therefore, the proposed project would not impact petroleum resources.

ISSUE 4: BIOLOGICAL RESOURCES

Part 4.a Species

Setting. Biological field surveys of the project site were conducted by Padre Associates Senior Biologist Matt Ingamells on October 5, 2017 and February 22, 2019. A total of 64 vascular plant species were identified during the field surveys of the project site. Plants observed within the project site consisted of 23 (36 percent) native taxa and 41 (64 percent) non-native, naturalized taxa. The high proportion of non-native plant species reflects the disturbed nature of the site. Twenty-eight of the 41 non-native plant species are listed as invasive by the California Invasive Plant Council, including two species rated as highly invasive, 13 species rated as moderately invasive, and 13 species rated as limited invasiveness.

Wildlife observed at the project site during the field surveys included California scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), band-tailed pigeon (*Patagioenas fasciata*), Audubon's warbler (*Setophaga coronata*), Say's phoebe (*Sayornis saya*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), California quail (*Callipepla californica*), northern flicker (*Colaptes auratus*), blue-gray gnatcatcher (*Polioptila caerulea*), American robin (*Turdus migratorius*), house finch (*Haemorhous mexicanus*), Botta's pocket gopher (*Thomomys bottae*), western gray squirrel (*Sciurus griseus*), California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*), and black-tailed deer (*Odocoileus hemionus*).

Table 3 lists special-status species observed or reported within 10 miles of the project site based on the results of the biological field surveys, literature research (including biological studies prepared for nearby projects) and review of the California Natural Diversity Data Base and California Native Plant Society (CNPS) inventory.

Table 3. Special-Status Species Reported within 10 miles of the Project Site

Common Name *(Scientific Name)*	Status	Nearest Reported Location to the Project Site
Southern California black walnut (*Juglans californica*)	List 4	Observed at the project site during the field survey
Catalina mariposa lily (*Calochortus catalinae*)	List 4	Tentative Tract Map 4410, 2.1 miles to the west
Plummer's mariposa lily (*Calochortus plummerae*)	List 4	Conejo Valley, 5 miles to the southwest
Ojai navarretia (*Navarretia ojaiensis*)	List 1B	Conejo Center Drive, 4.3 miles to the southwest
Gerry's curly-leaved monardella (*Monardella sinuata ssp. gerryi*)	List 1B	Las Posas Road, 1.1 miles to the west
White-veined monardella (*Monardella hypoleuca ssp. hypoleuca*)	List 1B	Circle X Ranch, 9.2 miles to the south

Table 3. Continued

Common Name *(Scientific Name)*	Status	Nearest Reported Location to the Project Site
Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*)	List 1B	Near Lake Eleanor, 8.0 miles to the south
Blochman's dudleya (*Dudleya blochmaniae ssp. blochmaniae*)	List 1B	Near Conejo Center Drive, 4.3 miles to the southwest
Chaparral ragwort (*Senecio aphanactis*)	List 2B	Lynnmere Open Space, 2.2 miles to the south
Southern tarplant (*Centromadia parryi ssp. australis*)	List 1B	Near the Borchard Road bridge, 4.8 miles to the southwest
Verity's dudleya (*Dudleya verityi*)	FT, List 1B	Conejo Mountain, 6.6 miles to the southwest
Conejo buckwheat (*Eriogonum crocatum*)	SR, List 1B	Wildwood Park, 0.9 miles to the south
Marcescent dudleya (*Dudleya cymosa ssp. marcescens*)	FT, SR, List 1B	Hidden Valley; 7.4 miles to the south-southwest
Conejo dudleya (*Dudleya parva*)	FT, List 1B	Mount Clef Ridge Open Space; 0.6 miles to the southeast
Braunton's milkvetch (*Astragalus brauntonii*)	FE, List 1B	Long Grade Canyon, 8.9 miles to the southwest
Lyon's pentachaeta (*Pentachaeta lyonii*)	FE, SE, List 1B	Near California Lutheran University, 0.7 miles to the southeast
Santa Susana tarplant (*Deinandra minthornii*)	SR, CNPS List 1B	Near Lake Sherwood, 6.6 miles to the south
California Orcutt grass (*Orcuttia californica*)	FE, SE, CNPS List 1B	Near State Route 23, 2.5 miles to the northeast
Riverside fairy shrimp (*Streptocephalus woottoni*)	FE	Near State Route 23, 2.5 miles to the northeast
Southern California Coast steelhead (*Oncorhynchus mykiss*)	FE	Conejo Creek (very rare occurrence), 6.7 miles to the west-southwest
Arroyo chub (*Gila orcuttii*)	CSC	Conejo Creek, 2.9 miles to the southwest
Western spadefoot toad (*Spea hammondii*)	CSC	Roseland Avenue, 6.4 miles to the north
Western pond turtle (*Emys marmorata*)	CSC	Conejo Creek, 2.9 miles to the southwest
Coast horned lizard (*Phrynosoma blainvillii*)	CSC	Las Posas Hills, 2.8 miles to the west
Coastal western whiptail (*Aspidoscelis tigris stejnegeri*)	CSC	Tentative Tract Map 4410, 2.1 miles to the west

