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**FINAL MITIGATED NEGATIVE DECLARATION  
FOR THE  
VENTURA COUNTY WATERWORKS DISTRICT NO. 1  
MOORPARK WASTEWATER TREATMENT PLANT RECLAIMED WATER DISTRIBUTION  
SYSTEM PHASE IV**

**LEAD AGENCY/PROJECT PROPONENT:**

Ventura County Waterworks District No. 1  
P.O. Box 250  
6767 Spring Road  
Moorpark, CA 93020-0250

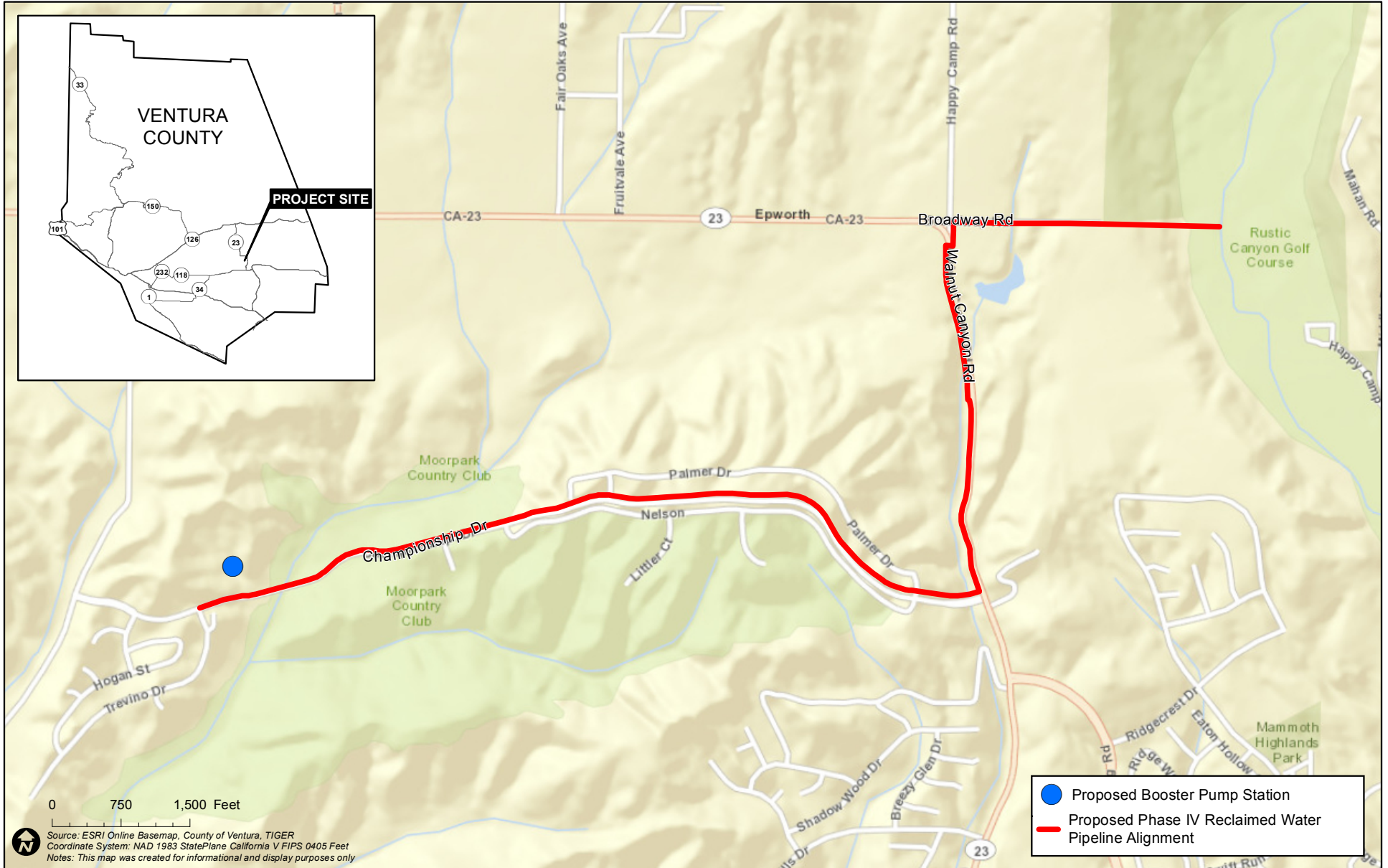
Contact: Ms. Susan Pan  
(805) 378-3025

**PROJECT LOCATION:**

The Moorpark Wastewater Treatment Plant (MWTP) is the source of the reclaimed water and is located south of Highway 118 and four miles west of the City of Moorpark. However, the location of the proposed Phase IV pipeline from west to east is described as follows. The pipeline alignment begins in the City of Moorpark on Championship Drive near the Ventura County Waterworks District No. 1 (VCWWD 1 or District) reclaimed water tank (located at 11501 Championship Drive) and extends east on Championship Drive to Walnut Canyon Road/State Route 23 (Figure 1). The alignment along Championship Drive is within the roadway and right-of-way. At Walnut Canyon Road the alignment extends to north to Broadway. Along this alignment (Walnut Canyon Road/Happy Camp Road segment) the jurisdiction changes from City of Moorpark to unincorporated Ventura County. The alignment along the majority of Walnut Canyon is located on the west side of the road outside the Caltrans right of way. The alignment crosses Walnut Canyon and continues north outside of the right of way on the east side of Walnut Canyon Road and Happy Camp Road. The final portion of the alignment extends east on Broadway to the Rustic Canyon Golf Course and will be within the roadway (County Road). The address of the Rustic Canyon Golf Course is 15100 Happy Camp Canyon Road, Moorpark, California. (However the golf course is in unincorporated Ventura County.) The proposed booster pump station will be located at the existing reclaimed water tank at 11501 Championship Drive. The Project's regional and site specific locations are shown on Figure 1.

**PROJECT DESCRIPTION:**

**Background and Project Objective.** The MWTP is owned and operated by VCWWD No. 1. The MWTP was originally constructed in 1965 and was designed as an interim treatment facility with a capacity of 1.0 million gallons per day (mgd). In 1982, the plant was expanded to a permanent 1.5 mgd facility. In May 1988, the District prepared and certified a Final EIR (State Clearinghouse [SCH] No 87051314) for the expansion of the MWTP from 1.5 mgd to 3.0 mgd. Subsequently, based upon further study, the project was revised by substituting process improvements for construction of some of the treatment works and an addendum to the previously prepared EIR was prepared to address the changes. The addendum and Final EIR were considered, and the revised project was approved on November 7, 1989. In 1991 the MWTP was upgraded to provide a secondary treatment capacity of 3.0 mgd.



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A Reclaimed Wastewater Feasibility Study (Boyle Engineering, 1990) was conducted to evaluate the feasibility of supplying reclaimed water for irrigation of agricultural and landscaping operations within the District's service area. The study identified a large potential market for reclaimed water near the MWTP. A supplemental EIR (EIR No. 0901-9783) was prepared to address the potential impacts of construction of tertiary treatment facilities to allow discharge of up to 1.5 mgd into the Arroyo Las Posas. The Ventura County Board of Supervisors certified the Supplemental EIR and approved the revised project on June 4, 1991. Both the Final and the Supplemental EIRs considered the possible long-term use of treated effluent (reclaimed water) from the MWTP for agricultural and landscape irrigation. In 1993 the MWTP was upgraded with the addition of treatment facilities to allow for the tertiary treatment of up to 1.5 mgd of effluent. The tertiary treated water meets the State Department of Health Services requirements for unrestricted reclaimed water use.

In April 1997, the District prepared a Subsequent Final Environmental Impact Report for the Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System (SCH No. 96021009). The project evaluated included a distribution system designed to distribute up to 1.5 mgd of tertiary-treated reclaimed water from the MWTP for use in agricultural or landscape irrigation reuse sites in the District's service area. The project also involved the construction of reclaimed water storage basins, pump stations, and a series of pipelines to deliver the reclaimed water. However, not all subsequent phases of the distribution system were envisioned at that time.

In 2002, the District constructed the reclaimed water pump station, pipelines, and storage basins within property owned by the District. A developer, Toll Brothers (in association with development of Tract 4928), constructed more than 3 miles of reclaimed water pipe to irrigate the 27 hole golf course known as Moorpark Country Club Estates. The golf course is located between Grimes Canyon Road and Walnut Canyon Road in the City of Moorpark. In September 2003, the District began serving reclaimed water for golf course irrigation. The golf course currently uses approximately 400 acre-feet per year (AFY) per year of reclaimed water on an annual basis.

In 2001, the District prepared a Final Focused Environmental Impact Report for the Moorpark Wastewater Treatment Plant 5.0 MGD Expansion (SCH No. 200011127). The project evaluated consisted of plant modifications required to provide secondary treatment capacity of 5.0 mgd and expansion of reclamation capacity from 1.5 mgd to 3.0 mgd. It was also acknowledged that future tertiary treatment capacity expansion to 4 mgd is envisioned. A focused EIR was required because of the unavoidable agricultural impact associated with the proposed expansion into adjacent agricultural land. An addendum to this FEIR was prepared to address revisions to the expansion project. However, at present the MWTP still has a secondary treatment capacity of 3.0 mgd and tertiary treatment capacity of 1.5 mgd.

In 2010 VCWWD No. 1 prepared a Final Mitigated Negative Declaration (MND) for the MWTP Reclaimed Water Distribution System Phases II and III (SCH No. 2010041035). These phases of the distribution system had not been previously identified or evaluated in earlier documents.

As indicated above, the MWTP reclaimed water system is being developed in phases. The following is a summary description of each phase.

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- Phase I (completed): This includes the existing tertiary treatment facility, reclaimed water booster pump stations, on-site storage basins and approximately 4 miles of reclaimed water lines from the MWTP to the Moorpark Country Club Golf Course, and on-site storage ponds. VCWWD 1 completed Phase I in 2002 and is currently serving approximately 400 AFY of reclaimed water through this system. These system elements received environmental evaluation through the documentation described above.
  - Phase II (completed): Phase II includes construction of a 1.5 MG above ground storage reservoir and approximately 3,000 linear feet of reclaimed water pipeline. Phase II was completed in 2012 and currently provides more than 200 AFY. As more customers connect for service it is estimated that this phase will provide an average of 250 AFY of reclaimed water.
  - Phase III (partially complete): This phase includes about 10,000 linear feet of reclaimed water pipeline, which will be extended from the Phase II pipeline terminus at Arroyo Las Posas crossing at Hitch Boulevard, to serve an additional 450 AFY of reclaimed water. The first half of Phase III (Phase III-A) was constructed by VCWWD 1 in 2012. The remaining portion of Phase III is not expected to be constructed at this time.
  - Phase IV (proposed future): This phase includes construction of approximately 16,500 linear feet of reclaimed water pipeline and a booster pump station from the reclaimed water reservoir near Championship Drive and Grimes Canyon Road to the Rustic Canyon Golf Course. This phase will provide 425 AFY of reclaimed water.

The existing above-referenced engineering and environmental documentation is herein incorporated by reference and is available for review at the District office located at 6767 Spring Road, Moorpark, CA 93020-0250.

VCWWD No. 1 proposes to implement the proposed components of the reclaimed water distribution system and specifically the Project to meet the following goals and objectives.

- Enable more reclaimed water to be used for non-potable purposes in lieu of imported water from the State Water Project and groundwater.
- Reduce demands on imported water from the State Water Project.
- Improve water supply reliability by providing a firm resource of water supply even during drought conditions.
- Expand the reclaimed water distribution system of VCWWD No. 1 consistent with the Watersheds Coalitions of Ventura County Integrated Regional Water Management Plan (2006) and Recycled Water Master Plan.

The Project would supply customers along the proposed pipeline route who are presently not served with reclaimed water, specifically the following:

- Rustic Canyon Golf Course (primary user),
- Moorpark Country Club Estates Homeowners Association,

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- City of Moorpark Landscape Maintenance District, and
  - Other customers along the proposed pipeline route.

**Project Components.** The proposed Project includes the installation of approximately 16,500 linear feet of reclaimed water pipeline and a booster pump station. The reclaimed water pipeline will be constructed of 12-inch ductile iron pipe or polyvinyl chloride (PVC) pipe. The booster pump station would be located at the existing reclaimed water tank site on Championship Drive and would include three 150-gallon per minute (gpm) capacity pumps and is proposed to be an above-ground facility. Reclaimed water from the MWTP would be served to customers along the route as they are identified and request service. This phase will provide 425 AFY of reclaimed water.

The preliminary construction start date is mid-December 2014 and completion is expected to occur by mid-December 2015. Construction will occur Monday through Friday between the hours of 7:00 am until 4:00 pm. Pipeline installation is expected to proceed at a rate of about 300 linear feet per work day. Therefore, site preparation and pipeline installation work is expected to last about three to four months.

The project is defined further in the attached Revised Initial Study (IS) prepared for this project.

#### **PUBLIC COMMENTS:**

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, the Ventura County Waterworks District No. 1 issued a public Notice of Intent (NOI) to adopt an MND and established a public review period from September 16, 2013 through October 15, 2013. The purpose of this review period was to accept comments on the adequacy of the information contained in the Draft MND/IS. The NOI was posted by the Ventura County Clerk, and was published in the Ventura County Star Newspaper on September 16 and 23, 2013. Copies of the MND/IS were available for review at the Ventura County Waterworks District No. 1 office in Moorpark, Ventura County Water and Sanitation Department office in Ventura, Moorpark Library and on the District's web site. The Draft MND/IS was also circulated to State agencies through the State of California Governor's Office of Planning and Research, State Clearinghouse (SCH) and assigned SCH No. 2013091048. Communications received in response to the NOI to adopt an MND are attached at the end of this MND followed by responses to comments. Where necessary, revisions to the Initial Study have been made in response to comments. Within the Revised Initial Study, deleted text has been indicated with strikethrough (~~strikethrough~~) and new text is designated with underlining (underlining).

#### **PROPOSED FINDINGS:**

VCWWD No. 1 has prepared this MND pursuant to Section 15070 of the State Guidelines for the Implementation of the California Environmental Quality Act. This MND documents VCWWD No. 1'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 (IS) identifies and discusses potential impacts, mitigation measures that will be incorporated into the proposed project and residual impacts for identified subject areas.

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Based upon the findings of the IS, it has been determined that, with the implementation of mitigation measures presented below, the Project will not have a significant effect on the environment for the following reasons:

- The proposal will not significantly affect topography, seismic exposure, erosion, flood plains or water quality;
- The proposal will not significantly affect any endangered species of habitat;
- The proposal will not significantly affect air quality, noise levels, solid wastes or the consumption of natural resources;
- The proposal will not significantly affect any cultural resources, scenic resources, open space, wetlands or parkland; and
- The proposal will not significantly affect land use, public facilities, or socio economic resources; and
- The proposal is consistent with local land uses and will not create any unplanned growth or require public services beyond those proposed for the near future.

Any element in the Project Description that is not met as described shall constitute an action not considered as part of the MND/IS. If the Project Description changes, the District will require that a reevaluation of potential environmental effects be conducted that considers these changes.



Reddy Pakala,  
Director – Water and Sanitation  
Department



Date

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## MITIGATION MEASURES INCORPORATED INTO THE PROJECT

The following measures are incorporated into the proposed Project to reduce impacts to a less than significant level.

### AIR QUALITY:

**AQ1** The District shall implement a fugitive dust control program. The dust control program should include the following procedures:

- 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.

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- 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).

**AQ2** Minimize equipment idling time.

**AQ3** Maintain equipment engines in good condition and in proper tune as per manufactures' specifications.

**AQ4** Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.

**AQ5** Use alternatively fueled construction equipment such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

#### **SURFACE WATER QUALITY:**

**WQ1** Project construction shall meet performance criteria defined in Section 1 of Part 4.F of the Ventura Countywide Municipal Stormwater Permit through the inclusion of the effective Best Management Practices (BMPs) for Construction Sites Less than One Acre during all ground disturbing activities or the BMPs for Construction Sites Over One Acre but Less than Five Acres as appropriate. The project applicant (District) is required to develop and implement a Stormwater Pollution Control Plan (SWPCP). VCWWD No. 1 shall review and approve the SWPCP for the Project for compliance with Section 1 or 2 and Section 6 regarding repaving of Part 4.F of the NPDES permit. The review shall be done by qualified personnel. The VCWWD No. 1 shall provide a copy of the approved SWPCP to the Watershed Protection District, Water and Environmental Resources Division for permit tracking purposes. The SWPCP shall be reviewed and approved by the Watershed Protection District prior to issuance of a notice to proceed to the contractor. A VCWWD No. 1 inspector shall conduct inspections per Section 8 of Part 4.F of the MS4 permit to assure effective installation and functionality of the approved BMPs.

#### **BIOLOGICAL RESOURCES:**

**BIO1** Presence/absence surveys for California gnatcatcher shall be completed prior to finalization of the Project design according to the survey guidelines developed by the U.S. Fish & Wildlife Service, which includes at least six surveys conducted at

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least one week apart. If presence of this species is documented during the surveys, the pipeline alignment shall be modified to avoid loss of occupied habitat and provide a U.S. Fish & Wildlife Service-approved buffer between occupied habitat and construction activities. Alternatively, the District may pursue a take permit through the Endangered Species Act Section 10 process, including the development and implementation of a habitat conservation plan.

- BIO2** If feasible, pipeline installation will be scheduled outside the typical bird breeding season (March 1 to August 15). Alternatively, a qualified biologist shall conduct breeding bird surveys within 48 hours of the start of construction to identify active bird nests within vegetation to be removed. If active nests are found, vegetation removal activities shall be postponed until the young have fledged or the nest is abandoned.

#### **AGRICULTURAL RESOURCES:**

- AG1** To the extent practicable, construction will be scheduled while fields are fallow or when crops can be harvested in advance of construction.
- AG2** Market value will be paid for crops taken out of production.
- AG3** Agricultural landowners of *Project construction sites and*<sup>1</sup> adjacent to Project construction sites will be notified of construction; and construction activities should be undertaken as to avoid blocking access to agricultural parcels.
- AG4** Entry of Project personnel and equipment into avocado groves or nearby areas topographically up-gradient from avocado plantings shall be avoided to the maximum extent practical. This shall be included as a condition in the request for bids on the Phase IV Pipeline Project and monitored in the field. This measure shall also apply to future activities associated with the operation of the Project.
- AG5** Any Project equipment that must operate in avocado groves or nearby areas topographically up-gradient from avocado plantings shall be disinfected prior to use in these areas if there is any possibility that the equipment was previously used in areas infected with *Phytophthora* (Avocado root rot pathogen). This shall be accomplished as recommended by the University of California Cooperative Extension, by washing off and mud/soil from equipment. The equipment should then be allowed to dry thoroughly and be dipped or treated with a disinfectant. Effective disinfectants include: a 70% solution of methanol, ethanol, or rubbing alcohol; a 10% chlorox solution; a 5% solution of commercial formalin or forlin or formaldehyde; or amphyl. Equipment disinfection shall be accomplished in a designated area that will not impact water or biological resources. This shall be included as a condition in the request for bids on the Phase IV Pipeline Project. This measure shall also apply to future activities associated with the operation of the Project.

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<sup>1</sup> Italicized text has been added to the measure as it previously appeared in the FEIR.

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## **SCENIC RESOURCES:**

- SR1** Staging of construction equipment and materials shall be conducted in such a way as to minimize the visual impact from adjacent viewing areas to the extent practicable. This may be accomplished by utilizing the minimum area needed for staging, confining all overnight staging of equipment and materials to designated areas and use of visual screening. This measure shall be included in contractor bid specifications.
- SR2** In areas of the proposed pipeline alignment where natural vegetation will be impacted, revegetation of the affected area will be accomplished with the assistance of a qualified biologist. A revegetation plan including details regarding the species, plant stock/sources, spacing, irrigation requirements and success criteria that will ensure complete restoration of the disturbed area will be prepared by a qualified biologist on behalf of VCWWD No. 1 prior to Project construction. The revegetation plan will be implemented as soon as practical upon completion of pipeline construction within natural areas. The revegetation plan shall be prepared and implemented with the objective of reestablishing the pipeline alignment to pre-Project conditions or better such that visual impacts are mitigated as soon as possible after completion of construction.
- SR3** The booster pump station shall be located in such a manner as to reduce visual impacts to public view areas. This may be accomplished by locating the pump station on the northwest side of the reclaimed water tank such that they would be screened from view by the existing reclaimed water tank for viewers on Championship Drive and the Moorpark Country Club. Additionally, the pump station equipment shall be placed in a structure of comparable construction to the structures on the Well No. 20 site.

## **PALEONTOLOGICAL RESOURCES**

- P1** If excavation has the potential to extend into Saugus Formation, the District shall implement a paleontological monitoring program for project areas where excavation would impact native Saugus Formation materials. The paleontological monitoring program shall be comprised of at least the following elements:
- a) A qualified, Ventura County-approved paleontologist shall be retained by the District to monitor initial excavation activities within the pipeline routes where excavation has the potential to extend into native Saugus Formation materials to determine if continued monitoring is warranted, and if so, to develop a monitoring schedule.
  - b) The Project paleontologist will provide an educational overview relating to paleontological issues in Ventura County and protection of resources at the Project site to all construction employees who will be onsite during the ground-disturbing phases of Project construction.

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- c) In the event that fossil remains are found during Project construction in any location, work shall be stopped immediately or redirected away from the find. The Project paleontologist or other Ventura County approved paleontologist shall be called to the site immediately to assess the site and determine further mitigation measures to be implemented as necessary.
  - d) If fossils are encountered, the paleontologist will salvage scientifically significant fossil remains.
  - e) The paleontologist shall have the power to temporarily halt or divert grading efforts to allow evaluation and any necessary salvage of exposed fossils which are determined as potentially significant.
  - f) All significant fossils collected shall be identified. These remains shall be donated to an institution with research and/or educational interest in the materials and a retrievable storage system such as the Los Angeles County Museum of Natural History.
  - g) Locations of recorded fossil localities are confidential and are to be released on a "need to know" basis only to reduce unauthorized collecting activities.
  - h) A final report summarizing findings, including an itemized inventory and contextual stratigraphic data, shall accompany the fossils to the designated repository with a copy also retained by the District.

#### **CULTURAL RESOURCES:**

- CUL1** In the event that archaeological resources are exposed during Project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended until a qualified archaeologist has evaluated the nature and significance of the find. The District shall be notified of any such find. A Chumash representative should monitor any archaeological field work associated with Native American materials.
- CUL2** 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. The District shall also be notified of any such find.

#### **HYDRAULIC HAZARDS**

- HH1** For areas where the Project pipeline would be located within a designated stream channel, a Project-specific hydraulic analysis of potential long-term channel degradation and channel scour of watercourses crossed by the proposed pipeline alignment shall be conducted prior to final Project design. Any necessary recommendations, such as appropriate depths of burial for the pipeline, needed to

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minimize the risk of exposure and damage of the structure shall be included in the analysis and incorporated into the final Project design.

## **HAZARDOUS MATERIALS AND WASTE**

- HAZ1** Ventura County Waterworks District No. 1 shall ensure that soil disturbing activities in agricultural areas will be done under the assumption that residual pesticides exist within these soils, and appropriate safety precautions as required under the applicable Occupational Safety and Health Administration (OSHA) regulations will be followed. Additionally, if during construction of the Project, any other type of soil contamination is suspected by the construction contractor, construction in the area shall stop and appropriate health and safety procedures shall be implemented including contact with the Ventura County Environmental Health Department. If determined necessary by the Ventura County Health Department or other regulatory agency with jurisdiction over the environmental resources affected, appropriate remedial activity shall be conducted prior to the resumption of work in the area of concern. Remediation could involve removal and proper disposal of contaminated materials, on-site treatment, etc.