Table 3. Continued

Common Name *(Scientific Name)*	Status	Nearest Reported Location to the Project Site
California glossy snake (*Arizona elegans occidentalis*)	CSC	Happy Camp Canyon, 5.1 miles to the north
San Bernardino ring-neck snake (*Diadophis punctatus modestus*)	SA	Las Posas Hills, 2.1 miles to the west-northwest
Two-striped garter snake (*Thamnophis hammondii*)	CSC	Conejo Creek, 2.9 miles to the southwest
Tri-colored blackbird (*Agelaius tricolor*)	ST, CSC	Lake Sherwood, 7.3 miles to the south
Golden eagle (*Aquila chrysaetos*)	WL, FP	Boney Mountain, 9.2 miles to the south-southwest
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	WL	Tentative Tract Map 4410, 2.1 miles to the west
California horned lark (*Eremophila alpestris actia*)	WL	Tentative Tract Map 4410, 2.1 miles to the west
Burrowing owl (*Athene cunicularia*)	CSC	Upper Dry Canyon, 9.8 miles to the northeast
Cooper's hawk (*Accipiter cooperii*)	WL	Tentative Tract Map 4410, 2.1 miles to the west
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE	Arroyo Santa Rosa, 2.7 miles to the west-southwest
California gnatcatcher (*Polioptila californica*)	FT, CSC	Near California Lutheran University, 0.8 miles to the southeast
San Diego desert woodrat (*Neotoma lepida intermedia*)	CSC	Western Moorpark, 3.0 miles to the northwest
American badger (*Taxidea taxus*)	CSC	Northern Moorpark, 3.4 miles to the north

CSC California Species of Special Concern (CDFW)
FE Federal Endangered (USFWS)
FT Federal Threatened (USFWS)
FP Protected under the California Fish & Game Code (CDFW)
SE State Endangered (CDFW)
FE Federal Endangered (USFWS)
FT Federal Threatened (USFWS)
List 1B Plants rare, threatened, or endangered in California and elsewhere (CNPS)
List 2B Plants rare, threatened, or endangered in California but more common elsewhere (CNPS)
List 4 Plants of limited distribution (CNPS)
SA Special Animal (CDFW)
SE California Endangered (CDFW)
SR California Rare (CDFW)
ST California Threatened (CDFW)
WL Watch List (CDFW)

The only special-status species observed at the project site during the biological field surveys was southern California black walnut, mostly on the slope west of the No. 2 Debris Basin and along the Bridlewood Trail north of the basin. Due to the long history of periodic disturbance associated with basin maintenance and fuel management activities, and surrounding residential development, wildlife habitat is limited to landscaping trees and a few patches of native vegetation (coast prickly pear scrub, California walnut grove) located west of the debris basin (Figure 9). Therefore, no other special-status species listed in Table 3 are anticipated at the project site due to the site's extensive disturbance history and lack of suitable habitat.

Significance Thresholds. The following significance thresholds are from the Ventura County ISAG. A project will have a direct or indirect physical impact to a plant or animal species if a project, directly or indirectly:

- Reduces a species' population,
- Reduces a species' habitat,
- Increases habitat fragmentation, or
- Restricts reproductive capacity.

The determination of whether a project's impact is significant or not shall be based on both the current conservation status of the species affected and the severity or intensity of impact caused by the project. Endangered, rare and threatened species, as well as special-status species, are more susceptible to project impacts than a more common species. If a project's impact is severe or intense, it may cause a population of a more common species to decline substantially or drop below self-sustaining levels, which would be considered a significant impact.

Impacts (PS-M). Proposed decommissioning activities would avoid southern California black walnut trees at the project site.

The project site has been repeatedly disturbed through debris basin construction, periodic sediment removal and annual fire prevention (dozer track-walking, mowing, herbicide application) activities. Coast prickly pear scrub is located on the slope west of the No. 2 Debris Basin and may provide isolated, low quality habitat for coastal western whiptail and San Diego desert woodrat. However, coast prickly pear scrub would not be removed by the proposed decommissioning. Therefore, impacts to special-status wildlife species would be less than significant. In addition, proposed revegetation (Figure 10) would provide habitat suitable for these and other wildlife species.