## **NOISE AND VIBRATION:**

- N1** The District shall notify all adjacent residents at least two weeks prior to project construction of the construction schedule including beginning and end dates and, days and hours of construction.
- N2** The contractor shall turn off idling equipment when not in use for periods longer than 30 minutes.
- N3** The contractor shall operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises near noise sensitive receptors.
- N4** Booster pump station operation together with Well No 20 filtration improvements shall not result in an increase of above 3 dBA over ambient at noise sensitive locations (e.g., residential uses). Prior to pump station operation, a noise consultant shall be retained to evaluate final development plans for both District projects and ensure that any necessary noise reduction measures (e.g., appropriate pump and motor selection, shielding, etc.) have been incorporated as needed to ensure that the project will not result in project-specific or cumulative increase in noise levels over 3 dBA above ambient (1hr Leq) at nearby sensitive receptors.

## **TRANSPORTATION/CIRCULATION:**

- T1** The District shall make a condition of the construction contractor bid specifications that during the construction phase of the Project, all construction-related trips affecting State Highways will occur outside of the peak hours to the maximum extent feasible. Peak hours are 6:30 to 9:30 am and 3:30 to 6:30 p.m. weekdays.

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- T2** The District shall apply for Encroachment Permits from the Permits Division of the County Transportation Department for work on County roads. The District should contact the Permits Division at 805-654-2055 for the requirements of this permit.
- T3** A Traffic Control Plan(s) shall be prepared by a traffic engineer, submitted, reviewed and approved by the appropriate jurisdiction (County, City CalTrans) for any road closure, partial road closure, or detours on area roads. Plans for all Project-impacted roads shall be designed to mitigate any potential disruptions to vehicle, pedestrian and bicycle movements, as well as property access during construction within road rights of way. The plan(s) must be approved the required minimum number of days (e.g., a minimum of seven calendar days for the County) prior to the actual road closure, or detour. The Traffic Control Plan(s) should include, but not necessarily be limited to the following as appropriate:
- Use of a flagger at work access areas;
  - Maintain two-way traffic at all times, where feasible;
  - Provide safety measures to separate motorists from the construction workers and the work zone;
  - Ensure access for emergency vehicles at all times;
  - Provide access to adjacent residences and businesses to the extent feasible;
  - Open lanes as soon as possible to restore normal traffic patterns;
  - Provide advance notification of the construction Project to residences and business in the affected area;
  - Notify the public during construction, using methods such as large electronic monitoring signs, notification to impacted residents, appropriate detour signs, and notifications to schools and emergency providers;
  - Provide an information hotline to be manned during business hours;
  - Provide a designated traffic control coordinator to ensure compliance with the Traffic Control Plan;
  - Identify temporary pedestrian detours if sidewalks are encroached on by construction activities;
  - Reopen bicycle lanes and pedestrian facilities if impacted as soon as possible to minimize disruption to facility users;
  - During construction, cover open trenches with metal plates at the end of the work day;
  - After construction, restore the roads to their pre-construction condition;
  - During the hauling of material to or from the Project sites, the trucks shall be covered to secure all material so that any nuisance or danger to the public from flying debris can be avoided, and
  - Inspect and maintain truck safety equipment.

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- T4** Provide the Transportation Department of the affected jurisdiction with a Site Plan that shows the proximity of trenching operation, construction equipment, and storage of materials to the right-of-way and road edge on the roads affected by the Project.
  - T5** Oversize vehicle permits shall be obtained from Caltrans, the County of Ventura and the City of Moorpark as appropriate if such vehicles are to be used in the truck hauling operations.
  - T6** The District shall apply for Encroachment Permits from the City of Moorpark for work in City streets.
  - T7** The District shall apply for Encroachment Permits from the Caltrans for work in State highways.
  - T8** All construction within roadway rights-of-way shall conform to the applicable City, County, or CalTrans Road Standards.
  - T9** Any wide loads or unusual loads (e.g., excessively long loads) to be transported on State highways will require a Transportation Permit from Caltrans.
  - T10** The District shall comply with the Ventura County Transportation Department policy regarding a moratorium on trenching on recently paved roads. If the road has been paved in the last five years, then the District will be responsible for overlaying the entire width of the road.
  - T11** The District shall require the construction contractor(s) for the Project to protect pavement, berms, and drainage structures within the Project work area from damage that may be caused by trucks and construction-related trips. Any portion damaged during construction, in the opinion of the Transportation Department or Designee, shall be replaced in accordance with the current Standard Construction Details and/or in a manner acceptable to the Transportation Department or designee of the affected roadway within 30 days of completion of the Project.
  - T12** Prior to and during construction within Happy Camp Regional Park and Rustic Canyon Golf Course the District and selected contractor shall coordinate with the managers of those facilities in order to minimize any impacts to the operation of roads within these recreational areas.

## **WATER SUPPLY**

- WS1** Project impacts areas requiring revegetation, other than areas dedicated to agricultural production, shall be revegetated using drought-tolerant native plants and water conserving techniques.
- WS2** Short-term Project construction water demands shall be met using reclaimed water (e.g., dust suppression and irrigation of revegetated areas).

## **SOLID WASTE MANAGEMENT**

- SW1** Recyclable Construction Materials: Contract specifications for this project must require that all recyclable materials generated during the demolition and/or

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construction phases of the project (e.g., concrete, asphalt, rebar, wood, and metal) be recycled at an appropriate, permitted, recycling facility. A complete list of permitted construction and demolition debris recycling facilities in Ventura County is available at: [www.wasteless.org/construction&demolitionrecyclingresources](http://www.wasteless.org/construction&demolitionrecyclingresources). All non-recyclable materials must be disposed at a permitted solid waste disposal facility.

- SW2** Soil - Recycling & Reuse: Contract specifications for this project must include a requirement that soil and sand not reused on-site during the construction phase of the project be transported to an authorized or permitted organics facility for recycling or reuse. Illegal disposal and landfilling of soil is prohibited. A complete list of facilities in Ventura County that recycle soil is available at: [www.wasteless.org/construction&demolitionrecyclingresources](http://www.wasteless.org/construction&demolitionrecyclingresources).
- SW3** Green Materials - Recycling & Reuse: The Contract Specifications for this **project must include a requirement that all wood waste and vegetation removed** during the construction phase of this project must be diverted from the landfill. This can be accomplished by on-site chipping and land-application at various project sites, or by transporting the materials to an authorized or permitted greenwaste facility in Ventura County. A complete list of authorized greenwaste facilities is located at: [www.wasteless.org/greenwasterecyclingfacilities](http://www.wasteless.org/greenwasterecyclingfacilities).
- SW4** Recyclable Construction & Demolition Debris – Required Report: Contractors shall submit a **Form B – Recycling Plan** to the IWMD for approval prior to the issuance of the Notice to Proceed, as provided in Section 6-7.4. of the VCSS. The **Recycling Plan** must specify how all recyclable materials generated by the project (e.g., metal, concrete, wood, greenwaste, and soil) will be diverted from the landfill. A copy of IWMD’s **Form B – Recycling Plan** is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD).
- SW5** Recyclable Construction & Demolition Debris – Required Report: Contractors shall submit a Form C – Recycling Report to the IWMD for approval prior to the Engineer’s preparation of the final estimate, as provided in Section 9-3.2 of the VCSS. The Form C – Recycling Report must have original recycling facility receipts and/or other documentation attached to verify recycling, on-site reuse, or salvage occurred. A copy of IWMD’s Form C – Recycling Report is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD).

## LAW ENFORCEMENT

- L1** The District shall ensure that proper security measures are followed during the construction phase of the Project to protect materials, tools and equipment.

## RECREATION

- R1** VCWWD No. 1 will provide informational signage at both entrances to Happy Camp Regional Park at least two weeks prior to the initiation of Project construction activities that would impact the park. The signage will briefly describe

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the Project, identify the areas of impact and the period of time that park access will be impacted.

- R2** VCWWD No. 1 will provide for public access to the Upper Parking Area during periods when Project activities do not preclude its use due to safety considerations. This will include weekends, holidays and weekday hours prior to and after construction. Any, Project equipment and/or materials that remain within the Upper Parking Area during periods of public access will be contained within a secured area (e.g, surrounded by chain link fencing with locked gate).

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**COMMUNICATIONS RECEIVED IN RESPONSE TO THE NOTICE OF INTENT TO ADOPT A  
MITIGATED NEGATIVE DECLARATION FOR THE VENTURA COUNTY WATERWORKS  
DISTRICT NO. 1 MOORPARK WASTEWATER TREATMENT PLANT RECLAIMED WATER  
DISTRIBUTION SYSTEM PHASE IV**

Parties Submitting Communications in Response to the Notice of Intent to Adopt an MND include:

- State of California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit
- Native American Heritage Commission
- State Water Resources Control Board
- California Department of Fish and Wildlife
- County of Ventura, Resources Management Agency, Planning Programs Section
- Ventura County Watershed Protection District
- Ventura County General Services Agency, Parks Department

Communications followed by response to comments are provided below.



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

October 16, 2013

Susan Pan  
Ventura County Waterworks District #1  
PO Box 250  
Moorpark, CA 93020



Subject: MWTP Reclaimed Water Distribution System Phase IV  
SCH#: 2013091048

Dear Susan Pan:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on October 15, 2013, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044  
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2013091048  
**Project Title** MWTP Reclaimed Water Distribution System Phase IV  
**Lead Agency** Ventura County Waterworks District #8

**Type** MND Mitigated Negative Declaration  
**Description** Note: Reference SCH# 2010041035

The proposed Project includes the installation of approximately 16,500 linear feet of reclaimed water pipeline and a booster pump station. The reclaimed water pipeline will be constructed of 12-inch ductile iron pipe or polyvinyl chloride (PVC) pipe. The booster pump station would be located at the existing reclaimed water tank site on Championship Drive and would include three 150-gallon per minute (gpm) capacity pumps and is proposed to be an above-ground facility. Reclaimed water from the MWTP would be served to customers along the route as they are identified and request service. This phase will provide 425 AFY of reclaimed water. The preliminary construction start date is mid-December 2014 and completion is expected to occur by mid-December 2015.

**Lead Agency Contact**

**Name** Susan Pan  
**Agency** Ventura County Waterworks District #1  
**Phone** 805 378 3025 **Fax**  
**email**  
**Address** PO Box 250  
**City** Moorpark **State** CA **Zip** 93020

**Project Location**

**County** Ventura  
**City** Moorpark  
**Region**  
**Lat / Long**  
**Cross Streets** Championship Drive and Walnut Canyon Road & Broadway Road and Happy Camp Rd.  
**Parcel No.** road rights-of-way and many parcels  
**Township** 3N **Range** 19W **Section** **Base** SBB&M

**Proximity to:**

**Highways** Hwy 23  
**Airports**  
**Railways** UPRR  
**Waterways** Happy Camp Canyon Creek  
**Schools** Walnut Canyon ES  
**Land Use** open space, agriculture, medium-low density residential

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 7; CA Department of Public Health; State Water Resources Control Board, Division of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; Public Utilities Commission

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Document Details Report  
State Clearinghouse Data Base

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*Date Received* 09/16/2013    *Start of Review* 09/16/2013    *End of Review* 10/15/2013

**NATIVE AMERICAN HERITAGE COMMISSION**

1550 Harbor Boulevard  
West Sacramento, CA 95691  
(916) 373-3715  
(916) 373-5471 – FAX  
e-mail: ds\_nahc@pacbell.net

September 24, 2013

**RECEIVED**

SEP 26 2013

PWA/WATER &amp; SANITATION

Ms. Susan Pan

**Ventura County Waterworks District No. 1**

P.O. Box 250  
Moorpark, CA 93020-0250

RE: SCH#2013091048 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the **“Ventura County Waterworks District 1 Moorpark Wastewater Treatment Plan Reclaimed Water Distribution System Phase IV; ”** located in Moorpark; Ventura County, California

Dear Ms. Pan:

The Native American Heritage Commission (NAHC) has reviewed the Court decision (170 Cal App 3<sup>rd</sup> 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native

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American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

  
Dave Singleton  
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

---

**Native American Contacts  
Ventura County  
September 24, 2013**

Beverly Salazar Folkes  
1931 Shadybrook Drive  
Thousand Oaks, CA 91362  
folkes9@msn.com  
805 492-7255  
(805) 558-1154 - cell  
folkes9@msn.com

Chumash  
Tataviam  
Fernandeño

Patrick Tumamait  
992 El Camino Corto  
Ojai, CA 93023  
(805) 640-0481  
(805) 216-1253 Cell

Chumash

Santa Ynez Band of Mission Indians  
Vincent Armenta, Chairperson  
P.O. Box 517  
Santa Ynez, CA 93460  
varmenta@santaynezchumash.  
(805) 688-7997  
(805) 686-9578 Fax

Chumash

San Luis Obispo County Chumash Council  
Chief Mark Steven Vigil  
1030 Ritchie Road  
Grover Beach CA 93433  
(805) 481-2461  
(805) 474-4729 - Fax

Chumash

Fernandeno Tataviam Band of Mission Indians  
Larry Ortega, Chairperson  
1019 - 2nd Street, Suite #1  
San Fernando CA 91340  
(818) 837-0794 Office  
  
(818) 837-0796 Fax

Fernandeno  
Tataviam

Owl Clan  
Qun-tan Shup  
48825 Sapaque Road  
Bradley, CA 93426  
mupaka@gmail.com  
(805) 472-9536 phone/fax  
(805) 835-2382 - CELL

Chumash

Barbareno/Ventureno Band of Mission Indians  
Julie Lynn Tumamait-Stennsle, Chair  
365 North Poli Ave  
Ojai, CA 93023  
jtumamait@sbcglobal.net  
(805) 646-6214

Chumash

Stephen William Miller  
189 Cartagena  
Camarillo, CA 93010  
(805) 484-2439

Chumash

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013091048; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Moorpark Wastewater Treatment Plant Reclaimed Water Project; located in Moorpark; Ventura County, California.

---

**Native American Contacts  
Ventura County  
September 24, 2013**

Santa Ynez Tribal Elders Council  
Adelina Alva-Padilla, Chair Woman  
P.O. Box 365 Chumash  
Santa Ynez , CA 93460  
elders@santaynezchumash.org  
(805) 688-8446  
(805) 693-1768 FAX

Santa Ynez Band of Mission Indians  
Tribal Admin/Counsel Sam Cohen  
P.O. Box 517 Chumash  
Santa Ynez , CA 93460  
info@santaynezchumash.org  
(805) 688-7997  
(805) 686-9578 Fax

Randy Guzman - Folkes  
6471 Cornell Circle Chumash  
Moorpark , CA 93021 Fernandefio  
**ndnRandy@yahoo.com** Tataviam  
(805) 905-1675 - cell Shoshone Paiute  
Yaqui

Carol A. Pulido  
165 Mountainview Street Chumash  
Oak View , CA 93022  
805-649-2743 (Home)

Coastal Band of the Chumash Nation  
Michael Cordero, Chairperson  
P.O. Box 4464 Chumash  
Santa Barbara CA 93140  
CbcnTRIBALCHAIR@gmail.com

Melissa M. Parra-Hernandez  
119 North Balsam Street Chumash  
Oxnard , CA 93030  
envvy36@yahoo.com  
805-983-7964  
(805) 248-8463 cell

Charles S. Parra  
P.O. Box 6612 Chumash  
Oxnard , CA 93031  
(805) 340-3134 (Cell)  
(805) 488-0481 (Home)

Frank Arredondo  
PO Box 161 Chumash  
Santa Barbara CA 93102  
ksen\_sku\_mu@yahoo.com

**This list is current only as of the date of this document.**

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---

**Native American Contacts  
Ventura County  
September 24, 2013**

Santa Ynez Tribal Elders Council  
Freddie Romero, Cultural Preservation Constlt  
P.O. Box 365 Chumash  
Santa Ynez , CA 93460  
805-688-7997, Ext 37  
freddyromero1959@yahoo.  
com

Coastal Band of the Chumash Nation  
Crystal Baker  
P.O. Box 723 Chumash  
Atascadero , CA 93423  
805-466-8406

Barbareno/Ventureno Band of Mission Indians  
Kathleen Pappo  
2762 Vista Mesa Drive Chumash  
Rancho Pales Verdes CA 90275  
310-831-5295

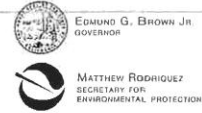
Barbareno/Ventureno Band of Mission Indians  
Raudel Joe Banuelos, Jr.  
331 Mira Flores Court Chumash  
Camarillo , CA 93012  
805-987-5314

Coastal Band of the Chumash Nation  
Janet Darlene Garcia  
P.O. Box 4464 Chumash  
Santa Barbara CA 93140  
805-689-9528

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013091048; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Moorpark Wasterwater Treatment Plan Reclaimed WAtEr Project; located in Moorpark; Ventura County, California.



State Water Resources Control Board

OCT 10 2013

Susan Pan
County of Ventura Waterworks District No. 1
P.O. Box 250
Moorpark, California 93020

Handwritten notes: 'cigar' and '10/15/13' next to a 'RECEIVED' stamp.

OCT 11 2013

STATE CLEARING HOUSE

Dear Ms. Pan:

DRAFT MITIGATED NEGATIVE DECLARATION (MND) FOR COUNTY OF VENTURA WATERWORKS DISTRICT NO. 1 (DISTRICT); COUNTY OF VENTURA WATERWORKS DISTRICT NO. 1 MWTP RECLAIMED WATER DISTRIBUTION SYSTEM PHASE IV (PROJECT); VENTURA COUNTY; STATE CLEARINGHOUSE NO. 2013091048

We understand that the District may be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project. As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information and comments for the environmental document prepared for the Project.

Please provide us with the following documents applicable to the proposed Project if seeking CWSRF or other State Water Board funding: (1) one copy of the draft and final MND, (2) the resolution adopting the MND and a Mitigation Monitoring and Reporting Program (MMRP) making California Environmental Quality Act (CEQA) findings, (3) all comments received during the review period and the District's response to those comments, (4) the adopted MMRP, and (5) the Notice of Determination filed with the Ventura Clerk and the Governor's Office of Planning and Research, State Clearinghouse. In addition, we would appreciate notices of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board.

The CWSRF Program is partially funded by the United States Environmental Protection Agency and requires additional "CEQA-Plus" environmental documentation and review. Three enclosures are included that further explain the CWSRF Program environmental review process and the additional federal requirements. For the complete environmental application package please visit the following link: http://www.waterboards.ca.gov/water\_issues/programs/grants\_loans/srf/docs/forms/financial\_assist\_application\_instructions.pdf. The State Water Board is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF financing commitment for the proposed Project. For further information on the CWSRF Program, please contact Mr. Ahmad Kashkoli, at (916) 341-5855.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, Ca 95812-0100 | www.waterboards.ca.gov



It is important to note that prior to a CWSRF financing commitment, projects are subject to provisions of the Federal Endangered Species Act (ESA), and must obtain Section 7 clearance from the United States Department of the Interior, Fish and Wildlife Service (USFWS), and/or United States Department of Commerce National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) for any potential effects to special status species.

Please be advised that the State Water Board will consult with USFWS, and/or NMFS regarding all federal special-status species that the Project has the potential to impact if the Project is to be funded under the CWSRF Program. The District will need to identify whether the Project will involve any direct effects from construction activities, or indirect effects such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur on-site, in the surrounding areas, or in the service area, and to identify applicable conservation measures to reduce such effects.

In addition, CWSRF projects must comply with federal laws pertaining to cultural resources, specifically Section 106 of the National Historic Preservation Act (Section 106). The State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board must consult directly with the California State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant. The District must retain a consultant that meets the Secretary of the Interior's Professional Qualifications Standards ([http://www.nps.gov/history/local-law/arch\\_stnds\\_9.htm](http://www.nps.gov/history/local-law/arch_stnds_9.htm)) to prepare a Section 106 compliance report.

Note that the District will need to identify the Area of Potential Effects (APE), including construction and staging areas, and the depth of any excavation. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The records search request should be made for an area larger than the APE. The appropriate area varies for different projects but should be drawn large enough to provide information on what types of sites may exist in the vicinity.

Other federal environmental requirements pertinent to the Project under the CWSRF Program include the following (for a complete list of all environmental requirements please visit: [http://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/srf/docs/forms/application\\_environmental\\_package.pdf](http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/forms/application_environmental_package.pdf)):

- A. Compliance with the Federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (i) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, or severe (if applicable); (ii) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.
- B. Compliance with the Migratory Bird Treaty Act: List any birds protected under this act that may be impacted by the Project and identify conservation measures to minimize impacts.

- C. Compliance with the Flood Plain Management Act: Identify whether or not the Project is in a Flood Management Zone and include a copy of the Federal Emergency Management Agency flood zone maps for the area.

Thank you for the opportunity to review the District's draft MND. If you have any questions or concerns, please feel free to contact me at (916) 341-5855, or by email at [AKashkoli@waterboards.ca.gov](mailto:AKashkoli@waterboards.ca.gov), or contact David Werner at (916) 327-9117, or by email at [DWerner@waterboards.ca.gov](mailto:DWerner@waterboards.ca.gov).

Sincerely,



Ahmad Kashkoli  
Senior Environmental Scientist

Enclosures (3)

1. SRF & CEQA-Plus
2. Quick Reference Guide to CEQA Requirements for State Revolving Fund Loans
3. Basic Criteria for Cultural Resources Reports

cc: State Clearinghouse  
(Re: SCH# 2013091048)  
P.O. Box 3044  
Sacramento, CA 95812-3044

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**Electronic Mail from the California Department of Fish and Wildlife, South Coast Region  
– Daniel S. Blankenship, Senior Wildlife Scientist to Susan Pan, Project Manager,  
Ventura County Waterworks District No. 1**

>>> "Blankenship, Daniel@Wildlife" <[Daniel.Blankenship@wildlife.ca.gov](mailto:Daniel.Blankenship@wildlife.ca.gov)> 10/22/2013 4:45 PM

>>>

Dear Ms. Susan Pan,

Thank you for the opportunity to comment on this MND. Because the proposed pipeline will cross three drainages the Department recommends that a Streambed Alteration Notification be completed and submitted to the Department. See the paragraphs below for guidance. Also, if feasible, the Department would like to receive pdf copies of the plant and bird surveys. Please let me know if you have any questions. Thanks, Dan

The Department opposes the elimination of watercourses (including concrete channels, blue-line streams and other watercourses not designated as blue-line streams on USGS maps) and/or the channelization of natural and manmade drainages or conversion to subsurface drains. All wetlands and watercourses, whether intermittent, ephemeral, or perennial, must be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations. The Department recommends a minimum natural buffer of 100 feet from the outside edge of the riparian zone on each side of drainage.

- a. The Department also has regulatory authority with regard to activities occurring in streams or lakes that could adversely affect any fish or wildlife resource. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) or a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of an LSA Agreement is a project subject to CEQA. To facilitate issuance of a LSA Agreement, if necessary, the environmental document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA Agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. Again, the failure to include this analysis in the project's environmental impact report could preclude the Department from relying on the Lead Agency's analysis to issue a LSA Agreement without the Department first conducting its own analysis, as Lead Agency for subsequent or supplemental analysis for the project.

Daniel S. Blankenship  
Senior Environmental Scientist (Specialist)  
Wildlife and Range Management Major Emphasis HSU  
Habitat Conservation Planning - North  
CA Department of Fish and Wildlife  
South Coast Region  
P.O. Box 802619  
Santa Clarita, CA 91380-2619  
O 661-259-3750  
C 661-644-8469  
[Daniel.Blankenship@wildlife.ca.gov](mailto:Daniel.Blankenship@wildlife.ca.gov)

October 15, 2013

Ventura County Waterworks Districts  
Water and Sanitation Department  
Attn: Susan Pan, Project Manager  
6767 Spring Road  
Moorpark, CA 93020

E-mail: susan.pan@ventura.org

Subject: Comments on the Draft MND for Ventura County Waterworks District 1,  
Reclaimed Water Distribution System – Phases IV

Dear Ms. Pan:

Thank you for the opportunity to review and comment on the subject document. Attached are the comments that we have received resulting from intra-county review of the subject document. Additional comments may have been sent directly to you by other County agencies.

Your proposed responses to these comments should be sent directly to the commenter, with a copy to Laura Hocking, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Laura Hocking at (805) 654-2443.

Sincerely,



Tricia Maier, Manager  
Planning Programs Section

Attachments

County RMA Reference Number 13-022

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509



Printed on Recycled Paper





**VENTURA COUNTY WATERSHED PROTECTION DISTRICT**  
PLANNING AND REGULATORY DIVISION  
800 South Victoria Avenue, Ventura, California 93009  
Tom Wolfington, Permit Manager – (805) 654-2061

**MEMORANDUM**

DATE: October 10, 2013

TO: Susan Pan, P.E., Manager of Planning, Design, and Construction  
Water & Sanitation Department, County Public Works Agency

FROM: Tom Wolfington, P.E., Permit Manager *TW*

SUBJECT: RMA 13-022 –Ventura County Waterworks District No.1, Moorpark  
Wastewater Treatment Plant Reclaimed Water Distribution System –  
Phase IV  
Draft Mitigated Negative Declaration (MND) and Initial Study (IS)  
Vicinity of Happy Camp Canyon and Gabbert Canyon  
Calleguas Creek Watershed, Zone 3

Pursuant to your request, this office has reviewed the subject Draft Mitigated Negative Declaration (MND) and Initial Study (IS) prepared by Padre Associates, Inc., dated September 2013, and offers the following comments:

1. Please revise Section 31.A.1: Setting, on Page C-104 to correctly reference the Ventura County Watershed Protection Ordinance as VC Ord. WP-2.
2. Please revise Section 31.A.1: Setting, on Pages C-104 and C-105 to include the following Ventura County Watershed Protection District (District) standards:
  - (i) Any activity in, on, over, under or across any jurisdictional red line channel, including the channel bed and banks of Gabbert Canyon and Happy Camp Canyon will require a permit from the District. In addition, a project can not impair, divert, impede or alter the characteristics of the flow of water running in any jurisdictional red line channel.
  - (ii) The District criteria for mitigating any increase in impervious area is that the peak flow after development shall not exceed the peak flow under existing conditions for any frequency of event.
3. Please include Items 2 (i) and (ii) above, in "Consistency Determination" for County Policy 4.6.2.1 on Page C-66 (Section 17.B.2: Project Consistency with Applicable Policies).

**END OF TEXT**

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**Electronic Mail from the Ventura County General Services Agency, Parks Department - Ron VanDyck, Deputy Director to James LaRue, Engineering Technician, Ventura County Waterworks Districts, Water & Sanitation Department**

>>> Ron VanDyck 9/13/2013 1:38 PM >>>

James,

Thanks for the opportunity to review the DMND. We are very supportive of this project and look forward to it's completion. However, I have reviewed the DMND and am ok with it, with one exception.

There will be a significant economic impact to Rustic Canyon Golf Course during the construction process in Happy Camp Canyon Park. The DMND show recreation as LS. The current pipeline routing cuts through the 17 hole (par 3) and hole damage will need to be addressed, then realigns back on the maintenance road to termination. The maintenance road is also the cart path from hole 16 to 17 and 17 to 18 and 10 to 11. T12 is good but does not address this problem. During this section of construction there will be a major impact on golf course operations, possibly shutting down half the golf course do to access limitations, equipment stowage and staging, which would bring an immediate revenue impact. This impact and design/routing need to be fully vetted with golf course management and county Parks staff before the MND is finalized to ensure all mitigation and impacts are fully addressed.

Also, in section 35.1 under Settings, Moorpark Parks and Rec is fully identified (not sure why), but there is no reference to County Parks which owns the Golf Course land and Happy Camp Canyon Regional Park. We have a management agreement with Eastern Ventura County Conservation Authority to manage and patrol the upper area above the golf course and a lease operation for the golf course.

If you have any questions please let me know.

Thanks

Ron

---

## RESPONSES TO COMMENTS

### **State of California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit, Scott Morgan, Director**

The letter is for informational purposes and indicates that the subject MND/IS was circulated to appropriate State agencies. The letter requires no response.

### **Native American Heritage Commission, Dave Singleton, Program Analyst**

A Phase I Archaeological Study was prepared for the proposed Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System Phase IV Project by Conejo Archaeological Consultants as summarized in Section C. 8 - Cultural Resources of the Initial Study. The complete Phase I Archaeological Investigation report is provided as an appendix to the Initial Study. As part of the Phase I Archaeological Investigation, Conejo conducted an archaeological records search at the South Central Coast Information Center and identified previous archaeological surveys conducted within or adjacent to the Project Area of Potential Affect (APE) as well as previously identified cultural sites within a 0.5 mile radius of the Project APE as detailed in the report. Conejo conducted a field survey of the Project APE. Additionally, Conejo conducted Native American Consultation using a Native American Heritage Commission-supplied list of recommended Chumash contacts. (The list used is the same as the list provided as an attachment to the comment letter.) No historic or prehistoric resources were identified within the project APE and Conejo determined that no further archaeological investigation is warranted. However, to mitigate any unanticipated cultural resource finds (including but not limited to human remains) during project construction, appropriate measures were recommended and have been incorporated into the Project. Therefore, Ventura County Waterworks District No 1 is in conformance with the recommendations as outlined in the subject letter.

### **State Water Resources Control Board, Ahmad Kashkoli, Senior Environmental Scientist**

The letter pertains to the environmental review process for projects whose proponents are seeking funding under the Clean Water State Revolving Fund. No comments were provided that pertain to the adequacy of the MND/IS pursuant to CEQA. Therefore, no further response is required here.

### **California Department of Fish and Wildlife, South Coast Region, Daniel S. Blankenship**

Section A.8.0, Other Public Agencies Whose Approval is Required (e.g., Permits Financing Approval, or Participation Agreement), of the Draft Initial Study provided as an attachment to the Draft MND identified a California Department of Fish and Wildlife Streambed Alteration Agreement as one of the many permits and approvals that would be required in association with project implementation. At such time as Waterworks District No. 1 submits an application for a Streambed Alteration Agreement, it will provide all necessary information as required by the application.

---

**County of Ventura, Resources Management Agency, Planning Programs Section, Tricia Maier, Manager Planning Programs Section**

The letter is for informational purposes and indicates that the subject MND/IS was circulated to appropriate County agencies. The letter requires no response.

**Ventura County Watershed Protection District, Tom Wolfington, P.E., Permit Manager**

The requested revision to Section 31.A.1 - Watershed Protection District Setting has been made. Deleted text has been indicated with strikethrough (~~strikethrough~~) and new text is designated with underlining (underlining).

The requested revision to Section 31.A.1 - Watershed Protection District Setting has been made.

The requested revision to Section 17.B.2 - Project Consistency with Applicable Policies has been made.

**Ventura County General Services Agency, Parks Department, Ron VanDyck, Deputy Director**

The identified Phase IV Project pipeline alignment as presented in the MND/IS is general for planning purposes. As indicated in Section C.35, Recreation of the Initial Study, District No. 1 anticipates the need to work with affected land owners in negotiating Project easements. In the case of the pipeline segment presently proposed to extend through Happy Camp Canyon Regional Park and Rustic Canyon Golf Course, District No. 1 will consult with the Ventura County General Services Agency, Parks Department and negotiate a pipeline alignment easement that is amenable to both agencies prior to construction. In the event that a negotiated alignment has the potential to result in impacts not identified in this MND/IS additional environmental review in compliance with CEQA will be conducted.

The text of the Initial Study, Section C.35.1 - Recreation Setting, has been revised to identify the role of the Ventura County General Services Agency, Parks Department.

**VENTURA COUNTY WATERWORKS DISTRICT NO. 1  
Moorpark Wastewater Treatment Plant Reclaimed Water Distribution  
System Phase IV  
REVISED INITIAL STUDY**

**Ventura County Waterworks District No. 1  
6767 Spring Road, P.O. Box 250  
Moorpark, California 93020-0250  
Ms. Susan Pan, Project Manager  
(805) 378-3025**

**November 2013**

SCH No. 2013091048

**Prepared with the Assistance of:**

**Padre Associates, Inc.  
1861 Knoll Drive, Ventura, California 93003**

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AIR QUALITY AND GREENHOUSE GASES

BIOLOGICAL RESOURCES

CULTURAL RESOURCES

HAZARDS

NOISE

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## **SECTION A - PROJECT DESCRIPTION**

### **1.0 PROJECT TITLE**

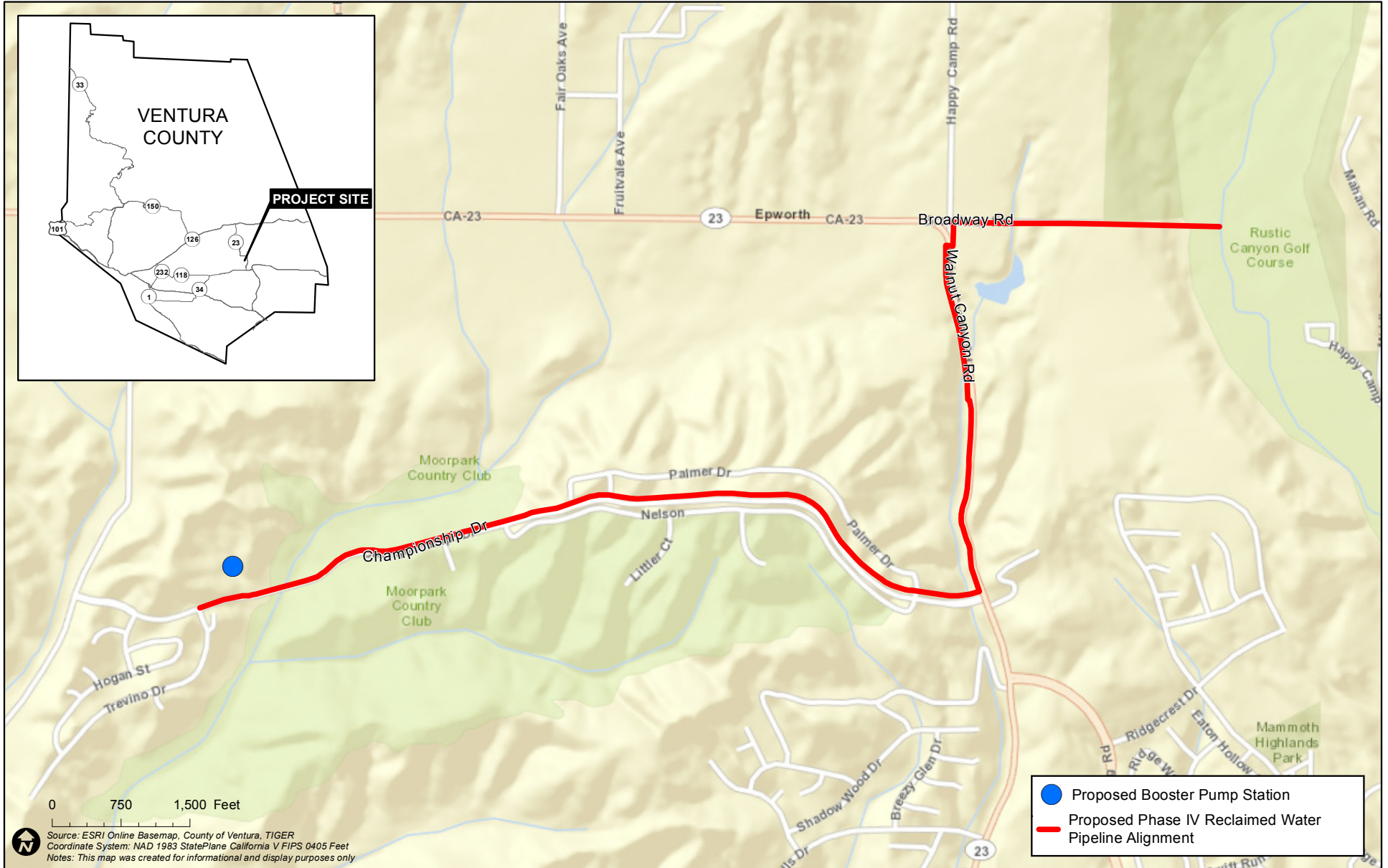
Moorpark Wastewater Treatment Plant (MWTP) Reclaimed Water Distribution System Phase IV.

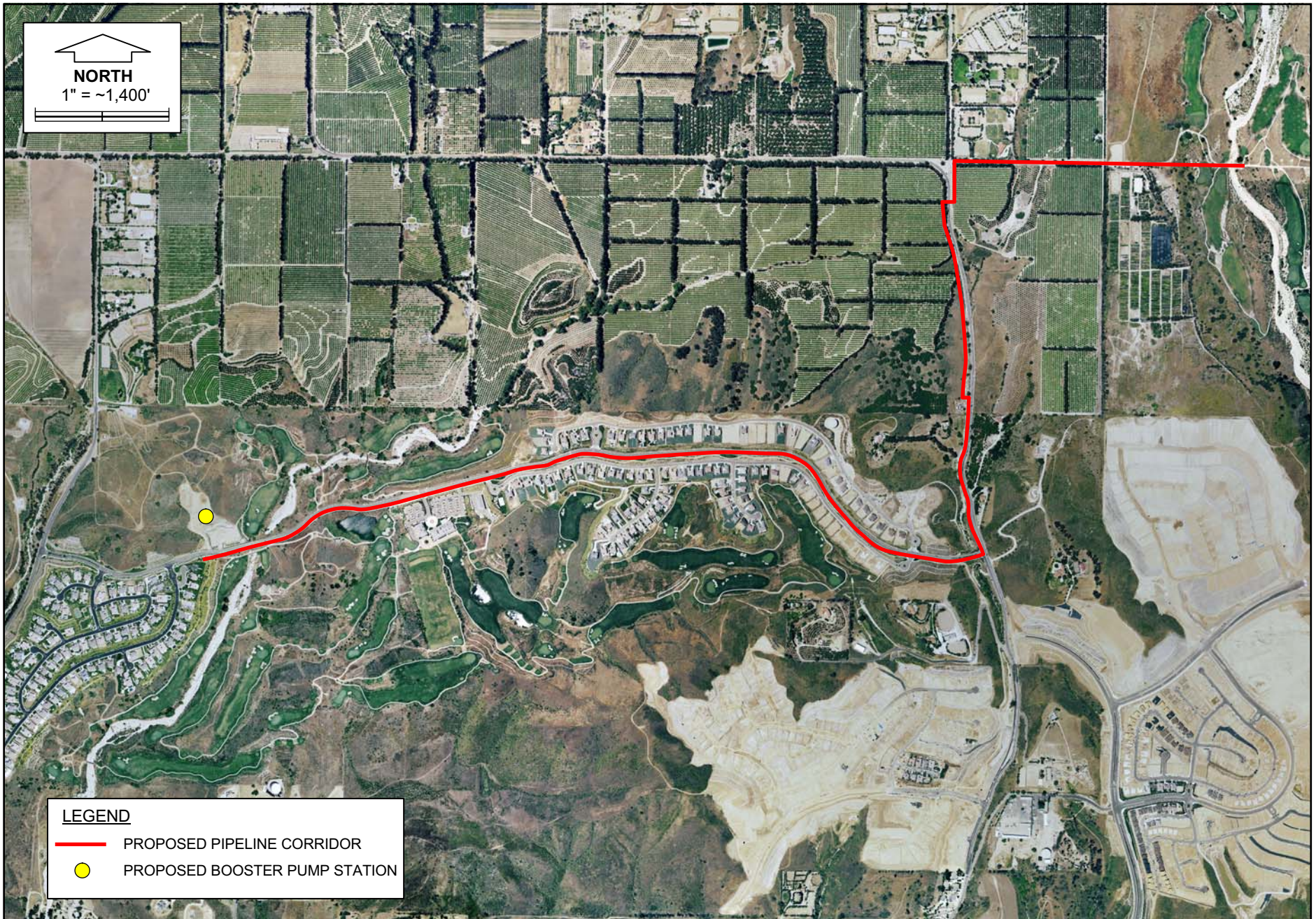
### **2.0 LEAD AGENCY NAME AND ADDRESS/CONTACT PERSON AND PHONE NUMBER**

Ventura County Waterworks District No. 1  
6767 Spring Road  
P.O. Box 250  
Moorpark, California 93020-0250  
Ms. Susan Pan, Project Manager  
(805) 378-3025

### **3.0 PROJECT LOCATION**

The MWTP is the source of the reclaimed water and is located south of Highway 118 and four miles west of the City of Moorpark. However, the location of the proposed Phase IV pipeline from west to east is described as follows. The pipeline alignment begins in the City of Moorpark on Championship Drive near the Ventura County Waterworks District No. 1 (VCWWD No. 1 or District) reclaimed water tank (located at 11501 Championship Drive) and extends east on Championship Drive to Walnut Canyon Road/State Route 23 (Figure 3-1). The alignment along Championship Drive is within the roadway and right-of-way. At Walnut Canyon Road the alignment extends to north to Broadway. Along this alignment (Walnut Canyon Road/Happy Camp Road segment) the jurisdiction changes from City of Moorpark to unincorporated Ventura County. The alignment along the majority of Walnut Canyon is located on the west side of the road outside the Caltrans right of way. The alignment crosses Walnut Canyon and continues north outside of the right of way on the east side of Walnut Canyon Road and Happy Camp Road. The final portion of the alignment extends east on Broadway to the Rustic Canyon Golf Course and will be within the roadway (County Road). The address of the Rustic Canyon Golf Course is 15100 Happy Camp Canyon Road, Moorpark, California. (However the golf course is in unincorporated Ventura County.) The proposed booster pump station will be located at the existing reclaimed water tank at 11501 Championship Drive. The Project's regional and site specific locations are shown on Figure 3-1. An aerial view of the proposed pipeline alignment is provided on Figure 3-2.





Staging of equipment and material laydown area will occur outside of the right of way, with the exception of the portion along Championship Drive where it will occur adjacent to the trench. Construction within Championship (and the portion within Broadway) will probably take out one traffic lane and/or the bike lane in one direction of travel, as dictated by the City required / approved traffic control plan.

#### 4.0 PROJECT SPONSOR'S NAME AND ADDRESS

The Project Sponsor (see Section 2.0) is the lead agency.

#### 5.0 GENERAL PLAN DESIGNATION AND ZONING

The General Plan designations and corresponding zoning along the pipeline alignment are identified below. Roadways do not have General Plan designations or zoning; however the General Plan designations and zoning of the property adjacent to the roadway is provided where the pipeline will be within the road.

General Plan Designation	Zoning
<b>City of Moorpark</b>	
OS-2 - Open Space (1 d.u./ac.)	OS-500AC
ML – Medium – Low density residential (2 d.u./ac.)	RPD-1.48U
RL – Rural Low Density Residential (1d.u./ac.)	RE-5AC
Mapped (see approved GPA) – Residential per City staff	Development Agreement applicable – ZC Ord. No 345 (Residential)
<b>County of Ventura</b>	
Agriculture 40 acre min.	Agriculture
Open Space 10 acre min.	Open space

#### 6.0 DESCRIPTION OF PROJECT

##### 6.1 BACKGROUND, GOALS, OBJECTIVES, PURPOSE AND NEED

###### 6.1.1 Background

VCWWD No. 1 was formed November 22, 1921, and serves approximately 37,576 customers through 10,194 service connections, including 10,053 residential and commercial service connections and 141 agricultural service connections. The District encompasses approximately 19,800 acres and includes the City of Moorpark and contiguous unincorporated

areas to the north and west (County of Ventura, March 2013). VCWWD No. 1 provides both water and sanitation services to the customers within its service area. District water supplies come from both imported and local (groundwater sources).

The MWTP is owned and operated by VCWWD No. 1. The MWTP is located between Highway 118 (Los Angeles Avenue) and a tributary of Calleguas Creek (locally referred to as Arroyo Las Posas west of Hitch Boulevard and Arroyo Simi east of Hitch Boulevard), approximately four miles west of the City of Moorpark. The MWTP was originally constructed in 1965 and was designed as an interim treatment facility with a capacity of 1.0 million gallons per day (mgd). In 1982, the plant was expanded to a permanent 1.5 mgd facility. In May 1988, the District prepared and certified a Final EIR (State Clearinghouse [SCH] No 87051314) for the expansion of the MWTP from 1.5 mgd to 3.0 mgd. Subsequently, based upon further study, the project was revised by substituting process improvements for construction of some of the treatment works and an addendum to the previously prepared EIR was prepared to address the changes. The addendum and Final EIR were considered, and the revised project was approved on November 7, 1989. In 1991 the MWTP was upgraded to provide a secondary treatment capacity of 3.0 mgd.

A Reclaimed Wastewater Feasibility Study (Boyle Engineering, 1990) was conducted to evaluate the feasibility of supplying reclaimed water for irrigation of agricultural and landscaping operations within the District's service area. The study identified a large potential market for reclaimed water near the MWTP. A supplemental EIR (EIR No. 0901-9783) was prepared to address the potential impacts of construction of tertiary treatment facilities to allow discharge of up to 1.5 mgd into the Arroyo Las Posas. The Ventura County Board of Supervisors certified the Supplemental EIR and approved the revised project on June 4, 1991. Both the Final and the Supplemental EIRs considered the possible long-term use of treated effluent (reclaimed water) from the MWTP for agricultural and landscape irrigation. In 1993 the MWTP was upgraded with the addition of treatment facilities to allow for the tertiary treatment of up to 1.5 mgd of effluent. The tertiary treated water meets the State Department of Health Services requirements for unrestricted reclaimed water use.

In April 1997, the District prepared a Subsequent Final Environmental Impact Report for the Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System (SCH No. 96021009). The project evaluated included a distribution system designed to distribute up to 1.5 mgd of tertiary-treated reclaimed water from the MWTP for use in agricultural or landscape irrigation reuse sites in the District's service area. The project also involved the construction of reclaimed water storage basins, pump stations, and a series of pipelines to deliver the reclaimed water. However, not all subsequent phases of the distribution system were envisioned at that time.

In 2002, the District constructed the reclaimed water pump station, pipelines, and storage basins within property owned by the District. A developer, Toll Brothers (in association with development of Tract 4928), constructed more than 3 miles of reclaimed water pipe to irrigate the 27 hole golf course known as Moorpark Country Club Estates. The golf course is located between Grimes Canyon Road and Walnut Canyon Road in the City of Moorpark. In

September 2003, the District began serving reclaimed water for golf course irrigation. The golf course currently uses approximately 400 acre-feet per year (AFY) per year of reclaimed water on an annual basis.