Take of migratory birds protected under the Federal Migratory Bird Treaty Act of 1918 and Section 3513 of the California Fish and Game Code may occur as a result of proposed removal of 12 non-native invasive trees (Table 4, Figure 9), should protected birds nest in these trees. Due to periodic basin maintenance, bird nesting habitat affected by the project is limited to the 12 non-native trees. Project-related take of migratory birds is considered a potentially significant impact.

Table 4. Tree Removal Summary

Tree no.	Species	Trunk Diameter at Breast Height (")
1	Peruvian pepper	25,17
2	Peruvian pepper	19,22
3	Peruvian pepper	29
6	Peruvian pepper	23
9	Blue gum eucalyptus	19
10	Peruvian pepper	36,12,12
11	Peruvian pepper	6
12	Peruvian pepper	21
13	Peruvian pepper	9,9
14	Peruvian pepper	13,14
15	Peruvian pepper	23,24,21
18	Peruvian pepper	57
Total		

Mitigation. Should decommissioning activities be planned during the bird breeding season (February 15 to September 1), a qualified biologist shall conduct a field survey to determine if breeding migratory birds are present. Should active nests of protected migratory birds be found within the work area, decommissioning activities shall be postponed until the young have fledged or the nest is abandoned.

Part 4.b Ecological Communities

Setting. Vegetation at the No. 2 Debris Basin and the immediate vicinity is primarily ruderal, dominated by non-native annual grasses (such as hare barley [*Hordeum murinum*]) and other weedy herbs that colonize the basin between disturbances associated with sediment removal and/or fire prevention activities (Figure 9). However, the lower slopes west of the No. 2 Debris Basin support coast prickly pear scrub (*Opuntia littoralis* Shrubland Alliance), dominated by coast prickly pear, with scattered lemonade-berry (*Rhus integrifolia*) and southern California black walnut. In addition, California walnut groves (*Juglans californica* Woodland Alliance) occur upstream of the basin near the Arroyo Santa Rosa Tributary, and consist of patches of southern California black walnut trees. Coast prickly pear scrub and California walnut groves are considered vulnerable to extirpation or extinction by CNPS (Sawyer et al., 2009).

Significance Thresholds. The following types of impacts to sensitive plant communities (critically imperiled, imperiled or vulnerable to extinction or extirpation) are considered potentially significant:

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

Impacts (NI). Proposed decommissioning activities would occur within disturbed areas lacking native vegetation, and avoid sensitive communities (coast prickly pear scrub, California black walnut groves) adjacent to the project site.

Part 4.c Waters and Wetlands

Setting. The U.S. Army Corps of Engineers (Corps) has jurisdiction over waters of the United States (U.S.) under the authority of Section 404 of the Clean Water Act. The limit of jurisdiction in non-tidal waters extends to the ordinary high water mark and includes all adjacent wetlands. Waters of the U.S. are defined as:

> "All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; including all interstate waters including interstate wetlands, all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce."

The Arroyo Santa Rosa Tributary channel through the project site is considered waters of the U.S. under the Clean Water Act, and the project is subject to permits from the Corps and the Regional Water Quality Control Board (Section 2.5). The Arroyo Santa Rosa Tributary channel is also considered "waters of the State" as defined in Section 13050 of the California Water Code.

The Arroyo Santa Rosa Tributary at the project site meets the definition of "stream" in Title 14 Section 1.72 of the California Code of Regulations. Therefore, project-related disturbance of the Arroyo Santa Rosa Tributary would require a streambed alteration agreement under Section 1602 of the California Fish and Game Code.

> The Corps and U.S. Environmental Protection Agency define wetlands as:
>
> "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Ventura County defines wetlands as (General Plan Goals Policies and Programs glossary):

> "Lands that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is periodically covered with shallow water. The frequency of occurrence of water is sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands include marshes, bogs, sloughs, vernal pools, wet meadows, river and stream overflows, mudflats, ponds, springs and seeps."

About 500 square feet of wetland vegetation occurs in the bottom of the No. 2 Debris Basin, where landscape irrigation run-off discharges from the down drain to the Basin. This area meets the County wetland definition due to the presence of vegetative life that requires seasonally saturated soil conditions. This wetland vegetation includes curly dock (*Rumex crispus*), alternate-leaf flat-sedge (*Cyperus involucratus*) and water-cress (*Nasturtium officinale*). This area meets the County wetland definition, but is not a significant wetland habitat due to its small area, isolated location and lack of development of a native plant community or aquatic habitat.