In 2001, the District prepared a Final Focused Environmental Impact Report for the Moorpark Wastewater Treatment Plant 5.0 MGD Expansion (SCH No. 2000111127). The project evaluated consisted of plant modifications required to provide secondary treatment capacity of 5.0 mgd and expansion of reclamation capacity from 1.5 mgd to 3.0 mgd. It was also acknowledged that future tertiary treatment capacity expansion to 4 mgd is envisioned. A focused EIR was required because of the unavoidable agricultural impact associated with the proposed expansion into adjacent agricultural land. An addendum to this FEIR was prepared to address revisions to the expansion project. However, at present the MWTP still has a secondary treatment capacity of 3.0 mgd and tertiary treatment capacity of 1.5 mgd.

In 2010 VCWWD No. 1 prepared a Final Mitigated Negative Declaration for the MWTP Reclaimed Water Distribution System Phases II and III (SCH No. 2010041035). These phases of the distribution system had not been previously identified or evaluated in earlier documents.

As indicated above, the MWTP reclaimed water system is being developed in phases. The following is a summary description of each phase.

- Phase I (completed): This includes the existing tertiary treatment facility, reclaimed water booster pump stations, on-site storage basins and approximately 4 miles of reclaimed water lines from the MWTP to the Moorpark Country Club Golf Course, and on-site storage ponds. VCWWD No. 1 completed Phase I in 2002 and is currently serving approximately 400 AFY of reclaimed water through this system. These system elements received environmental evaluation through the documentation described above.
- Phase II (completed): Phase II includes construction of a 1.5 MG above ground storage reservoir and approximately 3,000 linear feet of reclaimed water pipeline. Phase II was completed in 2012 and currently provides more than 200 AFY. As more customers connect for service it is estimated that this phase will provide an average of 250 AFY of reclaimed water.
- Phase III (partially complete): This phase includes about 10,000 linear feet of reclaimed water pipeline, which will be extended from the Phase II pipeline terminus at Arroyo Las Posas crossing at Hitch Boulevard, to serve an additional 450 AFY of reclaimed water. The first half of Phase III (Phase III-A) was constructed by VCWWD No. 1 in 2012. The remaining portion of Phase III is not expected to be constructed at this time.
- Phase IV (proposed future): This phase includes construction of approximately 16,500 linear feet of reclaimed water pipeline and a booster pump station from the reclaimed water reservoir near Championship Drive and Grimes Canyon Road to the Rustic Canyon Golf Course. This phase will provide 425 AFY of reclaimed water. This is the proposed Project which is the subject of this Initial Study and is

part of a Watersheds Coalitions of Ventura County Proposition 84 Integrated Regional Water Management (IRWMP) Implementation Grant application.

### **6.1.2 Goals and Objectives**

VCWWD No. 1 proposes to implement the proposed components of the reclaimed water distribution system and specifically the Project to meet the following goals and objectives.

- Enable more reclaimed water to be used for non-potable purposes in lieu of imported water from the State Water Project and groundwater.
- Reduce demands on imported water from the State Water Project.
- Improve water supply reliability by providing a firm resource of water supply even during drought conditions.
- Expand the reclaimed water distribution system of VCWWD No. 1 consistent with the Watersheds Coalitions of Ventura County Integrated Regional Water Management Plan (2006) and Recycled Water Master Plan.

### **6.1.3 Purpose and Need**

The Project would supply customers along the proposed pipeline who are presently not served with reclaimed water, specifically the following:

- Rustic Canyon Golf Course (primary user),
- Moorpark Country Club Estates Homeowners Association,
- City of Moorpark Landscape Maintenance District, and
- Other customers along the proposed pipeline route.

## **6.2 PROJECT COMPONENTS**

The proposed Project includes the installation of approximately 16,500 linear feet of reclaimed water pipeline and a booster pump station. The reclaimed water pipeline will be constructed of 12-inch ductile iron pipe or polyvinyl chloride (PVC) pipe. The booster pump station would be located at the existing reclaimed water tank site on Championship Drive and would include three 150-gallon per minute (gpm) capacity pumps and is proposed to be an above-ground facility. Reclaimed water from the MWTP would be served to customers along the route as they are identified and request service. This phase will provide 425 AFY of reclaimed water.

## **6.3 PROJECT SCHEDULE**

The preliminary construction start date is mid-December 2014 and completion is expected to occur by mid-December 2015. Construction will occur Monday through Friday between the hours of 7:00 am until 4:00 pm. Pipeline installation is expected to proceed at a rate of about 300 linear feet per work day. Therefore, site preparation and pipeline installation work is expected to last about three to four months.

## 6.4 PROJECT CONSTRUCTION

### 6.4.1 Methods

Pipeline construction methods will be conventional trenching which includes cutting and removal of pavement (if necessary) or clearing of the alignment of vegetation, excavation of trench, preparation of pipe bed, installation of pipeline, backfilling trench compacting soils and restoring the surface to original conditions. Trenches will be approximately 5.5 feet deep and 2.5 feet wide. Depth of cover (top of pipe to pavement) will be 48-inches and the base below the pipe to bottom of the trench will be 4 inches deep.

Estimates of cut, fill, import and export volumes for the Project are provided in Table 6.4-1 (includes native material, sand and asphalt-concrete [AC]). It is anticipated that between 300-400 truck trips will be required for hauling off AC and excess fill as well as to import bedding, base and pipe.

**Table 6.4-1. Pipeline Cut and Fill Volumes**

	Volume in Cubic Yards	Tons
Cut (trench volume)	8,199	13,836
Fill (trench volume – pipe volume)	7,649	12,909
Export (fill – AC – base – bedding)	6,051	10,087
Import (AC + base + bedding)	1,599	2,822

Traffic control measures will be used when work is within the lanes of traffic. Caltrans standard traffic control methods will be implemented for all Project traffic control. Lane closures will be necessary where work needs to be conducted in the travel lanes of local roads.

### 6.4.2 Equipment

The construction equipment anticipated to be required for installation of the proposed pipeline improvements is listed below. One piece of each equipment type (or possibly more) is expected to be required. In the case of delivery trucks, several different types of trucks will be required and would be onsite at different phases of construction. This assumes that material excavated from the trench will be temporarily stockpiled onsite and not require trucking to a remote site for later use. However, excess fill will be trucked to an off-site disposal area.

- Rubber Tired Backhoe
- Boom Truck
- End Dump Truck
- Soil Compactor
- Roller compactor (pavement replacement)
- Tracked excavator
- Delivery Trucks for material (e.g. pipe, sand, asphalt)

- Generator (pavement saw cutting)
- Street Sweeper

Equipment required for the installation of the booster pump station includes:

- Crane
- Rubber Tired Backhoe
- Boom Truck
- End Dump Truck
- Soil Compactor
- Tracked excavator
- Delivery Trucks for material (e.g. concrete)
- Street Sweeper

### **6.4.3 Manpower**

It is anticipated that a crew of up to eight personnel would be required for the pipeline upgrades and booster pump station installation.

### **6.4.4 Construction Staging Areas**

Staging areas will be provided within the District's Well No. 20 site located on Championship Drive near the reclaimed water tank and the Rustic Canyon Golf Course property near the pipeline end point. During the hours of construction operations, materials (e.g., pipe and earth materials) would be temporarily stored adjacent to the pipeline trenches within road rights-of-way or temporary construction easements on private property as described above.

## **6.5 OPERATIONS AND MAINTENANCE**

Annual maintenance will be conducted at the proposed reclaimed water facilities. This will include exercising in-line valves and servicing air release/vacuum valves. Additionally periodically installation or replacement of customer service meters will be required.

## **7.0 SETTING**

### **7.1 ENVIRONMENTAL SETTING**

As indicated above, the Project area encompasses parts of the City of Moorpark and unincorporated Ventura County. The Project area is located in the Transverse Ranges physiographic province of southern California. The characteristic landforms that define this province are a series of predominantly east-west trending mountain ranges and their intervening valleys. At the base of the mountains in the southern part of the Moorpark area, the flood plain for the Arroyo Simi forms the Little Simi Valley. Elevations along the valley floor range from about 400 to 600 feet. Elevations along the proposed pipeline corridor are several hundred feet higher as the alignment is north of the valley floor within the foothills.

The Project area is within the Calleguas Creek Watershed. The Calleguas Creek Watershed is approximately 343 square miles and lies in the most heavily populated area of eastern Ventura County (WCVC, March 2013). The Calleguas Creek has relatively small natural flows, augmented by the treated effluent from several wastewater treatment plants and urban runoff from the areas tributary to the Creek. The communities in the watershed are served largely with imported water from the State Water Project, delivered by the Calleguas Municipal Water District and distributed by local purveyors such as VCWWD No. 1.

Additional setting information is provided by subject area in Section C of this Initial Study.

## **7.2 SURROUNDING LAND USE**

As indicated in the description of land use and zoning designations for land along the proposed pipeline route (Section 5.0), land uses along the pipeline corridor include single family residential uses, mainly on Championship Drive; open space/recreation including two golf courses (Moorpark Country Club at 11800 Championship Drive, Happy Camp Regional Park, and Rustic Canyon Golf Course at the east end of the alignment); and, agricultural uses located along the Walnut Canyon Road and Broadway Road segments of the pipeline corridor.

## **7.3 OTHER PENDING AND APPROVED DEVELOPMENT**

### **7.3.1 City of Moorpark**

A review of the City of Moorpark's Residential, Commercial, Industrial and Public Projects Quarterly Status Report for January of 2013 identified the following pending projects in the Project area (specifically along Championship Drive east to Walnut Canyon Road, and Walnut Canyon Road) that should be considered relative to the evaluation of cumulative effects associated with the proposed Project:

- RPD 2004-04, GPA 2004-03, TT 5347, ZC 2004-03 – 21 Single Family Residencies proposed at Marine Drive, East of Walnut Canyon Road at Championship Drive. According to the City, the RPD has expired, however the planning department has indicated that they anticipate a re-issuance in the near future.
- RPD 2003-04; TR-5463. 49 Single Family residences located on the north side of Championship Drive, west of Grimes Canyon Road approved, but not yet under construction.

Numerous other pending and approved projects are located within the City. However, these projects are not located within the immediate area of the proposed Project.

### **7.3.2 County of Ventura**

A review of the 2013 County of Ventura's Pending Projects List and Approved Projects List identified no other pending or approved pertinent cumulative projects within the Project corridor. The County of Ventura encourages urban uses to be focused in the cities within the

County, not in the unincorporated primarily agricultural areas. Therefore, the area north of the City of Moorpark is not very active with private development. However, a review of the County of Ventura Public Works Agency Planned Capital Projects Program Five Year Plan 2012-2017 which addresses Transportation, Water and Sanitation, Watershed Protection and CEO projects, yielded the following improvement projects within the Project vicinity.

- General Water System Improvements – Unspecified locations within northern Moorpark area (through 2017)
- Pressure Regulating Station within 770, 757, 944 and 1180 Zones (2014-2016)
- Well No. 20 Treatment Facility Phase II – Design and construction of additional treatment facilities utilizing nano-filtration to lower water hardness and total dissolved solids comparable with State Water Project. (2012-2014)
- Unidentified Sewage System Improvements - Unspecified locations within northern Moorpark area (through 2017).

The County of Ventura Initial Study Assessment Guidelines (2011) indicate that the County General Plan's population, dwelling unit and employment forecasts, in conjunction with land use maps, should be used as the foundational basis for determining cumulative development within the geographic area. Additionally, all known General Plan Amendments that have been filed or are being processed in the same geographical area should be added to the forecasts. As previously noted, there are no significant County discretionary approvals being sought in the Project area. For the assessment of long-term environmental effects associated with population, the service area of VCWWD No. 1 is the area of concern.

#### **8.0 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (E.G., PERMITS, FINANCING APPROVAL, OR PARTICIPATION AGREEMENT)**

The Project will potentially require permits and approvals as listed below.

- Approval of the project by the VCWWD No. 1
- County Road Encroachment Permit (pipeline in County roads)
- County Encroachment Permit for use of Happy Camp Regional Park land
- Ventura County Watershed Protection District Permit for work in the area of red line channels
- City of Moorpark Encroachment Permit (pipeline in city roads)
- California Department of Transportation Encroachment Permit (pipeline crossing Walnut Canyon Road/State Route 23)
- California Department of Fish and Wildlife Streambed Alteration Agreement

- United States Army Corps of Engineers (ACOE) permits in compliance with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act
- Regional Water Quality Control Board Section 401 certification in compliance with the Clean Water Act and Porter-Cologne State Water Quality Act
- United States Fish & Wildlife Service Endangered Species Act, Section 7 consultation (conducted concurrently with ACOE Permit)

This environmental document will be used by decision-makers in the review and approval of the proposed Project, as well as in consideration of issuance of necessary permits and clearances. Because VCWWD No. 1 is pursuing a Proposition 84 Integrated Regional Water Management Plan Implementation Grant for the Project from the Department of Water Resources, this document will also be used by that agency in its consideration of providing funding.

**SECTION B - ENVIRONMENTAL CHECKLIST**

	Issue (Responsible Department)	Project Impact Degree of Effect*				Cumulative Impact Degree of Effect*			
		N	LS	PS -M	PS	N	LS	PS -M	PS
<b>RESOURCES:</b>	<b>1. <u>Air Quality (APCD)</u></b>		X				X		
	<b>2. <u>Water Resources (PWA):</u></b>								
	A. Groundwater Quantity	X				X			
	B. Groundwater Quality		X				X		
	C. Surface Water Quantity		X				X		
	D. Surface Water Quality		X				X		
	<b>3. <u>Mineral Resources (PIng.):</u></b>								
	A. Aggregate		X				X		
	B. Petroleum		X				X		
	<b>4. <u>Biological Resources:</u></b>			X				X	
	<b>5. <u>Agricultural Resources:</u></b>								
	A. Soils (PIng.)		X				X		
	B. Land Use Incompatibility (Ag. Dept.)			X			X		
	<b>6 <u>Scenic Resources (PIng.)</u></b>			X				X	
	<b>7. <u>Paleontological Resources</u></b>			X				X	
	<b>8. <u>Cultural Resources:</u></b>								
	A. Archaeological			X				X	
	B. Historical (PIng.)	X				X			
	<b>9. <u>Coastal Beaches &amp; Sand Dunes</u></b>	X				X			
<b>HAZARDS:</b>	<b>10. <u>Fault Rupture (PWA)</u></b>	X				X			
	<b>11. <u>Ground Shaking (PWA)</u></b>		X			X			
	<b>12. <u>Liquefaction (PWA)</u></b>		X			X			
	<b>13. <u>Seiche &amp;Tsunami (PWA)</u></b>	X				X			
	<b>14. <u>Landslides/Mudslides (PWA)</u></b>		X			X			
	<b>15. <u>Expansive Soils (PWA)</u></b>		X			X			
	<b>16. <u>Subsidence (PWA)</u></b>	X				X			
	<b>17. <u>Hydraulic Hazards:</u></b>								
	A. Non-FEMA (PWA)		X				X		
	B. FEMA (WPD)		X				X		
	<b>18. <u>Fire Hazards (Fire)</u></b>		X				X		
	<b>19. <u>Aviation Hazards (Airports)</u></b>	X				X			

	<u>Issue (Responsible Department)</u>	<u>Project Impact Degree of Effect*</u>				<u>Cumulative Impact Degree of Effect*</u>			
		N	LS	PS -M	PS	N	LS	PS -M	PS
	<b>20. <u>Hazardous Materials/Waste:</u></b>								
	A. Hazardous Materials (EH/Fire)			X				X	
	B. Hazardous Waste (EH)		X				X		
	<b>21. <u>Noise and Vibration</u></b>			X				X	
	<b>22. <u>Daytime Glare</u></b>	X				X			
	<b>23. <u>Public Health (EH)</u></b>			X				X	
	<b>24. <u>Greenhouse Gases (APCD)</u></b>		X				X		
<b>LAND USE:</b>	<b>25. <u>Community Character (PInq.)</u></b>		X			X			
	<b>26. <u>Housing (PInq.)</u></b>		X				X		
<b>PUBLIC FACILITIES/ SERVICES:</b>	<b>27. <u>Transportation/Circulation:</u></b>								
	A. Roads and Highways:								
	(1) Level of Service (PWA)			X				X	
	(2) Safety/Design of Public Roads (PWA)			X				X	
	(3) Safety/Design of Private Access (Fire)	X				X			
	(4) Tactical Access (Fire)	X				X			
	B. Pedestrian/Bicycle (PWA/PInq.)			X				X	
	C. Bus Transit	X				X			
	D. Railroads	X				X			
	E. Airports (Airports)	X				X			
	F. Harbors (Harbors)	X				X			
	G. Pipelines	X				X			
		<b>28. <u>Water Supply:</u></b>							
	A. Quality (EH)	X				X			
	B. Quantity (PWA)		X				X		
	C. Fire Flow (Fire)	X				X			
	<b>29. <u>Waste Treatment/Disposal:</u></b>								
	A. Individual Sewage Disposal System (EH)	X				X			
	B. Sewage Collection/Treatment Facilities (EH)		X				X		
	C. Solid Waste Management (PWA)		X				X		
	D. Solid Waste Facilities (EH)	X				X			
	<b>30. <u>Utilities</u></b>		X				X		

	<u>Issue (Responsible Department)</u>	<u>Project Impact Degree of Effect*</u>				<u>Cumulative Impact Degree of Effect*</u>			
		N	LS	PS -M	PS	N	LS	PS -M	PS
	<b>31. <u>Flood Control/Drainage:</u></b>								
	A. WPD Facilities/Watercourses (WPD)		X			X			
	B. Other Facilities/Watercourses (PWA)		X				X		
	<b>32. <u>Law Enforcement/Emergency Svs. (Sheriff):</u></b>		X				X		
	<b>33. <u>Fire Protection (Fire):</u></b>								
	A. Distance/Response Time		X				X		
	B. Personnel/Equipment/Facilities		X				X		
	<b>34. <u>Education:</u></b>								
	A. Schools	X				X			
	B. Libraries (Lib. Agency)	X				X			
	<b>35. <u>Recreation (GSA):</u></b>		X			X			

**DEGREE OF EFFECT:**

N = No Impact  
 LS = Less Than Significant  
 PS-M = Potentially Significant Impact Unless Mitigation Incorporated.  
 PS = Potentially Significant Impact

**AGENCIES:**

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

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## SECTION C - DISCUSSION OF RESPONSES TO CHECKLIST

The assessment and threshold criteria used in this Section (C) are taken from the Ventura County Initial Study Assessment Guidelines (County Guidelines), 2011. The County Guidelines indicate that a project’s inconsistency with an adopted policy or development standard may result in a significant impact. Therefore, an assessment of project consistency with applicable County General Plan policies is provided in a specific subsection for each checklist issue area. Additionally, applicable City of Moorpark policies have been considered. Other applicable threshold criteria are considered in the impact subsections for each checklist issue area.

### 1.0 AIR QUALITY

#### 1.1 REGIONAL

##### 1.1.1 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<sub>10</sub>) 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 six stations, operated by the California Air Resources Board (ARB) and the Ventura County Air Pollution Control District (APCD). The Simi Valley monitoring station is the most representative of the Project site, and is located approximately 11.0 miles to the east.

Table C.1-1 lists the monitored maximum concentrations and number of violations of air quality standards for the years 2009 through 2011. As shown in Table C.1-1, ozone concentrations monitored at the Simi Valley station periodically exceeded the State 1-hour standard and State 8-hour ozone standards from 2009 through 2011. PM<sub>10</sub> concentrations exceeded the State 24-hour standard at the Simi Valley station during one sampling event from 2009 through 2011.

**Table C.1-1. Air Quality Summary**

Parameter	Standard	Year		
		2009	2010	2011
<b>Ozone (O<sub>3</sub>) – parts per million</b>				
Maximum 1-hour concentration monitored (ppm)		0.116	0.098	0.108
Number of days exceeding State standard	0.095 ppm	12	3	3
Maximum 8-hour concentration monitored (ppm)		0.092	0.087	0.085
Number of days exceeding State 8-hour standard	0.070 ppm	39	15	13

Parameter	Standard	Year		
		2009	2010	2011
<b>Particulate Matter less than 10 microns (PM<sub>10</sub>) – micrograms per cubic meter</b>				
Maximum sample (µg/m <sup>3</sup> )		76.8	35.2	45.8
Number of samples exceeding State standard	50 µg/m <sup>3</sup>	1	0	0
Number of samples exceeding Federal standard	150 µg/m <sup>3</sup>	0	0	0
<b>Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>) – micrograms per cubic meter</b>				
Maximum 24-hour sample (µg/m <sup>3</sup> )		22.2	20.2	24.8
Number of samples exceeding Federal 24-hour standard	35 µg/m <sup>3</sup>	0	0	0

### 1.1.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 1.1.2.3: Discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. Developers shall be encouraged to employ innovative methods and technologies to minimize air pollution impacts.</i>	Consistent - Project-related air emissions will not result in a significant impact to local air quality as described below. Appropriate dust and emission control measures have been incorporated into the Project.
<i>County Policy 1.1.2.5: Development subject to APCD permit authority shall comply with all applicable APCD rules and permit requirements, including the use of best available control technology (BACT) as determined by the APCD.</i>	Consistent - The District intends to comply with APCD rules and regulations with emphasis on Rule 50 (Opacity), Rule 51 (Nuisance), and Rule 55 (Fugitive Dust), as well as Rule 10, (Permits Required) permit requirements. It is understood that certain types of new and modified equipment and operations require APCD air permits prior to installation and/or inauguration of use. The District will contact the VCAPCD Engineering Division to determine any air permit requirements. The VCAPCD Engineering Division can be contacted by telephone at (805) 645-1401 or by email at <a href="mailto:engineering@vcapcd.org">engineering@vcapcd.org</a> .

### 1.1.3 Impact Discussion

#### 1.1.3.1 Significance Thresholds

The APCD has prepared Air Quality Assessment Guidelines (2003) for the preparation of air quality impact analyses. The Guidelines indicate that projects 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<sub>x</sub>);

- 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 Air Quality Management Plan (AQMP);
- Be inconsistent with the Ventura County AQMP and emit greater than 2 pounds per day ROC or NO<sub>x</sub>.

Due to the temporary, short-term nature of construction emissions, the APCD does not apply the quantitative emissions thresholds for ROC and NO<sub>x</sub> to construction activities. The APCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation.

#### 1.1.3.2 Impacts

**a. AQMP Consistency.** Projects that cause local populations to exceed population forecasts in the Ventura County 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. Inconsistency with the AQMP may hinder progress towards attainment of the ozone ambient air quality standard. The Project would provide reclaimed water to the Rustic Canyon Golf Course, Moorpark Country Club Estates, City of Moorpark Landscape Maintenance District and other local users. This water is not potable and could not support population growth. Therefore, the proposed Project would not affect population projections of the AQMP.

**b. Criteria Pollutant Emissions Increase.** Emissions would be generated during the construction phase by heavy equipment, heavy-duty trucks and construction worker passenger vehicles. This analysis is based on a peak construction day, consisting of pipeline installation including excavation, pipelaying, and backfilling. Equipment assumed to be operating during a peak construction day includes one dozer/pipe-layer, one soil compactor, one backhoe, one excavator, one crane and one roller. Construction equipment exhaust emissions were calculated using load factors and emission factors from Nonroad Engine and Vehicle Emissions Study (EPA, 1991). On-road worker and material transportation emissions were estimated using the EMFAC2007 model, based on 50 one-way trips per day and 20 percent heavy-duty trucks.

Peak day construction emissions would be 109.1 pounds NO<sub>x</sub> and 9.7 pounds ROC. As such, NO<sub>x</sub> emissions during peak construction periods would exceed the 25 pounds per day threshold established by the APCD. However, due to the temporary, short-term nature of construction emissions, the APCD does not apply the quantitative emissions thresholds for ROC and NO<sub>x</sub> to construction activities. The APCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation (see mitigation measures below).

The Project consists of a buried pipeline and a booster pump station with very little maintenance requirements, and would not result in the generation of substantial emissions following construction. Based on one maintenance worker trip on a peak day, operational emissions would be 0.01 pounds NO<sub>x</sub>, and considered less than significant.

**c. Toxic Air Contaminants.** 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 ARB. Particulate matter (PM) from diesel exhaust has been identified as a toxic air contaminant, which has prompted ARB to develop a Final Risk Reduction Plan (released October 2000) for exposure to diesel PM. Based on ARB 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 100 feet from residences (Moorpark Country Club Estates). However, these residences are currently exposed to regional diesel exhaust emissions from traffic on State Routes 118, 23, and Grimes Canyon Road and other sources. The proposed Project would have a small, short-term contribution to existing diesel PM emissions, and impacts are considered less than significant.

#### 1.1.3.3 Mitigation and Residual Impact

Air emissions reduction measures recommended by the Ventura County APCD Air Quality Assessment Guidelines (revised 2003) shall be incorporated into the Project as described below.

**AQ1** The District shall implement a fugitive dust control program. The dust control program should include the following procedures:

- 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).

The above emission reduction measures ensure that dust impacts are less than significant.

The following measures shall be implemented to reduce construction-related ozone precursor emissions from motor vehicles and equipment.

**AQ2** Minimize equipment idling time.

**AQ3** Maintain equipment engines in good condition and in proper tune as per manufactures' specifications.

**AQ4** Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.

**AQ5** Use alternatively fueled construction equipment such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, if feasible.

## 1.2 LOCAL

### 1.2.1 Setting

The regional air quality setting applies to the local conditions as well.

### 1.2.2 Project Consistency with Applicable Policies

The policy consistency analysis provided for regional air quality applies to local air quality as well.

### 1.2.3 Impact Analysis

#### 1.2.3.1 Thresholds of Significance

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

- Cause a violation or make a substantial contribution to a violation of an ambient air quality standard;
- Result in fugitive dust, odors or other emissions to cause injury, detriment, nuisance or annoyance to a considerable number of persons.

#### 1.2.3.2 Impacts

**a. Carbon Monoxide Hotspots.** 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”. Ambient CO levels in the region are relatively low due to the use of oxygenated fuels, and increasingly stringent emissions standards for motor vehicles. The Project site is relatively isolated from major roadways and associated vehicle emissions. The Project would generate roadway traffic only during construction, when workers and trucks would be traveling to and from the Project site. The number of daily vehicle trips that would be generated during construction would not add substantially to local traffic volumes. Considering the above, the Project would not be expected to create or contribute substantially to the violation of CO standards.

**b. Dust and Nuisance.** Fugitive dust would be generated by the operation of heavy equipment and vehicles during the excavation and grading. 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 residents. Therefore, fugitive dust reduction measures listed above in Section 1.1.3.3 under the regional discussion will be incorporated into the Project.

**c. Odors.** Residences are located in proximity to the pipeline alignment along Championship Drive, and diesel exhaust odors from construction equipment may be considered objectionable. However, these odors would only occur for a short period at any one location (a few weeks), and would not affect a substantial number of people. Therefore, odor impacts are considered less than significant.

#### 1.2.3.3 Mitigation and Residual Impacts

No mitigation required. However, measures identified above in Section 1.1.3.3 will be incorporated into the Project as recommended by the APCD and would reduce Project emissions.

## 2.0 WATER RESOURCES

### 2.A GROUNDWATER QUANTITY

#### 2.A.1 Setting

##### 2.A.1.1 Physical Setting

The largest groundwater supplies in the County are contained within major water bearing aquifers, which underlie most of the Oxnard Plain and Pleasant Valley areas. These are, in order of depth from top to bottom, the Oxnard, Mugu, Hueneme, Fox Canyon, and Grimes Canyon aquifer zones.

The Project site is located over the Las Posas Groundwater Basin, specifically the East Las Posas Sub-Basin. The Las Posas Basin is an east-west structural depression containing water-bearing sediments of Pliocene to recent age covering an area of about 40 square miles (County of Ventura Waterworks District 1, 2010). The basin spans approximately 15 miles between the Oxnard Plain and the City of Moorpark. The basin has been historically considered to be comprised of two separate sub-basins, the North and South Las Posas Sub-Basins, by the presence of the Moorpark Anticline, a large east-west trending anticlinal structure located north of Los Angeles Avenue. More recently, the Las Posas Basin has been divided into three sub-basins, based on geologic structure, aquifer distribution, inferred sources of recharge, and water quality variations. These sub-basins include the West, East and South Las Posas Sub-Basins (also referred to as the WLP, ELP and SLP). The most important division is between the WLP and ELP Sub-Basins where there is strong evidence that a north trending fault or other geologic

structure located near Somis forms a barrier to groundwater flow between these sub-basins within the deep confined aquifers. Therefore, for groundwater management purposes the ELP and SLP Sub-Basins are grouped into a single management sub-area called the Eastern Management Sub-area by the Los Posas Basin Users Group.

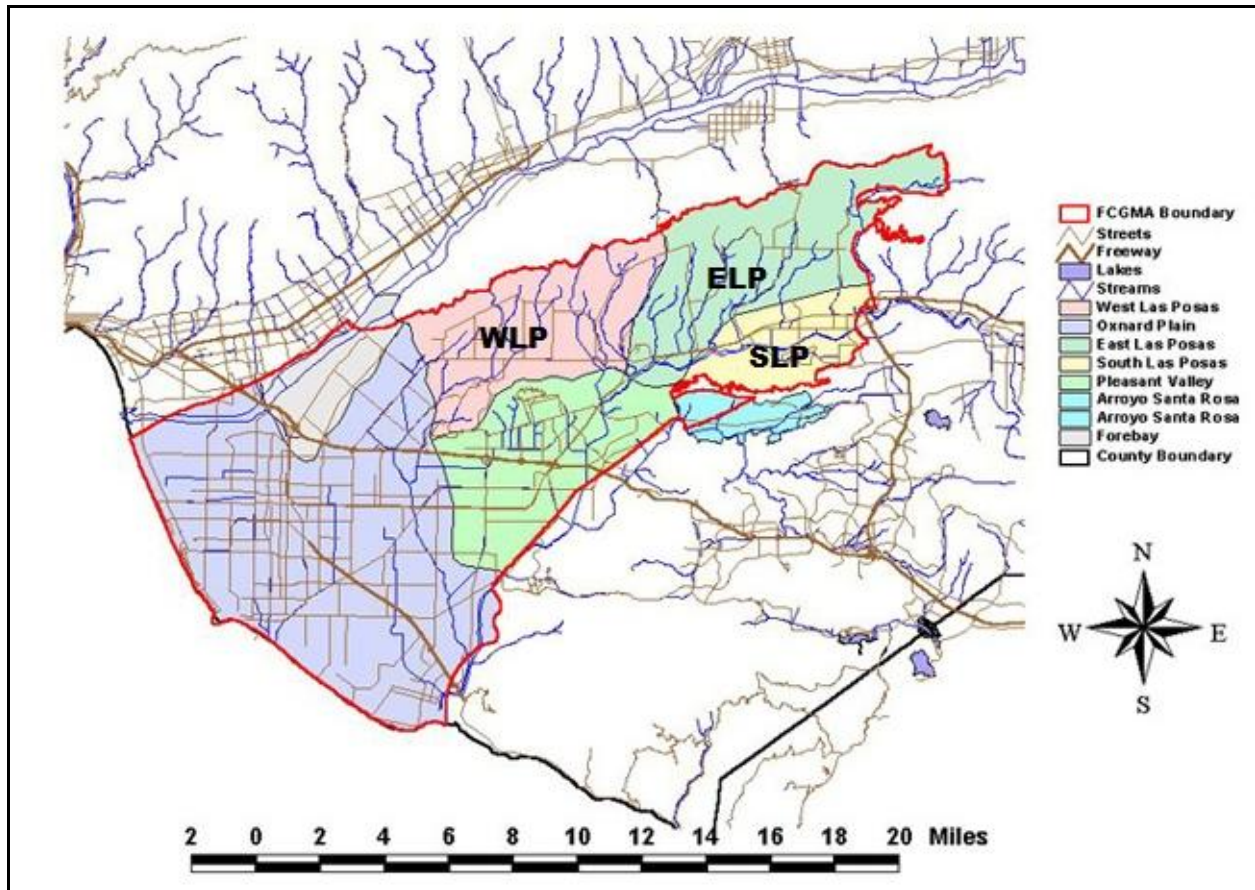
The primary aquifer system (referred to as the Lower Aquifer System or LAS) in the Las Posas Basin consists of the Fox Canyon Aquifer and Grimes Canyon Aquifer. The Fox Canyon Aquifer is part of the Lower Pleistocene San Pedro Formation and consists of marine and non-marine sand and gravel. The Grimes Canyon Aquifer is part of the Plio-Pleistocene Santa Barbara Formation, and consists of marine sand with gravel. The Fox Canyon Aquifer is typically separated from the underlying Grimes Canyon Aquifer by 50 to 100 feet of fine-grained sediments, which are of low permeability. The LAS is overlain by interbedded fine-grained and coarse grained sedimentary deposits, which are referred to as the interbedded unit.

Water levels in the ELP Sub-Basin are affected by urban development, recharge associated with wastewater discharges, groundwater pumping and injected water as part of the Las Posas Basin Aquifer Storage and Recovery (ASR) Project operated by the Calleguas Municipal Water District. Discharges from the MWTP and Simi Valley Wastewater Treatment Plant, and shallow groundwater dewatering discharges in Simi Valley to the Arroyo Simi/Arroyo Las Posas have resulted in a perennial base flow that continuously recharges the shallow aquifer underlying the arroyo flood plain in the SLP and ELP Sub-Basins as well as the underlying confined aquifers which supply most of the wells in these sub-basins.

Water levels have been relatively stable or rising over the last two decades within the Las Posas Basin with a temporary decline during the 2007 - 2010 period when ASR pumping was conducted in the ELP Sub-Basin and localized pumping depressions occurred in the WLP Sub-Basin. Water levels measured at monitoring well No. 03N20W26R03S within the ELP Sub-Basin have ranged from a low of about 100 feet msl (measured in 2009) to a high of 200 feet msl (this level was generally maintained for the reported dates of 1985 through 2006) (Ventura County Watershed Protection District Water and Environmental Resources Division, 2012).

#### 2.A.1.2 Groundwater Management

The Fox Canyon Groundwater Management Agency (FCGMA) was created by State legislation in 1982 to manage groundwater under the southern portion of Ventura County with the objective of controlling overdrafting. As such, the FCGMA manages the groundwater resources in the area overlying the Fox Canyon Aquifer Zone. The FCGMA has authority to require well registrations, reporting of groundwater production, and place limits on groundwater extractions. The FCGMA has prepared a Groundwater Management Plan and the County of Ventura, cities within the County, various water agencies and any other entity pumping groundwater within the boundaries of the FCGMA jurisdiction must comply with the Plan. Groundwater basins within the jurisdiction of the FCGMA are shown on the Figure C.2-1.



**Figure C.2-1. Groundwater Basins within the FCGMA**

Additionally, the FCGMA has promulgated several ordinances in its groundwater management role. One of these ordinances with particular general relevance is Ordinance No. 5. Ordinance No. 5 was adopted with the objective of reducing extractions to a “safe yield” level of 120,000 acre-feet per year (AFY) within the Agency by the year 2010. This was to be accomplished via scheduled five percent reductions in groundwater pumping that total 25 percent by the year 2010. As part of this process a system of allocations to groundwater users was developed based upon historical, baseline and efficiency related water data. The system also provides for credits for allocation volumes not used (under-pumping) as well as penalties if allocations are exceeded (over-pumping). As a member agency Ventura County Waterworks District 1, like other member agencies, has received allocations for its groundwater pumpage.

#### 2.A.1.3 Moorpark Wastewater Treatment Plant Effluent Disposal

The MWTP discharges secondary treated effluent to onsite percolation ponds. During periods when the capacity of the percolation ponds is exceeded, wastewater is discharged directly to the Arroyo Las Posas after tertiary treatment. Discharges of tertiary treated effluent are infrequent, but generally occur following wet periods when the percolation ponds become saturated. Since 2002, no discharge of tertiary treated water into the Arroyo Las Posas has

occurred. All discharges from the plant are regulated by the California Regional Water Quality Control Board (Regional Board), Los Angeles Region. Discharges of the secondary treated effluent to the percolation ponds, are regulated by the Waste Discharge Requirements (WDRs) established by the Regional Board. Direct discharges of tertiary treated effluent are regulated by the Regional Board through a National Pollution Discharge Elimination System (NPDES) permit.

As part of the MWTP's waste discharge requirements (WDRs) for the discharge of secondary treated effluent to the percolation ponds, a monitoring well network was installed at the facility in May of 1996, and quarterly monitoring of groundwater has occurred since then. The quarterly water quality data for the VCWD No. 1 MWTP 2012 Annual Report indicate that the groundwater level and quality are consistent with data gathered during baseline monitoring and the previous 2011 annual report. The quality of the groundwater beneath the site improves in the down-gradient direction with respect to total dissolved solids, sulfate, chloride, and nitrate. The average daily dry weather discharge of effluent to the percolation/evaporation ponds is on the order of 1.5 MGD. Historically, the effluent water quality discharged to the percolation/evaporation ponds at the MWTP is of significantly better quality than the shallow groundwater immediately up-gradient of the facility. The reason for this is that the source water related to the effluent (water purveyed by the Calleguas Municipal Water District that is obtained from the Metropolitan Water District of Southern California) is of a high quality. The water quality data obtained from the groundwater monitoring wells at the facility support this conclusion.

The tertiary treated water from the existing MWTP 1.5 mgd tertiary facility is presently reused for beneficial purposes (e.g. irrigation of Moorpark Country Club Golf Course). As the inflow to the MWTP increases, the District intends to reclaim 3.0 mgd and ultimately 5.0 mgd as evaluated in the Final Focused Environmental Impact Report for the Moorpark Wastewater Treatment Plant 5.0 MGD Expansion (SCH No. 2000111127). Mitigation measures adopted as part of the Phase 1 Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System Final Environmental Impact Report (FEIR) included a provision that discharges to the percolation ponds would continue at a rate no less than the historical average annual flows (about 0.76 MGD). The proposed Project would not alter this minimum historical average annual discharge requirement.

**2.A.2 Project Consistency with Applicable Policies**

County Policy	Consistency Determination
<i>County Policy 1.3.2.1: Discretionary development which is inconsistent with the goals and policies of the County's Water Management Plan (WMP) shall be prohibited, unless overriding considerations are cited by the decision-making body.</i>	Consistent -The Project provides for delivery of reclaimed water to VCWWD No. 1 customers.
<i>County Policy 1.3.2.2: Discretionary development shall comply with all applicable County and State water regulations.</i>	Consistent - The Project is a VCWWD No. 1 proposal, it is within the District jurisdictional responsibilities to comply with applicable County and State water regulations.

County Policy	Consistency Determination
<p><i>County Policy 1.3.2.4: Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.</i></p>	<p>Consistent – The Project would not alter the provision that MWTP historical rates of discharge to the percolation ponds shall be maintained. Thus significant groundwater quality impacts would not occur. Reclaimed water to be made available to users as a result of the Project would meet all water quality regulatory requirements such that no significant impacts to groundwater quantity are expected to result.</p>
<p><i>County Policy 1.3.2.5: Landscape plans for discretionary development shall incorporate water conservation measures as prescribed by the County's Guide to Landscape Plans, including use of low water usage landscape plants and irrigation systems and/or low water usage plumbing fixtures and other measures designed to reduce water usage.</i></p>	<p>Consistent. No landscaping plans are proposed.</p>

### 2.A.3 Impact Discussion

The County Guidelines state that a project will have a significant impact on groundwater quantity if it will increase the net use of groundwater in a basin that is overdrafted, or individually or cumulatively cause a basin to become overdrafted. The proposed Project would be a continuation of the current wastewater reclamation program in which reclaimed wastewater will be delivered to customers that have historically received primarily imported water. Currently, approximately 3 percent of the water treated by the MWTP is sourced from groundwater extracted from Waterworks District wells within the FCGMA boundary with the remainder coming from imported water. When the Phase IV Reclaimed Water Pipeline is in operation it will deliver approximately 425 AFY of reclaimed water of which 350 AFY would be delivered outside of the FCGMA boundary with the remaining 75 AFY being delivered to customers within the FCGMA boundary. As stated above, at present, about 97 percent of the treated wastewater is sourced from imported water. Because of this, the overall discharge of treated wastewater into the FCGMA from imported sources (either as reclaimed water or discharges to the percolation ponds) exceeds the volume of the locally pumped groundwater that might be exported with operation of the proposed Phase IV pipeline. In addition FCGMA Resolution 2011-01 allows the District to provide groundwater from wells within its service area to parcels located outside of the FCGMA boundary.

All reclaimed water deliveries reduce the amount of water sent to the MWTP percolation ponds for recharge. However, as stated above, mitigation measures adopted as part of the Phase 1 Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System Final Environmental Impact Report (FEIR) included a provision that discharges to the percolation ponds would continue at a rate no less than the historical average annual flows (about 0.76 MGD). The proposed Project would not alter this minimum historical average annual discharge requirement. Therefore, the Project would not result in a significant impact on groundwater quantity or a project-specific or cumulative basis. No mitigation is required.

## **2.B GROUNDWATER QUALITY**

### **2.B.1 Setting**

The setting discussion provided above in 2.A., Groundwater Quantity also pertains to this topic.

#### **2.B.1.1 Water Quality**

The groundwater quality within the Arroyo Las Posas has been affected by salt loading, particularly chloride and sulfate ions, in the last 20 years as groundwater levels have risen. The salts are believed to be leached from previously unsaturated soil horizons that have become saturated (FCGMA, 2007). The salts migrate with the percolating groundwater, essentially from east to west, and then laterally to the north into the ELP Sub-Basin. In some areas the shallow, and progressively more so the deeper aquifers, have become marginally suitable for irrigation purposes.

According to the California's Groundwater Bulletin 118 (2006), the Las Posas Valley Groundwater Basin groundwater is calcium bicarbonate to sodium bicarbonate in character with an average total dissolved solids (TDS) concentration of 752 mg/L and a maximum of 2,318 mg/L. Of 22 public supply wells sampled, one had concentrations of primary inorganics above the maximum (permissible) contamination level (MCL) as set by the U.S. Environmental Protection Agency, two wells had radiological levels above the MCL, and one well had pesticides levels above the MCL (sampling period 1994 through 2000). However, according to a 2007 Groundwater Basin Report prepared for the Ventura County Basins of the northwest Metropolitan Water District service area, chloride has become a problem along the Arroyo Las Posas, where groundwater from an area in the ELP and SLP Sub-Basins must be blended with lower-chloride water to meet irrigation suitability. The high levels of chloride and sulfates along the southern flank of the ELP and SLP Sub-Basins are reportedly due to higher groundwater levels leaching salts from shallow aquifers and transporting them to deeper aquifers as described above.

As reported in the 2011 Ventura County Watershed Protection District Water and Environmental Resources Division 2011 Groundwater Section Annual Report, seven wells were sampled in the ELP Sub-Basin, of those, the three wells located in the southwest portion of the basin near the Arroyo Las Posas, presented very different water chemistry. The dominant cations in the southwestern wells are sodium, calcium and magnesium and the dominant anions are bicarbonate, sulfate and chloride. TDS, sulfate and manganese are above the MCL for drinking water in all three wells. The remainder of the wells sampled have good water quality with an average TDS of 486 mg/l. The dominant cations are sodium and calcium and bicarbonate is the dominant anion. Water from three wells was analyzed for inorganic chemicals (Title 22 metals). No inorganic constituent was above the MCL. Depth to the upper water bearing unit measured approximately 120 to 150 feet and to the lower unit measured approximately 530 to 580 feet.

The SLP Sub-Basin is an impacted basin with respect to Regional Water Quality Control Board (Los Angeles Region) Basin Plan Objectives due to the current salt loadings associated in part with the discharges of treated wastewater from the Simi Wastewater Treatment Plant and the MWTP. The MWTP however provides a mechanism through the continued discharge of some 2.2 MGD of treated wastewater to the percolation/evaporation ponds to improve the quality of shallow groundwater in the Arroyo Las Posas. As mentioned in a memorandum from the County of Ventura Watershed Protection District, the MWTP has never been issued a notice of violation relative to the discharge of treated wastewater.

Mitigation measures adopted as part of the *Phase 1 MWTP Reclaimed Water Distribution System Final Environmental Impact Report* (FEIR) included a provision that discharges to the Moorpark percolation ponds would continue at a rate no less than the historical average annual flows (about 0.76 million gallons per day or MGD). The Phase 1 Project FEIR identified potential water quality impacts to groundwater in the area only to the extent that the historical average annual discharges to the percolation ponds (0.76 MGD) were reduced since these discharges were, on average, considered to be of a higher quality than that of the groundwater in the SLP Sub-Basin.

#### 2.B.1.2 Recycled Water Regulatory Setting

The State Water Resources Control Board (SWRCB) shares jurisdiction over the use of recycled water with the Regional Water Quality Control Boards (RWQCB) and with California Department of Public Health (CDPH). The SWRCB establishes general policies governing the permitting of recycled water projects, consistent with its role of protecting water quality and sustaining water supplies, and exercises general oversight over recycled water projects, including review of RWQCB permitting practices. The CDPH is charged with protection of public health and drinking water supplies and with the development of uniform water recycling criteria appropriate to particular uses of water. The RWQCBs are charged with protection of surface and groundwater resources and with the issuance of permits that implement CDPH recommendations relevant to the establishment of permit conditions needed to protect human health.

#### 2.B.2 Project Consistency with Applicable Policies

The policies outlined under topic 2.A are also applicable to groundwater quality.

#### 2.B.3 Impact Discussion

##### 2.B.3.1 Thresholds of Significance

The County Guidelines state that any project that will individually or cumulatively degrade the quality of groundwater and cause it to fail to meet groundwater quality Basin standards set by the Regional Water Quality Control Board (Regional Board) is a significant impact.

### 2.B.3.2 Impacts

Due to the high quality of the reclaimed water, the Project is not expected to cause water quality in the ELP Sub-Basin to fail to meet groundwater quality Basin standards set by the Regional Board. Presently, the water quality of the tertiary treated effluent (i.e. reclaimed water) from the MWTP meets the water quality requirements of the Waste Discharge Permit Order No. 00-048 issued by the Regional Water Quality Control Board, Los Angeles Region for direct discharge to the percolation ponds at the MWTP. The reclaimed water that will be applied in the Phase IV Project areas meets all Title 22 requirements for beneficial reuse. The quality of the reclaimed water also meets all water quality Basin Plan objectives established by the Regional Water Quality Control Board, Los Angeles Region. Of the anticipated 425 AFY of reclaimed water that would be delivered by the Phase IV Reclaimed Water Pipeline, approximately 350 AFY will be used outside of any groundwater basin. The remaining 75 AFY would be utilized in the ELP Sub-Basin. Additionally, the historic minimum average annual discharges of wastewater to the MWTP percolation ponds and thereby the SLP Sub-Basin will not be altered as a result of the proposed Project. Project impacts are accordingly deemed less than significant. The Project's effect on groundwater quality is also not considered to be cumulatively considerable.