Significance Thresholds. Significance thresholds are taken from the Ventura County ISAG. Potentially significant project impacts to waters and wetlands include:

1. Removal of vegetation, grading, obstruction or diversion of water flow, change in velocity, siltation, volume of flow or runoff rate, placement of fill, placement of structures, construction of a road crossing, placement of culverts or other underground piping and/or any disturbance of the substratum.
2. Disruptions to wetland or riparian plant communities that would isolate or substantially interrupt contiguous habitats, block seed dispersal routes, or increase vulnerability of wetland species to exotic weed invasion or local extirpation. An example would be disruption of adjacent upland vegetation to a level that would adversely affect the ecological function of the wetland, such as where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian habitat, which reduces erosion and sedimentation potential.
3. Interference with ongoing maintenance of hydrological conditions in a water or wetland. The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Adverse hydrological changes might include altered freshwater input; changes in the watershed area or run-off quantity, quality, or velocity; drawing down of the groundwater table to the detriment of groundwater-dependent habitat; substantial increases in sedimentation; introduction of toxic elements or alteration of ambient water temperature.

4. The project does not provide an adequate buffer for protecting the functions and values of existing waters or wetlands. The buffer is measured from the top-of-bank or edge of wetland or riparian habitat, whichever is greater. Ventura County General Plan Policy 1.5.2-4 requires a minimum buffer of 100 feet from significant wetland habitat. In accordance with this policy, buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100-foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area.

Impacts (LS). The patch of wetland vegetation would be temporarily disturbed during decommissioning of the No. 2 Debris Basin and reconstruction of the down drain. The affected vegetation has colonized the debris basin during periods between maintenance events, and would also recolonize the area at the down drain outlet following completion of decommissioning activities. In any case, the affected vegetation is considered very low quality habitat due to its small area (0.01 acres), isolated location, low species diversity and lack of plant community development. Due to the temporary nature of project impacts and very low quality of affected vegetation, impacts to wetlands are considered less than significant.

Proposed removal of the dam and construction of a low-flow channel would increase the area of streambed at the project site, and thereby result in an increase in the area of waters of the U.S. and waters of the State.

In the long-term, dam removal, restoration of the channel, and termination of maintenance of the affected reach of the Arroyo Santa Rosa Tributary may result in the colonization of the proposed low-flow channel by riparian and wetland plant species, which would increase the wetland area meeting the County's wetland definition.

Part 4.d Coastal Habitat

Setting. The project site is not located within the Coastal Zone.

Significance Thresholds. Significance thresholds are taken from the Ventura County ISAG. Potentially significant project impacts to Environmentally Sensitive Habitat Areas (ESHA) include:

1. Construction, grading, clearing, or other activities and uses that would temporarily or permanently remove ESHA or disturb ESHA buffers. (ESHA buffers are within 100 feet of the boundary of ESHA as defined in Section 8172-1 of the Coastal Zoning Ordinance).
2. Indirect impacts resulting from project operation at levels that would degrade the health of an ESHA.

Impacts (NI). No project-related impacts to ESHA or other coastal resources would occur.

Part 4.e Habitat Connectivity

Setting. Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local such as between foraging and nesting or denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. Habitat linkages provide cover and forage sufficient for temporary inhabitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional ecology of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

The South Coast Wildlands Missing Linkages Project (Penrod et al., 2006) has identified the Santa Monica-Sierra Madre Landscape Linkage which connects the Santa Monica Mountains to the south and the Sierra Madre Ranges of the Los Padres National Forest to the north. The east end of Las Posas Hills meets the southwestern strand of the Santa Monica-Sierra Madre Landscape Linkage near Tierra Rejada Valley, approximately 2.1 miles east of the site, where the Linkage then heads toward the southwest through the western Simi Hills to Palo Comado Canyon and Point Mugu State Park. The Las Posas Hills are not mapped as part of the Santa Monica-Sierra Madre Landscape Linkage, and at its nearest point, the Linkage is located approximately 2.1 miles east of the site, but is separated by substantial development (residential land uses, Santa Rosa Road, and agricultural fields).

The Arroyo Santa Rosa Tributary is not expected to function as wildlife movement corridor due to the lack of contiguous vegetation, minimal vegetation cover downstream of the No. 2 Debris Basin and encroachment of residential development. In addition, evidence of focused wildlife movement (game trails) was not observed.

Significance Thresholds. Significance thresholds are taken from the Ventura County ISAG. Potentially significant project impacts to habitat connectivity include:

1. A habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be severed, substantially interfered with, or potentially blocked.
2. Wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction would be prevented or substantially interfered with.
3. Wildlife would be forced to use routes that endanger their survival. For example, constraining a corridor for mule deer or mountain lion to an area that is not well-vegetated or that runs along a road instead of through a stream corridor or along a ridgeline.
4. Lighting, noise, domestic animals, or other indirect impacts that could hinder or discourage fish and/or wildlife movement within habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be introduced.