### 2.B.3.2 Mitigation and Residual Impact

No significant impact would result. Therefore, no mitigation is necessary.

## 2.C SURFACE WATER QUANTITY

### 2.C.1 Setting

Surface water resources in Ventura County are divided into two major hydrologic units (the Ventura River and Santa-Clara-Calleguas Units) and into four other smaller hydrologic units (Rincon Creek, Cuyama, San Joaquin, and Malibu Hydrologic Units) (Ventura County, 2000).

The Arroyo Simi and Arroyo Las Posas drain the northern portion of the Calleguas Watershed. The Arroyo Simi passes through the cities of Simi Valley and Moorpark. Downstream of Hitch Boulevard, the Arroyo Simi becomes the Arroyo Las Posas. The Arroyo Las Posas passes through agricultural fields and orchards mostly in natural channels. Surface water flows in the Arroyo Las Posas derive from precipitation runoff, agricultural return flows, discharges of effluent from the City of Simi Valley Water Quality Control Plant (wastewater treatment plant) and MWTP, and discharges from dewatering wells in the Simi Valley area. The Arroyo Las Posas Channel meets with the Calleguas Creek near Camarillo.

A study conducted by Larry Walker Associates on behalf of Calleguas Municipal Water District (2012) revealed two losing and one gaining stream reaches between the Simi Valley Water Quality Control Plant and the north Pleasant Valley Groundwater Basin. A losing reach is a segment of the stream where surface water percolates to groundwater. A gaining reach is a segment of stream where groundwater is moving upward and discharging into the stream. The losing reaches are located between the Simi Valley Water Quality Control Plant and

approximately mid-way between Spring Road and Tierra Rejada Road (i.e., the eastern half of the SLP Sub-Basin) and again approximately between Balcom Canyon Road and Upland Road in Camarillo (i.e., most of the ELP Sub-Basin and a portion of the Pleasant Valley Basin. The gaining reach is the intervening stretch between the two losing reaches (i.e., the eastern half of the SLP Sub-Basin.

## **2.C.2 Project Consistency with Applicable Policies**

The policies outlined under topic 2.A are also applicable to surface water quantity.

## **2.C.3 Impact Discussion**

### **2.C.3.1 Thresholds of Significance**

According to the County Guidelines, threshold of significance criteria for determining if a land use or project activity has the potential to cause a significant adverse impact upon surface water quantity in itself or on a cumulative basis include, but are not limited to:

1. Any project that will increase surface water consumptive use (demand), either individually or cumulatively, in a fully appropriated stream reach as designated by SWRCB 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 per Section B, above, is considered a significant adverse impact.

### **2.C.3.2 Impacts**

Due to the nature of the Project as installation of water reclamation infrastructure, it would not utilize surface water resources. Further, the installation of subsurface pipe would not alter the infiltration of precipitation at the Project site.

From a cumulative basis the use of reclaimed water should be considered. At the MWTP, treated wastewater is discharged to the onsite percolation ponds to their maximum capacity. If needed (e.g., the ponds are at capacity), and the demand for reclaimed water is low (e.g., during the wet season), tertiary treated wastewater is discharged to the Arroyo Las Posas in accordance with the facility's discharge permit. However, this has not happened in many years. The District proposes to increase the secondary treatment capacity of the MWTP to 5 mgd in the future. Additionally, the tertiary treatment capacity is planned to be upgraded to 3 mgd in the future once the flow to the MWTP reached 4 mgd. As such, growth in the MWTP service area is expected to offset the increase in water reclamation, such that the amount of water discharged to the percolation ponds or directly to Arroyo Las Posas would not be

substantially modified. Thus the use of reclaimed water that would be facilitated by the proposed Project is not anticipated to result in significant surface water quantity impacts.

### 2.C.3.3 Mitigation and Residual Impact

No significant impact would result. Therefore, no mitigation is necessary.

## 2.D SURFACE WATER QUALITY

### 2.D.1 Setting

The Water Quality Control Plan for the Los Angeles Region (California Regional Water Quality Control Board, 1994) establishes beneficial uses for water bodies within the region. Beneficial uses for the Arroyo Las Posas (hydrological unit 403.62) include the following existing and potential uses:

#### **Existing:**

- Groundwater recharge,
- Freshwater replenishment,
- Contact and non-contact water recreation,
- Water recreation,
- Warm freshwater habitat, and
- Wildlife habitat.

#### **Potential:**

- Municipal and domestic supply,
- Industrial process supply,
- Industrial service supply,
- Agricultural supply, and
- Cold freshwater habitat.

Section 303(d) of the 1972 Federal Clean Water Act requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) list, to the U.S. EPA every two years. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment, and establishes a priority for developing a control plan to address the impairment.

Calleguas Creek Reaches 6 and 7, which is the Arroyo Las Posas from Hitch Road to the confluence with Calleguas Creek, is on the 2010 303(d) List for the following pollutants: (ammonia, chlordane, chloride, chlorpyrifos, DDT (in sediment), diazanon, deldrin, fecal coliform, nitrate and nitrite, sedimentation/siltation, sulfates, total dissolved solids, and toxicity (California State Water Resources Control Board, 2010). Reach 7 is listed for the following additional pollutants boron, indicator bacteria and organophosphorus pesticides.

## 2.D.2 Project Consistency with Applicable Policies

The policies outlined under topic 2A are also applicable to surface water quality.

## 2.D.3 Impact Discussion

### 2.D.3.1 Thresholds of Significance

County threshold of significance criteria for determining if a land use or project activity has the potential to cause a significant adverse impact upon surface water quality individually or cumulatively when combined with recently approved, current, and/or reasonably foreseeable future projects, include, but are not limited to the following:

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 as contained in Chapter 3 of the three Basin Plans.
2. Any land use or project development that directly or indirectly causes stormwater quality to exceed water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits.

### 2.D.3.2 Impacts

**a. Short-term.** Construction activities can result in short-term erosion events (e.g., erosion of soil piles, erosion of previously covered soil by the removal of significant amounts of pavement, or living ground cover, etc.). The Project must comply with the local requirements of Ventura County Ordinance 4450 regarding Stormwater Quality Management and the Ventura Countywide Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit No. CAS004002. "Development Construction Program" Subpart 4.F. Under this permit the project applicant is required to include Best Management Practices (BMPs) designed to ensure compliance and implementation of an effective combination of erosion and sediment control measures to protect surface water quality and develop, implement, and submit for approval a Stormwater Pollution Control Plan (SWPCP) for publicly owned/operated construction projects disturbing less than 1 acre of soil. (Applicable BMPs are listed in Table 6, Subpart 4.F of the Ventura Countywide Municipal Stormwater Permit ORDER R4-2010-0108. In the event that the Project ultimately result in the disturbance of more than one acre, the Project are all required to obtain individual NPDES permits for storm water discharges, or be covered by the statewide General Permits by completing and filing a Notice of Intent (NOI) with the State Board. Conformance with permit requirements are intended to reduce impacts to stormwater due to short-term construction related erosion of soils to a less than significant level on project-specific and cumulative basis.

**b. Long-term.** The MWTP reclamation project meets California Department of Health Services Title 22, Chapter 3, Water Recycling<sup>1</sup> Criteria requirements and the District has a master water recycling permit issued by the California Regional Water Quality Control Board, Los Angeles Region (Order No. R4-2002-0028), pursuant to California Water Code Section 13523.1. The permit identifies: recycled water limitations that must be complied with; specifications for use of recycled water, use area requirements; requirements for dual plumbed systems, as well as general requirements and provisions. Additionally, the actual delivery of recycled water to end users is subject to the approval of the State Department of Health Services. Due to the restrictions and limitations associated with the MWTP reclamation project, no significant impact to surface water quality is expected to result from the Phase IV Project on a project-specific or cumulative basis, assuming compliance with all applicable regulations.

#### 2.D.3.3 Mitigation and Residual Impact

Impacts would be less than significant; therefore, no mitigation is required. However, to ensure compliance with Part 4.F, “Development Construction Program” of the Ventura Countywide Municipal Stormwater Permit and inclusion in the Mitigation Monitoring Program, the following standard requirement provided by the Ventura County Watershed Protection District is presented below.

**WQ1** Project construction shall meet performance criteria defined in Section 1 of Part 4.F of the Ventura Countywide Municipal Stormwater Permit through the inclusion of the effective Best Management Practices (BMPs) for Construction Sites Less than One Acre during all ground disturbing activities or the BMPs for Construction Sites Over One Acre but Less than Five Acres as appropriate. The project applicant (District) is required to develop and implement a Stormwater Pollution Control Plan (SWPCP). VCWWD No. 1 shall review and approve the SWPCP for the Project for compliance with Section 1 or 2 and Section 6 regarding repaving of Part 4.F of the NPDES permit. The review shall be done by qualified personnel. The VCWWD No. 1 shall provide a copy of the approved SWPCP to the Watershed Protection District, Water and Environmental Resources Division for permit tracking purposes. The SWPCP shall be reviewed and approved by the Watershed Protection District prior to issuance of a notice to proceed to the contractor. A VCWWD No. 1 inspector shall conduct inspections per Section 8 of Part 4.F of the MS4 permit to assure effective installation and functionality of the approved BMPs.

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<sup>1</sup> Reclamation and recycling of treated wastewater are interchangeable references for the same process. Likewise, for the purposes of this report reclaimed and recycled water refer to the same thing.

### 3.0 MINERAL RESOURCES

#### 3.A AGGREGATE

##### 3.A.1 Setting

The California Geological Survey Department of Conservation (CDC) provides an inventory of the current availability of California’s permitted construction aggregate resources. Permitted aggregate resources are resources of aggregate that have been determined to be acceptable for commercial use, which exist within properties owned or leased by aggregate-producing companies, and for which permits have been granted to allow mining and processing of the materials. The assessment of fifty-year aggregate demand compared to permitted aggregate reserves is presented below (CDC, 2012).

**Table C.3-1. Ventura Aggregate Demand Compared to Permitted Reserves**

Aggregate Study Area	50-Year Demand (Million Tons)	Permitted Aggregate Reserves (Million Tons)	Permitted Aggregate Reserves Compared to 50-Year Demand (Percent)	Projected Years Remaining
Ventura County	298	96	32	11 to 20

The proposed Project area is not identified on the Ventura County Resource Protection Map (2010) as a "mineral resource area." However, the Arroyo Las Posas channel, south of the areas proposed for improvements, could be a potential source of aggregate materials. Additionally, no portion of the City of Moorpark is designated MRZ-2 under the Surface Mining and Reclamation Act (areas where adequate information indicates that significant mineral deposits are present, or where it is judged a high likelihood for their presence exists). Thus the Project site is not in a mineral resources area.

##### 3.A.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 1.4.2.8: Discretionary development within a Mineral Resource Area (see Resource Protection Map) shall be subject to the provisions of the Mineral Resource Protection (MRP) Overlay Zone, and is prohibited if the use will significantly hamper or preclude access to or the extraction of mineral resources.</i>	Consistent – The Project site is not located in a significant "mineral resource area." Additionally, the Project would not preclude access to an existing aggregate resource.

##### 3.A.3 Impact Discussion

###### 3.A.3.1 Significance Thresholds

The County Guidelines provide the following criterion for determining the significance of project impacts on aggregate resources.

1. Any land use or project activity which is proposed to be located on or immediately adjacent to land zoned Mineral Resource Protection (MRP) overlay zone, or adjacent to a principal access road to an existing aggregate Conditional Use Permit (CUP), and 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.

### 3.A.3.2 Impacts

The Project site is not located in or in immediate proximity to a significant "mineral resource area". Additionally, the Project would not hamper or preclude extraction access to identified mineral resources. Implementation of the Project would require the use of sand for pipeline trench bedding. However, based upon County thresholds this impact would be less than significant on a project-specific and cumulative basis.

### 3.A.3.3 Mitigation and Residual Impacts

Impacts are less than significant; therefore, no mitigation is necessary.

## 3.B PETROLEUM

### 3.B.1 Setting

The Project site is not within an oil production area. Additionally, based upon a review of the Munger Map Book of California and Alaska Oil and Gas Fields (2001), there are no active oil or gas wells in the Project area. However, historically oil and gas exploration was conducted in the Moorpark area, numerous dry holes with no show for oil or gas are present in the Project vicinity.

### 3.B.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 1.9.2.1: Discretionary development shall be evaluated for impact to energy resources and utilization of energy conservation techniques.</i>	Consistent - Preparation of this environmental document provides consistency with this policy.
<i>County Policy 1.9.2.3: Energy efficiency and renewable energy use shall be included as factors in designing capital improvement projects of all County agencies, departments and service areas.</i>	Consistent - The Project involves mainly the installation of a reclaimed water pipeline. Booster pumps will be installed. These pumps and motors will be selected considering their energy efficiency among other factors applicable to their application.

### **3.B.3 Impact Discussion**

#### **3.B.3.1 Significance Thresholds**

The County Guidelines state that determinations of significance for petroleum resources require a case-by-case determination based on the type of land use being requested and its location relative to petroleum resource areas and CUPs. Generally,

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.

#### **3.B.3.2 Impacts**

The Project site is not in an oil producing area, and would require only a small amount of petroleum products for construction and operation, the Project would have a less than significant impact on petroleum products. Additionally, the Project would not hamper or preclude extraction of a petroleum resource. The Project's contribution to impacts on petroleum resources is inconsequential and is, therefore, not cumulatively significant.

#### **3.B.3.3 Mitigation and Residual Impacts**

Impacts are less than significant; therefore, no mitigation is necessary.

## **4.0 BIOLOGICAL RESOURCES**

### **4.1 SPECIES**

The proposed pipeline alignment is primarily located in Walnut Canyon along State Route 23, but traverses west to Grimes Canyon and east to Happy Camp Canyon. Arroyo Simi is located to the south, and the Santa Clara River is located to the north. The pipeline alignment terminates at Happy Camp Canyon Regional Park, which is part of a large open space area

extending east to Oak Ridge. The southwestern portion of the Regional Park has been developed as Rustic Canyon Golf Course, which has been designed to retain native vegetation between small scattered fairways and greens.

#### 4.1.1 Setting

##### 4.1.1.1 Plants

A total of 158 vascular plant species were observed in Happy Camp Canyon in 1999 (Padre Associates, 1999), and many of these species likely occur along the pipeline alignment. A list of special-status plant species (Table C.4-1) potentially occurring along the pipeline alignment was developed based on review of the California Natural Diversity Data Base, a biological field survey conducted along the pipeline alignment on April 17, 2013, and numerous field surveys conducted in Happy Camp Canyon in 1999 for the Biological Baseline Assessment (Padre Associates, 1999).

Special-status plant species anticipated to occur near the pipeline alignment are limited to southern California black walnut and coast live oak. Southern California black walnut is considered a plant of limited distribution by the California Native Plant Society (CNPS), but is not rare or endangered as defined in Section 15380 of the State CEQA Guidelines. Along the pipeline alignment, this species was found on the east side of Walnut Canyon Road just upstream of the culvert crossing, and within the Rustic Canyon Golf Course just east of the drainage crossing.

Coast live oak trees are defined as protected trees under the Ventura County Tree Protection Regulations (Section 8107-25 of the Non-Coastal Zoning Ordinance) if their girth (circumference) is at least 9.5 inches. Four protected oak trees were found in close proximity to the pipeline alignment during the field survey and are listed in Table C.4-2. Each of these trees are located on the east bank of the drainage along the west side of Walnut Canyon Road.

**Table C.4-1. Special-Status Plant Species of the Project Area**

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Location	Preferred Habitat	Potential to Occur along the Pipeline Alignment
Lyon's pentachaeta ( <i>Pentachaeta lyonii</i> )	SE, FE, List 1B	North of Tierra Rejada Road, 2.2 miles to the southeast (CNDDDB, 2013)	Openings in coastal scrub	Very low, habitat along the pipeline alignment is highly disturbed, not found during biological survey
Plummer's mariposa lily ( <i>Calochortus plummerae</i> )	List 1B	Oak Park, 3.3 miles to the east-south-east (CNDDDB, 2013)	Coastal scrub, chaparral	Very low, habitat along the pipeline alignment is highly disturbed, not found during biological survey

Common Name ( <i>Scientific Name</i> )	Status	Nearest Known Location	Preferred Habitat	Potential to Occur along the Pipeline Alignment
Catalina mariposa lily ( <i>Calochortus catalinae</i> )	List 4	Simi Valley Landfill: 4.4 miles to the east-southeast (Padre Associates, 1998)	Coastal scrub, grassland	Very low, habitat along the pipeline alignment is highly disturbed, not found during biological survey
California orcutt grass ( <i>Orcuttia californica</i> )	SE, FE, List 1B	Near intersection of SR 23 and Tierra Rejada Road, 3.0 miles to the south-southeast (CNDDDB, 2013)	Vernal pools	Very low, no suitable habitat in area
Southern California black walnut ( <i>Juglans californica</i> )	List 4	Adjacent to Walnut Canyon Road, and within Happy Camp Canyon Regional Park	Canyons, moist slopes	Present
Coast live oak ( <i>Quercus agrifolia</i> )	TPO	Adjacent to Walnut Canyon Road, and within Happy Camp Canyon Regional Park	Canyon bottoms, north-facing slopes	Present

- List 1B Plants rare, threatened, or endangered in California and elsewhere (CNPS)  
 List 4 Plants of limited distribution (CNPS)  
 FE Federal Endangered (USFWS)  
 SE State Endangered (CDFW)  
 TPO Protected under the Ventura County Tree Protection Ordinance

**Table C.4-2. Protected Coast Live Oak Trees Along the Pipeline Alignment**

Tree Number	Tree Location	Tree Girth (Inches, Each Major Trunk)	Jurisdiction	Zoning
CLO-1	In drainage along walnut canyon road, approximately 720 feet north of the championship drive intersection	16, 13, 13, 9	City Of Moorpark	Open Space
CLO-2	In drainage along walnut canyon road, approximately 740 feet north of the championship drive intersection	25	City Of Moorpark	Open Space
CLO-3	In drainage along walnut canyon road, approximately 1,300 feet north of the championship drive intersection	60, 53	City Of Moorpark	Open Space
CLO-4	In drainage along walnut canyon road, approximately 1,650 feet north of the championship drive intersection	19, 19	Ventura County	Open Space

#### 4.1.1.2 Wildlife

A total of one amphibian species, 4 reptile species, 34 bird species and 11 mammal species were observed in lower Happy Camp Canyon Regional Park in 1999 (Padre Associates, 1999). Wildlife observed during the field survey along the pipeline alignment on April 17 and 23, 2013 included fence lizard, side-blotched lizard, bushtit, Anna’s hummingbird, California towhee, spotted towhee, common raven, house finch, northern mockingbird, mallard, coot, ruddy duck, cliff swallow, red-tailed hawk, black phoebe, scrub jay, western kingbird,

Bewick's wren, California quail, white-crowned sparrow, phainopepla, greater roadrunner, pocket gopher, brush rabbit, Audubon's cottontail, California ground squirrel, raccoon and coyote. Wildlife was observed along the alignment in native vegetation and adjacent landscaping. Water fowl were observed in a large pond associated with the Moorpark Country Club, including mallard, coot and ruddy duck.

A list of special-status wildlife species (Table C.4-3) potentially occurring along the pipeline alignment was developed based on review of the California Natural Diversity Data Base, a biological field survey conducted along the pipeline alignment on April 17, 2013, and numerous field surveys conducted in Happy Camp Canyon in 1999 for the Biological Baseline Assessment (Padre Associates, 1999).

Approximately 0.76 acres of suitable sandy shrub-land habitat for coast horned lizard and coastal western whiptail occurs along the pipeline alignment adjacent to Walnut Canyon Road (within the drainage) and near Broadway Road (within the Regional Park). Coastal western whiptail was common within the Happy Camp Canyon drainage (Padre Associates, 1999) prior to construction of the Rustic Canyon Golf Course. However, habitat along the pipeline alignment is low quality due to fragmentation by surrounding residential, agricultural and golf course development. A focused survey for these two species conducted on April 23, 2013 did not detect coast horned lizard or coastal western whiptail. Therefore, these species are unlikely to be present along the pipeline alignment.

**Table C.4-3. Special-Status Wildlife Species of the Project Area**

Common Name (Scientific Name)	Status	Nearest Known Location	Potential to Occur along the Pipeline Alignment
Arroyo chub ( <i>Gila orcuttii</i> )	CSC	Arroyo Simi: 1.6 miles to the southeast (CNDDDB, 2013)	None, surface water extremely ephemeral on-site
Spadefoot toad ( <i>Spea hammondi</i> )	CSC	Roseland Avenue, 1.4 miles to the north (CNDDDB, 2013)	Very low, no breeding habitat (seasonal pools) present
Southwestern pond turtle ( <i>Emys marmorata</i> )	CSC	Arroyo Simi, 4.9 miles to the east-southeast (CNDDDB, 2013)	Very low, no aquatic habitat on-site
Coast horned lizard ( <i>Phrynosoma blainvillii</i> )	CSC	Upper Happy Camp Canyon, 1.7 miles to the north-northeast (CNDDDB, 2013)	Low, habitat along alignment is low quality, not found during focused survey
Coastal western whiptail ( <i>Aspidoscelis tigris stejnegeri</i> )	SA	Lower Happy Camp Canyon (Padre Associates, 1999)	Low, habitat along alignment is low quality, not found during focused survey
Silvery legless lizard ( <i>Anniella pulchra pulchra</i> )	CSC	Grimes Canyon Road: 1 mile to the southwest	Low, suitable habitat (woodland, native tree groves) not present
Two-striped garter snake ( <i>Thamnophis hammondi</i> )	CSC	Arroyo Simi: 4.3 miles to the southeast (CNDDDB, 2013)	Very low, no aquatic habitat on-site
Least Bell's vireo ( <i>Vireo belli pusillus</i> )	FE, SE	Arroyo Simi: 1.9 miles to the southeast (CNDDDB, 2013)	Very low, may forage in Happy Camp Canyon, but no breeding habitat present
Cooper's hawk ( <i>Accipiter cooperi</i> )	WL	Lower Happy Camp Canyon (Padre Associates, 1999)	Moderate, may forage near pipeline alignment, and breed in Happy Camp Canyon
Coastal California gnatcatcher ( <i>Poliophtila californica californica</i> )	FT, CSC	Moorpark near Spring Road: 1.0 miles to the south (CNDDDB, 2013)	Moderate, could forage near pipeline alignment, and breed on nearby slopes

Common Name (Scientific Name)	Status	Nearest Known Location	Potential to Occur along the Pipeline Alignment
Yellow warbler ( <i>Dendroica petechia brewsteri</i> )	CSC	Arroyo Simi: 2.5 miles to the southeast (Montgomery Watson, 1995)	Very low, no riparian habitat in area
Yellow-breasted chat ( <i>Icteria virens</i> )	CSC	Arroyo Simi: 2.5 mile to the southeast (Montgomery Watson, 1995)	Very low, no riparian habitat in area
White-tailed kite ( <i>Elanus caeruleus</i> )	FP	Lower Happy Camp Canyon (Padre Associates, 1999)	Moderate, may forage near pipeline alignment, and breed in Happy Camp Canyon
Southern California rufous-crowned sparrow ( <i>Aimophila ruficeps canescens</i> )	WL	Lower Happy Camp Canyon (Padre Associates, 1999)	Moderate, may forage near pipeline alignment, and breed in Happy Camp Canyon
San Diego desert woodrat ( <i>Neotoma lepida intermedia</i> )	CSC	Union Pacific Railroad tracks, 1.7 miles to the south-southwest (CNDDDB, 2013)	Low-Moderate, no suitable habitat in proximity to the alignment

Status Codes:

- FP Fully protected under Fish and Game Code (CDFW)
- FT Federal Threatened (USFWS)
- CSC California Species of Special Concern (CDFW)
- SA Special Animal (CDFW)
- SE State Endangered (CDFW)
- FE Federal Endangered (USFWS)
- WL Watch List (CDFW)

Suitable woodland habitat for silvery legless lizard does not occur along the pipeline alignment, and this species is not anticipated to be present. Cooper’s hawk, white-tailed kite, southern California rufous crowned sparrow and San Diego desert woodrat may occur near the pipeline alignment within the Regional Park.

California gnatcatcher has been reported just south of the alignment, and the portion of the alignment within the Regional Park is located within designated Critical Habitat Unit 13 for this threatened species. Suitable habitat for this species occurs on the slopes along Walnut Canyon Road and within the Regional Park.

#### 4.1.2 Impact Discussion

##### 4.1.2.1 Significance Thresholds

The following thresholds are taken from the Ventura County Initial Study Assessment Guidelines and indicate the potential for a significant impact:

- Substantially reduce a species population or habitat;
- Substantially increase habitat fragmentation or restrict reproductive capacity;
- Loss of one or more individuals listed as endangered, threatened or rare under the Federal or State Endangered Species Act, a candidate species or California fully protected species;
- Eliminate or threaten to eliminate an element occurrence of a special-status species;
- Threaten the viability of a habitat that sustains a special-status species;

- Take of birds protected under the California Fish & Game Code or Migratory Bird Treaty Act;
- Increases in noise and/or lighting that would adversely affect a special-status species;
- Increases in human access, predation or competition from domestic animals, pests or exotic species that would adversely affect special-status species;
- Impacts that would substantially reduce the habitat of a wildlife species or cause a wildlife population to decline substantially or drop below self-sustaining levels.

#### 4.1.2.2 Impacts

**a. Special-Status Plants.** As discussed in Table C.4-1, the only special-status plant species likely to be impacted by pipeline installation and operation are southern California black walnut and coast live oak. Southern California black walnut is located both north and south of the cart path at the Rustic Canyon Golf Course, just east of the drainage crossing. Although the precise alignment and construction disturbance area of the pipeline has not been determined to date, at least one southern California black walnut tree is likely to be removed. This impact is considered less than significant due to the small number of affected individuals (one), the abundance of this species in the region, and this species is not rare or endangered as defined in Section 15380 of the State CEQA Guidelines.

Four coast live oak trees (see Table C.4-2) are likely to be impacted by pipeline installation and operation. Although the precise alignment and construction disturbance area of the pipeline has not been determined to date, these trees may be removed. This impact is considered less than significant because only one tree within County jurisdiction would be removed, and up to five protected trees are allowed to be removed under the Tree Protection Ordinance without a tree permit.

**b. Special-Status Wildlife.** The precise pipeline alignment has not been selected to date, but may be located within wildlife habitats along the Walnut Canyon drainage, adjacent slopes to the west, and along Broadway Road within the Regional Park. Maximum habitat loss for special-status reptiles would be approximately 0.8 acre, and temporary as vegetation would colonize areas over the buried pipeline. Coast horned lizard, coastal western whiptail and silvery-legged lizard are not expected to be present based on low habitat quality and a focused survey conducted for the Project. Therefore, impacts to these species would be limited to temporary habitat loss and considered less than significant.

Cooper's hawk, white-tailed kite, and southern California rufous-crowned sparrow may occur near the pipeline alignment within Happy Camp Canyon Regional Park. Impacts may include habitat loss and disturbance of active nests. Project-related habitat loss in the Regional Park would be minimal (less than 0.2 acre) because the alignment follows existing trails and cart paths. In addition, the alignment is located along active cart paths which would discourage

nesting in close proximity. Overall, impacts to Cooper's hawk, white-tailed kite, and southern California rufous-crowned sparrow are considered less than significant.

The threatened California gnatcatcher occurs in the Project area (northern Moorpark) and the pipeline alignment is partially located within designated critical habitat. Temporary habitat loss would vary with the precise pipeline alignment selected, but is anticipated to be up to 1.0 acre. The quality of affected habitat for California gnatcatcher is low due to low plant cover, low species diversity and abundance of non-native species. It is possible that California gnatcatchers breed on the slopes along Walnut Canyon Road and undeveloped portions of Happy Camp Canyon Regional Park. However, breeding is unlikely to occur along roadways and golf course cart paths where Project-related habitat loss would occur. Impacts to the California gnatcatcher are unlikely to be significant for the following reasons:

- No permanent impacts would occur, as native vegetation (likely suitable habitat) would colonize the area disturbed by pipeline installation;
- Habitat loss would be very small (up to an acre) as compared to 57,737 acres within Critical Habitat Unit 13 (Ventura County, west Los Angeles County);
- Affected habitat is low quality, located along roadways with low species diversity and high abundance of non-native plants;
- Based on more rigorous sampling techniques, the species is more abundant than previously thought (U.S. Fish & Wildlife Service, 2010); and
- Take is not anticipated (mortality, harassment, loss of breeding opportunities).

However, loss of habitat would occur within critical habitat. Therefore, impacts are considered potentially significant unless California gnatcatcher is determined to be absent along the pipeline alignment. Additionally, other development proposed within the general area including 21 residential units proposed to be developed on the east side of Walnut Canyon Road also has the potential to impact California gnatcatcher. Thus the Project's impact may also be considered potentially cumulatively significant.

San Diego desert woodrat likely occurs within Happy Camp Canyon Regional Park in large patches of cactus and rock outcrops. These habitat features do not occur in proximity to the pipeline alignment and this species is not anticipated to be significantly affected by Project-related habitat loss.

**c. Migratory Birds.** Removal of vegetation during pipeline installation has the potential to result in take of migratory birds through the loss of active nests (with eggs or nestlings). This impact is considered potentially significant.

#### 4.1.2.3 Mitigation and Residual Impacts.

The following measure is required to reduce potential impacts to California Gnatcatcher to less than significant.

**BIO1** Presence/absence surveys for California gnatcatcher shall be completed prior to finalization of the Project design according to the survey guidelines developed by the U.S. Fish & Wildlife Service, which includes at least six surveys conducted at least one week apart. If presence of this species is documented during the surveys, the pipeline alignment shall be modified to avoid loss of occupied habitat and provide a U.S. Fish & Wildlife Service-approved buffer between occupied habitat and construction activities. Alternatively, the District may pursue a take permit through the Endangered Species Act Section 10 process, including the development and implementation of a habitat conservation plan.

The following mitigation measure is required for to ensure Project compliance with the Migratory Bird Treaty Act.

**BIO2** If feasible, pipeline installation will be scheduled outside the typical bird breeding season (March 1 to August 15). Alternatively, a qualified biologist shall conduct breeding bird surveys within 48 hours of the start of construction to identify active bird nests within vegetation to be removed. If active nests are found, vegetation removal activities shall be postponed until the young have fledged or the nest is abandoned.

## **4.2 ECOLOGICAL COMMUNITIES - SENSITIVE PLANT COMMUNITIES**

### **4.2.1 Setting**

#### **4.2.1.1 Plant Communities**

Sensitive plant communities do not occur along the pipeline alignment. The Project site may be divided into four areas for the purposes of describing vegetation:

- Proposed booster pump station site;
- Championship Drive: north and south of the eastbound bike lane, approximately 8,900 feet;
- Walnut Canyon Road: west of the western shoulder except when approaching Broadway Road, approximately 4,500 feet; and
- Broadway Road: north or south of traffic lanes, approximately 3,100 feet.

The proposed booster pump station would be located in a disturbed area adjacent to an existing pump station and recycled water storage tank, which does not support native vegetation. The site supports scattered weedy species, with landscaping and masonry wall to shield the site from Championship Drive.

South of the traffic lanes, Championship Drive includes a turf-grass strip, concrete sidewalk, a landscaped strip, an earthen hiking trail and a landscaped strip/slope between the trail and parallel residential streets. The landscaped strip along the western portion (about

1,500 linear feet) of the alignment includes native species such as black sage (*Salvia mellifera*), white sage (*Salvia apiana*) and sagebrush (*Artemisia californica*). Vegetation north of the traffic lanes on Championship Drive is composed of a landscaped strip between the curb and adjacent homes. However, the western portion of the alignment includes contoured slopes planted with mostly native species such as sage and sagebrush. The alignment crosses the Walnut Canyon drainage at a culvert near the eastern terminus of Championship Drive and turns north. The culvert inlet supports a patch of planted coyote brush (native vegetation) and a patch of arroyo willows (*Salix lasiolepis*) occurs at the culvert outlet.

The Walnut Canyon drainage occurs along the alignment just west of the roadway embankment. The drainage supports small patches of native shrubs and trees (coyote brush, black sage, sagebrush, mulefat, blue elderberry, California buckwheat, coast live oak), but is dominated by weedy species (mostly non-native grasses and herbs) and Peruvian pepper tree (*Schinus molle*).

The western portion of the alignment along Broadway Road supports citrus orchards both north and south of the road, and a blue gum windrow (*Eucalyptus globulus*) located to the south. The portion of the alignment within Happy Camp Canyon Regional Park mostly follows the existing trail and cart paths. However, patches of native vegetation are present, including sagebrush-California buckwheat scrub and native plantings within the Rustic Canyon Golf Course. The alignment crosses the Happy Camp Canyon drainage which supports scale-broom scrub dominated by scale-broom (*Lepidospartum squamatum*), sagebrush and deer-weed (*Acmispon glaber*).

#### 4.2.1.2 Waters and Wetlands

The pipeline alignment crosses three drainages, including the Gabbert Canyon drainage (near booster pump station site off Championship Drive), Walnut Canyon drainage (at Championship Drive and at Walnut Canyon Road) and the Happy Camp Canyon drainage.

The U.S. Army Corps of Engineers (Corps) has jurisdiction over waters of the United States (U.S.). The limit of jurisdiction in non-tidal waters extends to the ordinary high water mark and include 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 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."

The Ventura County General Plan Goals, Policies & Programs Element defines wetlands as:

*"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."*

Following the Supreme Court Rapanos decision, Corps jurisdiction under the Clean Water Act is established if the waterbody is "relatively permanent" or the waterbody has a significant nexus to traditional navigable waters. The three affected drainages are ephemeral and surface flows are not relatively permanent, and are tributaries of Arroyo Simi, which becomes Calleguas Creek downstream in Camarillo. Calleguas Creek is considered a traditionally navigable water due to the tidal influence of the Pacific Ocean. Due to the small watershed area, low aquatic habitat value and presence of debris/detention basins, these tributaries do not appear to substantially affect the chemical, physical and biological integrity of Calleguas Creek. The Corps of Engineers may determine that one or more of these three drainages are waters of the U.S. and within the jurisdiction under the Clean Water Act.

Jurisdictional wetlands are determined to be present if evidence of all three Federal criteria are observed (hydrophytic vegetation, hydric soils, and wetland hydrology) within or adjacent to waters of the U.S. The only area where a predominance of hydrophytic (water-loving) vegetation (arroyo willows) was observed was at the Walnut Canyon drainage culvert outlet just downstream of Championship Drive. A preliminary wetland delineation was conducted on April 23, 2013 and determined that this area supports a predominance of hydrophytic vegetation (arroyo willow, mulefat) and exhibited secondary indicators of wetland hydrology (sediment deposits, drift deposits and drainage patterns). However, hydric soils were not found. Therefore, this area is not considered a jurisdictional wetland.

The patch of willows at the Walnut Canyon drainage culvert outlet just downstream of Championship Drive does support County-defined wetlands because arroyo willow requires seasonally saturated soils for growth and reproduction. This wetland is not considered a significant wetland habitat for the purposes of General Plan Policy 1.5.2-4 because it is small (about 0.25 acres), supports surface water only immediately following rain events, is isolated from other wetland habitats and does not support aquatic organisms.

## 4.2.2 Impact Discussion

### 4.2.2.1 Significance Thresholds

The following thresholds are taken from the Ventura County Initial Study Assessment Guidelines and indicate the potential for a significant impact:

- Activities that would result in temporary or permanent removal of sensitive plant communities;
- Indirect impacts from project operation that would degrade the health of a sensitive plant community;
- Removal of vegetation, grading, obstruction or diversion of water flow, change in flow velocity, siltation, volume of flow, change in run-off rate, placement of fill, placement of structures, construction of a road crossing, or placement of culverts within waters and wetlands;
- Disruption of wetland or riparian plant communities that would isolate or substantially interrupt contiguous habitat, block seed dispersal routes or increase vulnerability of wetland species to exotic weed invasion or local extirpation;
- Interference with ongoing maintenance of hydrological conditions in a water or wetland; and
- Inadequate buffer to protect functions and values of existing waters or wetlands.

### 4.2.2.2 Impacts

**a. Plant Communities.** No sensitive plant communities would be impacted. Temporary loss of native vegetation would vary with the precise pipeline alignment selected, but is anticipated to be up to one acre, comprised of disturbed black sage scrub, white sage scrub and sagebrush-California buckwheat scrub. This impact is considered less than significant due to small area affected, low species diversity and high frequency of non-native species in this vegetation.

**b. Waters and Wetlands.** The pipeline alignment crosses three drainages, which may be considered waters of the U.S. It is anticipated that these crossings would utilize existing roadway culverts when feasible, which would minimize impacts to waters. However, the pipeline may be installed within/below the Walnut Canyon drainage to avoid placement within the State right-of-way. Jurisdictional wetlands do not occur along the alignment and would not be impacted. The small patch of County-defined wetlands at the Walnut Canyon drainage crossing at Championship Drive could be impacted by pipeline installation. However, this impact is considered less than significant due to small area of potential impact (less than 0.02 acres) and the lack of significant wetland habitats.

### 4.2.2.3 Mitigation and Residual Impacts

No significant impacts were identified; therefore no mitigation is required.

## **4.3 HABITAT CONNECTIVITY**

### **4.3.1 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.

State Route 118 east of Moorpark is considered a partial barrier to wildlife movement between the Santa Susana Mountains and the Simi Hills, with wildlife using larger culverts, underpasses and tunnels to cross under traffic lanes (LSA, 2004). Happy Camp Canyon Regional Park is part of a suspected wildlife movement corridor connecting the Santa Monica Mountains to the Sierra Madre Mountains (Penrod et al., 2006).

The pipeline alignment traverses a residential area (Moorpark Country Club), a transportation corridor (Walnut Canyon Road/Route 23), and a regional park. Focused wildlife movement is not anticipated to occur along the alignment.

### **4.3.2 Impact Discussion**

#### **4.3.2.1 Thresholds of Significance**

The following thresholds are taken from the Ventura County Initial Study Assessment Guidelines and indicate the potential for a significant impact:

- A habitat connectivity feature would be severed, substantially interfered with, or potentially blocked;
- Wildlife access to foraging habitat, breeding habitat, water sources or other areas necessary for their reproduction would be prevented or substantially interfered with;
- Wildlife would be forced to use routes that endanger their survival;
- Lighting, noise, domestic animals or other indirect impacts that could hinder or discourage fish and/or wildlife movement within a habitat connectivity feature;
- The width of a habitat linkage, corridor or chokepoint would be reduced to less than the sufficient width for movement of the target species; and
- Loss of visual continuity (line-of-sight) across a highly constrained wildlife corridor, such as highway crossing structures.

#### 4.3.2.2 Impacts

Pipeline installation and operation would not substantially reduce the value of Happy Camp Canyon Regional Park as a wildlife movement corridor because the pipeline would be located within the Rustic Canyon Golf Course portion of the Regional Park and would not fully traverse the canyon bottom. Wildlife moving through the Regional Park are expected to avoid golf course facilities, and would mostly move at night, when Project construction would not occur. Therefore, impacts associated with habitat connectivity are considered less than significant.

#### 4.3.2.3 Mitigation and Residual Impacts

Impacts to habitat connectivity would be less than significant; therefore, no mitigation is required.

### 4.4 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 1.5.2.1: Evaluate biological impacts of discretionary development.</i>	Consistent - This Initial Study includes an evaluation of biological impacts.
<i>County Policy 1.5.2.2: Mitigate significant biological impacts.</i>	Consistent – With implementation of measures provided herein, no significant biological impacts would result.
<i>County Policy 1.5.2.3: Evaluate impacts to wetland habitat, discretionary development that would have a significant impact on a significant wetland habitat shall be prohibited.</i>	Consistent - This Initial Study includes an evaluation of biological impacts, including wetland habitats. No significant wetland habitat impact would occur.
<i>County Policy 1.5.2.4: Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats.</i>	Consistent – No “significant” wetland habitat would be impacted by Project development..
<i>County Policy 1.5.2.5: The California Department of Fish and Game, U.S. Fish and Wildlife Service, National Audubon Society and California Native Plant Society shall be consulted when discretionary development may significantly impact biological resources.</i>	Consistent – With implementation of biological mitigation measures, the Project would not significantly impact biological resources. However, the Initial Study/Mitigated Negative Declaration will be submitted to these entities.
<i>City General Plan Open Space, Conservation and Recreation Element Policy 4.3: Conserve, preserve and enhance the quality of biological and physical environments throughout the City of Moorpark. Require restoration of those areas unsatisfactorily maintained or subsequently degraded.</i>	Consistent - With the implementation of scenic resource (SR2, regarding revegetation) and water quality-related (WQ1, regarding stormwater pollution prevention) measures described within this Initial Study, the Project will be consistent with this policy.

## 5.0 AGRICULTURAL RESOURCES

### 5.A SOILS

#### 5.A.1 Setting

Agriculture plays an important role in the national, State, and County economies. Ventura County is one of the principal agricultural counties in the State. The value of Ventura County agricultural production in 2011 was \$1,841,260,000 making it 10th in the state with respect to economic value of agriculture production (California Farm Bureau Federation web site, accessed March 2013). This prolific production is made possible by the presence of high quality soils, adequate water, favorable climate, and level topography. In addition, according to the Ventura County Farm Bureau, altogether, farming and farm-dependent businesses provide an estimated 31,000 jobs in Ventura County, more than any other sector of the economy except services. Agriculture and agriculture-related businesses account for about 4.4 percent of overall economic activity in Ventura County (Farm Bureau of Ventura County web site accessed March 2013). There are several factors that affect agricultural economic viability. Cost of land, water, materials and equipment, etc., are important factors. To preserve the agricultural base of the County, it is necessary to discourage the conversion of farmland to other uses.

Agricultural uses adjacent to the proposed pipeline alignment on Walnut Canyon Road, Happy Camp Road and Broadway Road include mainly citrus orchards. However avocado plantings are also located adjacent to Broadway Road in the Project area. One property under covered under a Land Conservation Act (aka Williamson Act) contract is located along the pipeline route, north of Broadway Road. That property is in orchard production.

In Ventura County, the California Department of Conservation Important Farmlands Inventory (IFI) system is used to inventory lands considered to have agricultural value. The areas with the highest agricultural potential are classified as “Prime” or of “Statewide Importance,” followed by “Unique,” “Local Importance,” “Grazing,” “Urban” and “Other.” This system is superior to merely identifying class I and II type soils because other aspects of the land’s productive potential are factored in. Based upon Important Farmlands Inventory mapping prepared by Ventura County GIS, land adjacent to the eastern end of Championship Drive and much of Walnut Canyon Road, Happy Camp Road and Broadway Road along the proposed pipeline alignment is identified as “Grazing” land. However, areas of “Unique” farmland are also located adjacent to Walnut Canyon Road, Happy Camp Road and Broadway Road along the proposed pipeline alignment.

Soils types, as identified by a review of custom soil resource reports created for the proposed Project using the United States Department of Agriculture Natural Resource Conservation Service web-based soil survey, that are present at the proposed pipeline alignment are identified in Table C.5-1 below.

**Table C.5-1. Soil Types at the Proposed Pipeline Alignment**

Map Unit	Description	Additional Comments
<b>Championship Drive</b>		
ScF2	San Benito clay loam, 30-50 percent slopes, eroded	Not prime farmland Land capability: 6e <sup>2</sup> 40 to 60 inches to paralithic bedrock
SvF2	Soper gravelly loam, 30-50 percent slopes, eroded	Not prime farmland Land capability: 6e 24 to 40 inches to paralithic bedrock
GaC	Garretson loam, 2 to 9 percent slopes	<u>Prime farmland if irrigated</u> Land Capability: 2e More than 80 inches to bedrock
SsE2	Soper loam, 15 to 30 percent slopes, eroded	Not prime farmland Land capability: 4e 24 to 40 inches to paralithic bedrock
ChD2	Chesterson coarse sandy loam, 5 to 15 percent slopes, eroded	<u>Farmland of Local Importance</u> Land capability: 4e 20 to 40 inches to duripan
CfF2	Castaic-Balsom complex, 30 to 50 percent slopes	Not prime farmland Land capability: 6e 22 to 40 inches to paralithic bedrock
<b>Walnut Canyon Road</b>		
CkE3	Chesterson sandy loam, 9 to 30 percent slopes, severely eroded	Not prime farmland Land capability: 6e 20 to 40 inches to duripan
ChD2	See description above	
GxG	Gullied Land	Not Prime Farmland Land capability: 8
<b>Broadway Road to East End of Alignment</b>		
ChD2	See description above	
CkE3	See description above	
HuC2	Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded	<u>Farmland of Local Importance</u> Land capability: 4e Depth to restrictive feature more than 80 inches
SvF2	See description above	

<sup>2</sup> Soil subclass “e” is made up of soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.

Map Unit	Description	Additional Comments
CoC	Corralitos loamy sand, 2 to 9 percent slopes	<u>Farmland of Statewide Importance</u> Land capability: 4e non-irrigated 3s irrigated Depth to restrictive feature more than 80 inches
Sd	Sandy alluvial land	Not prime farmland Land capability: 4w

As can be seen from a review of Table C.5-1, soils at the proposed Project pipeline route are mostly not designated as valuable soils for agriculture. About 150 linear feet of the alignment along Championship Drive is within soil designated as prime if irrigated (GaC). Approximately 1,150 linear feet of the alignment along Championship Drive is within soil designated as farmland of Local Importance (ChD2). However, land adjacent to the Project pipeline alignment on Championship Drive is developed with urban uses. Approximately 900 linear feet of the alignment along Walnut Canyon Road is within soil designated as farmland of Local Importance (ChD2). Approximately, 2,600 linear feet of the alignment along Broadway Road is within soil designated as farmland of Local Importance (ChD2 and HuC2). Approximately 750 linear feet of the alignment within the Rustic Canyon Golf Course is within soil designated as farmland of Statewide Importance (CoC).

Agriculturally zoned land at and proximate to the Project site within unincorporated Ventura County is “protected” under the Ventura County Save Open Space and Agricultural Resources (SOAR) ordinance. This ordinance requires countywide voter approval of any change to the County General Plan involving the Agricultural, Open Space or Rural land use map designations, or any change to a General Plan goal or policy related to those land use designations. The ordinance remains in effect until 2020.

**5.A.2 Project Consistency with Applicable Policies**

Policy	Consistency Determination
<i>County Policy 1.6.2.1: Discretionary development located on land designated as Agricultural (see Land Use Chapter) and identified as Prime Farmland or Farmland of Statewide Importance on the State's Important Farmland Inventory, shall be planned and designed to remove as little land as possible from potential agricultural production and to minimize impacts on topsoil.</i>	Consistent - The Project would not result in the removal of Prime Farmland or Farmland of Statewide Importance from agricultural use.
<i>County Policy 1.6.2.6: Discretionary development adjacent to Agricultural-designated lands shall not conflict with agricultural use of those lands.</i>	Consistent - The proposed Project would not conflict with agricultural uses in the long-term. Dust control measures will be incorporated into the Project to reduce short-term construction-related impacts to agriculture. Short-term mitigation will be implemented as necessary for potential impacts to avocado plantings. Additionally, the District must

Policy	Consistency Determination
	negotiate easement agreements with the landowners of any parcels that would be directly impacted by the installation of water infrastructure.
<i>City of Moorpark General Plan Open Space Conservation and Recreation Element Policy 4.4: Protect agricultural resources from future development...</i>	Consistent – The Project is limited to installation of water-related infrastructure that would make reclaimed water available to agricultural users in the Project area. The Project would not result in long-term preclusion of agricultural production within the Project site.

### 5.A.3 Impact Discussion

#### 5.A.3.1 Significance Thresholds

The County of Ventura Guidelines state that projects resulting in the direct or indirect loss of agricultural soils meeting or exceeding the following criteria would result in significant project-specific impacts to agriculture. Any project that would result in the direct and/or indirect loss of soils designated Prime, Statewide Importance, Unique or Local Importance will have an impact. Any project that would result in the direct and/or indirect loss of agricultural soils meeting or exceeding the following criteria will be considered as having a significant project impact:

General Plan Land Use Designation	Important Farmland Inventory Classification	Acres Lost
Agricultural	Prime/Statewide	5 ac.
	Unique	10 ac.
	Local	15 ac.
Open Space/Rural	Prime/Statewide	10 ac.
	Unique	15 ac.
	Local:	20 ac.
All Others	Prime/Statewide	20 ac.
	Unique	30 ac.
	Local	40 ac.

Any project that would result in the direct and/or indirect loss of agricultural soils is considered as having a contribution to a significant cumulative impact. However, the cumulative loss of agricultural soils was discussed in the Final EIR for the Comprehensive Amendment to the County General Plan (1988). The conclusions of that EIR were that there will be a significant loss of agricultural soils and, although the General Plan contains policies and programs that serve to partially mitigate the cumulative impact, the impact can't be reduced to a less-than-significant level.

Therefore, in accordance with Section 15183 of the CEQA Guidelines, additional cumulative environmental analysis is not required for any project that is consistent with the General Plan. Furthermore, any project that entails a General Plan amendment and would result in the loss of agricultural soils less than that indicated above (project impact), is considered as having a de minimus contribution to a significant cumulative impact and would not require an EIR. Conversely, any project that entails a General Plan amendment and would result in the loss of agricultural soils equal to or greater than that indicated above is considered as having a substantial contribution to a significant cumulative impact, and would require an EIR.

#### 5.A.3.2 Impacts

The Project involves installation of reclaimed water pipelines in paved road rights of way, agricultural land, park land and golf course property. The pipeline would be installed within the road right-of-way on Championship Drive. Along Walnut Canyon Road and Broadway Road approximately 0.2 acre (3,500 linear feet x 2.5 feet wide) of farmland of Local Importance (ChD2 and HuC2) would be temporarily impacted for the pipeline trench. Additional temporary impacts to these soils would result from stockpiling of materials and use of equipment along the pipeline corridor. Within Rustic Canyon Golf Course 0.04 acre (750 linear feet x 2.5 feet wide) farmland of Statewide Importance (CoC) would be temporarily impacted for the pipeline trench. Additional temporary impacts to this soil would result from stockpiling of materials and use of equipment along the pipeline corridor. Upon completion of pipeline installation, the pre-existing uses can resume. No permanent loss of agricultural soils would result and as such, Project impacts may be considered adverse but are below the applicable thresholds of significance.

Further, with respect to the reclaimed water project in general, District 1 previously prepared an EIR for the MWTP 5.0 MGD Expansion Project (2001) which includes an upgrade of tertiary treatment capacity, and an EIR for the Reclaimed Water Distribution System (1997). The 2001 EIR identified a significant and unavoidable agricultural impact because proposed development of percolation ponds would replace 23.5 acres of productive farming on prime agricultural soils. Similarly the 1997 EIR also identified a significant and unavoidable impact to agriculture due to the direct displacement of 3.3 acres of prime farmland due to reclaimed water storage ponds and indirect loss of an additional 11 acres of prime farmland because it was assumed that the remainder of the affected parcel would not continue in agricultural production. In accordance with Section 15093 of Title 14 of the California Code of Regulations (CEQA Guidelines) a Statement of Overriding Considerations was required at the time that the projects were approved. The District has already identified a significant and unavoidable loss of agricultural soil in association with the MWTP Reclaimed Water Project, additional temporary impacts to Locally Important farmland, farmland of Statewide Importance or Prime agricultural soil associated with the development of Project is not a substantial increase in the severity of the agricultural soil impact already disclosed in the previous EIRs.

#### 5.A.3.3 Mitigation and Residual Impacts

No significant impact would result, so no mitigation is required.

## **5.B AGRICULTURAL RESOURCES - LAND USE INCOMPATIBILITY**

### **5.B.1 Setting**

The general setting provided in 5.A.1 above applies to this issue.

### **5.B.2 Project Consistency with Applicable Policies**

The policies outlined under topic 5A are also applicable to agricultural land use incompatibility.

### **5.B.3 Impact Discussion**

#### **5.B.3.1 Significance Thresholds**

The County Guidelines agricultural land use compatibility impact thresholds state that a project that is closer than 300 feet with vegetative screening, or 150 feet without vegetative screening, may have a potentially significant impact on agricultural resources. However, several waiver conditions from these thresholds are also identified. The following waiver condition is applicable to the proposed Project:

- Individuals are not continuously present in the proposed structures or use area.

#### **5.B.3.2 Impacts**

Construction of the pipeline within and adjacent to active agricultural parcels may interfere with ongoing agricultural operations on a short-term basis. Direct impacts to agriculture will be authorized through agreements between the District and the property owner(s). Additionally, construction will result in the creation of dust; however, standard dust suppression measures recommended by the VCAPCD will be implemented as part of the Project. Therefore, dust impacts to adjacent agricultural uses will be less than significant.

Based upon past communications with the Ventura Agricultural Commissioner's Office regarding the potential for introduction of pests and disease to agricultural lands as a result of construction, the spread of avocado root rot through the introduction of construction equipment to avocado groves was identified as a potential issue of concern. According to the University of California Integrated Pest Management Program web page on avocado root rot, the disease is caused by the pathogen *Phytophthora cinnamomi*. It also states that *Phytophthora* is readily spread by activities such as walking or driving on infested wet soil. As such, in the event that Project equipment brought to the site contained residual soils from a site infected with *Phytophthora*, it may result in the spread of the disease to previously uninfected areas planted with avocados. This is a potentially significant impact of Phase IV pipeline installation due to the proximity of the pipeline route to avocado plantings on Broadway Road.

Over the long-term, due to the nature of the Project as development of water infrastructure, it is not anticipated to introduce any new uses, activities, or elements to the site that would result in an introduction of pest or disease to nearby agricultural uses with the

exception of possible risk of introducing avocado root rot in the Phase IV pipeline area during extension of lines into the individual properties along the pipeline route and regular maintenance and repair work which may be considered a potentially significant impact. Also, it is known that irrigation water with high overall salinity or an excess of boron, chloride, or sodium promotes infection of roots by *Phytophthora* (University of California, 2009). Similarly, other adverse crop health conditions may be exacerbated by specific water quality characteristics. However, reclaimed water produced by the District is required to meet the water quality constituent requirements as set forth in the Water Recycling Requirements set for by the CRWQB in Title 22 Recycled Water Order No. R4-2002-0028, and any future regulatory updates. Additionally, the use of reclaimed water for agricultural purposes will be at the discretion of the land owners. Each grower is responsible for the management of their crops and should select to utilize reclaimed water as they determine appropriate.

Because the Project is limited to the construction of pipelines and a booster pump station no long-term incompatibility between the Project and nearby agricultural land use practices, such as the use of agricultural chemicals, is anticipated since no continuously occupied structures are proposed. Furthermore, the operation of the proposed uses would not interfere with agricultural operations over the long-term.

The proposed Project would facilitate further expansion of reclaimed water use for irrigation purposes including agricultural irrigation and would not reduce existing water supplies available to agriculture.

There are no other known cumulative Projects that would impact the same avocado groves as the Project, therefore, the Project's potential impacts relative to the transfer of avocado root rot are not considered cumulatively significant.

#### 5.B.3.3 Mitigation and Residual Impacts

The following mitigation measures were identified in the FEIR for the MWTP Reclaimed Water Distribution System (April 1997) and were incorporated into the reclamation project at that time. These measures shall also be incorporated into Phase IV of the reclaimed water system to reduce potential adverse agricultural land use conflicts.

- AG1** To the extent practicable, construction will be scheduled while fields are fallow or when crops can be harvested in advance of construction.
- AG2** Market value will be paid for crops taken out of production.
- AG3** Agricultural landowners of *Project construction sites and<sup>3</sup>* adjacent to Project construction sites will be notified of construction; and construction activities should be undertaken as to avoid blocking access to agricultural parcels.

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<sup>3</sup> Italicized text has been added to the measure as it previously appeared in the FEIR.

The following measures would reduce potentially significant impacts associated with pest/diseases on a short-term and long-term basis to a less than significant level.

- AG4** Entry of Project personnel and equipment into avocado groves or nearby areas topographically up-gradient from avocado plantings shall be avoided to the maximum extent practical. This shall be included as a condition in the request for bids on the Phase IV Pipeline Project and monitored in the field. This measure shall also apply to future activities associated with the operation of the Project.
- AG5** Any Project equipment that must operate in avocado groves or nearby areas topographically up-gradient from avocado plantings shall be disinfected prior to use in these areas if there is any possibility that the equipment was previously used in areas infected with *Phytophthora* (Avocado root rot pathogen). This shall be accomplished as recommended by the University of California Cooperative Extension, by washing off and mud/soil from equipment. The equipment should then be allowed to dry thoroughly and be dipped or treated with a disinfectant. Effective disinfectants include: a 70% solution of methanol, ethanol, or rubbing alcohol; a 10% chlorox solution; a 5% solution of commercial formalin or forlin or formaldehyde; or amphyl. Equipment disinfection shall be accomplished in a designated area that will not impact water or biological resources. This shall be included as a condition in the request for bids on the Phase IV Pipeline Project. This measure shall also apply to future activities associated with the operation of the Project.

## 6.0 SCENIC RESOURCES

### 6.1 SETTING

The main natural scenic features of the Project area include the Little Simi Valley to the south and Oak Ridge to the north. Along the immediate pipeline route the scenic features include undeveloped open space, the two Project area golf courses, Happy Camp Regional Park and orchards. Within Ventura County, many residents value the aesthetics of agriculture land and the associated rural environment.

Championship Drive, Walnut Canyon Road, Happy Camp Road and Broadway all provide visual access to the Project pipeline alignment. These travel corridors may also be considered primary view corridors. Views of the Project pipeline alignment are also available from area land uses including residential uses and the golf courses. Figure C.6-1 shows the approximate pipeline alignment as viewed from Rustic Canyon Golf Course looking west toward Happy Camp Regional Park.

The proposed pump station would be located at the existing VCWWD No. 1 reclaimed water tank site and can be viewed from area roads and nearby properties including the Moorpark Country Club Golf Course as shown in Figure C.6-2.



**Figure C.6-1. View of Pipeline Alignment from Rustic Canyon Golf Course**



**Figure C.6-2. View of Existing Reclaimed Water Tank Site and Well No. 20**

There are no Ventura County designated Scenic Resources areas, as identified on the Ventura County General Plan Resource Protection Map, in the Project area. However, the City of Moorpark General Plan Open Space and Conservation Element identifies scenic viewsheds including, but not limited to, an area that encompasses part of the following streets and their surroundings: Championship Drive (eastern end), Walnut Canyon Road and Broadway Road.

Based on a review of Ventura County General Plan Resources Appendix (updated April 6, 2010) Figure 1.7.3b, Designated and Eligible Scenic Highways Southern Half, Walnut Canyon Road is considered an eligible County Scenic Highway as is Broadway Road, west of the Project pipeline alignment. The City of Moorpark General Plan, Open Space, Conservation and Recreation Element identifies Walnut Canyon Road as a scenic corridor and Happy Camp Canyon Road through the regional park as a proposed scenic corridor.

## 6.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 1.7.2.1: Notwithstanding Policy 1.7.2.2, discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.</i>	Consistent - The Project would not significantly alter or obscure public views of visual resources. With implementation of measures provided below, the Project would not degrade scenic resources.
<i>City Policy 1.1 from the Open Space Conservation and Recreation Element: Protect scenic viewsheds both to and from the city of Moorpark...</i>	Consistent - The Project would not significantly alter or obscure public views of visual resources. With implementation of measures provided below, the Project would not degrade scenic resources.

## 6.3 IMPACT DISCUSSION

### 6.3.1 Significance Thresholds

The County Guidelines state that:

A project has the potential to create a significant impact to scenic resources if it:

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

### 6.3.2 Impacts

During Project construction activities, construction equipment and disturbed earth would be visible at the sites from the adjacent roads and properties including regional-park, golf course residential and agricultural uses. As mentioned above, a portion of the Project area is designated as a scenic viewshed and Walnut Canyon Road is a scenic road. This view modification would occur for a short-period of time in any one location as the pipeline installation process would progress in a linear fashion. In areas where vegetation is disturbed, the temporary visual effect would remain until revegetation of the impacted corridor is successfully accomplished. These impacts may be adverse and potentially significant due to the fact that established vegetation located along a designated scenic road, and within a scenic viewshed and regional recreation area would be impacted.

Over the long-term, the pipeline would be subsurface and the previously disturbed ground would be restored to its original condition. The proposed booster pump station will be located at the existing reclaimed water tank site at 11501 Championship Drive. This site is presently developed with water-related facilities, the booster pump station would, therefore, be consistent with the existing character of the site and would not alter or obstruct any existing scenic vista.

The Project's short-term scenic resource impacts may be considered cumulatively considerable when considered together with pending and approved development, specifically other development on Walnut Canyon Road

### 6.3.3 Mitigation and Residual Impacts

The following measures SR1 and SR2 are provided to reduce short-term visual impacts including the Projects contribution to cumulatively significant impacts to less than significant. To further reduce potential long-term adverse visual impacts measure SR3 is provided.

**SR1** Staging of construction equipment and materials shall be conducted in such a way as to minimize the visual impact from adjacent viewing areas to the extent practicable. This may be accomplished by utilizing the minimum area needed for staging, confining all overnight staging of equipment and materials to designated areas and use of visual screening. This measure shall be included in contractor bid specifications.

**SR2** In areas of the proposed pipeline alignment where natural vegetation will be impacted, revegetation of the affected area will be accomplished with the assistance of a qualified biologist. A revegetation plan including details regarding the species, plant stock/sources, spacing, irrigation requirements and success criteria that will ensure complete restoration of the disturbed area will be prepared by a qualified biologist on behalf of VCWWD No. 1 prior to Project construction. The revegetation plan will be implemented as soon as practical upon completion of pipeline construction within natural areas. The revegetation plan shall be prepared and implemented with the objective of reestablishing the pipeline

alignment to pre-Project conditions or better such that visual impacts are mitigated as soon as possible after completion of construction.

- SR3** The booster pump station shall be located in such a manner as to reduce visual impacts to public view areas. This may be accomplished by locating the pump station on the northwest side of the reclaimed water tank such that they would be screened from view by the existing reclaimed water tank for viewers on Championship Drive and the Moorpark Country Club. Additionally, the pump station equipment shall be placed in a structure of comparable construction to the structures on the Well No. 20 site.

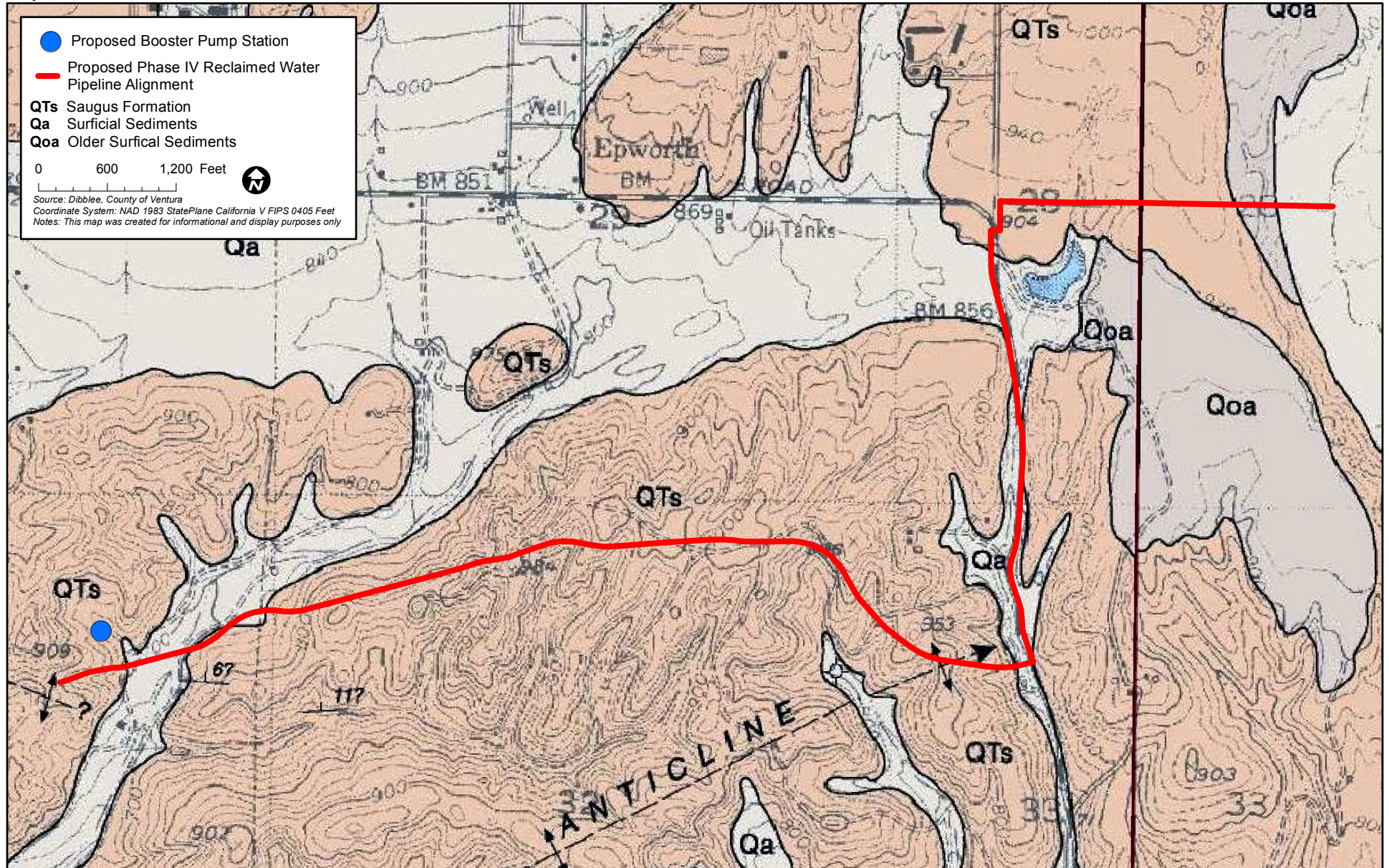
## 7.0 PALEONTOLOGICAL RESOURCES

### 7.1 SETTING

According to the Ventura County General Plan Resources Appendix, paleontological resources refer to the fossilized remains of pre-historic plant and animal life. In Ventura County, paleontological remains include examples from throughout most of geologic history dating back 600 million years ago to the present. Certain geologic formations are of known paleontological importance, others are of low importance, while the importance of other deposits is unknown. According to the County Guidelines, fossil remains are considered important if they are: 1) well preserved; 2) identifiable; 3) type/topotypic specimens; 4) age diagnostic; 5) useful in environmental reconstruction; 6) represent rare and/or endemic taxa; 7) represent a diverse assemblage; and/or 8) represent associated marine and non-marine taxa.

The Geologic Map of the Simi Quadrangles (Dibblee, 1992) and the Moorpark Quadrangle (Dibblee, 1992) were reviewed. The geologic formations along the pipeline corridor in order of prevalence include Saugus Formation (QTs), Surficial Sediments - Alluvial Deposits (Qa) and Older Surficial Sediments - Alluvial (Qoa) (see Figure C.7-1).

The Saugus Formation is nonmarine fluvial, weakly consolidated material of the Pleistocene and possibly Pliocene ages and is ranked as a geologic formation of paleontological importance in the Ventura County area as identified in the Ventura County Initial Study Assessment Guidelines. The comparatively large number of fossil sites, the abundance of vertebrate taxa (particularly terrestrial vertebrates), and the moderate local site densities indicate that the Saugus Formation has a high paleontological sensitivity. This formation has the potential to yield additional scientifically significant paleontological resources of great importance to the understanding of the evolution of mammals in the early Tertiary Eocene and Oligocene times (BonTerra Consulting, 2002). Marine invertebrates are well known from Saugus Formation deposits in the Moorpark and Simi Valley areas. A diverse assemblage of marine and non-marine vertebrates, including extinct horses, large cats, dogs, elephants, turtles, peccaries, deer, and sharks are known from exposures of the Saugus formation in Simi Valley. Other fossil remains that have been recovered from this formation include rodents, rabbits and lizards (United States Army Corps of Engineers and California Department of Fish



and Game, April 2009). In 2005, a nearly intact fossilized mammoth skeleton was discovered in Saugus formation at a residential development construction site in Moorpark (Valencia-Martinez, April 9, 2005).

**7.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES:**

Policy	Consistency Determination
<p><i>County Policy 1.8.2.1: Discretionary developments shall be assessed for potential paleontological and cultural resource impacts, except when exempt from such requirements by CEQA. Such assessments shall be incorporated into a Countywide paleontological and cultural resource data base.</i></p>	<p>Consistent - The Project has been reviewed for potential paleontological and cultural resource impacts.</p>
<p><i>County Policy 1.8.2.2: Discretionary development shall be designed or re-designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical or paleontological consultants, depending on the type of resource in question.</i></p>	<p>Consistent – Saugus formation cannot be avoided in the Project area due to its prevalence. Mitigation has been proposed to reduce potential Project impacts to a less than significant level. The Project is not expected to result in significant impacts to cultural resources with implementation of mitigation.</p>

**7.3 IMPACT DISCUSSION**

**7.3.1 Significance Thresholds**

Based upon the County Guidelines, if the proposed project’s disturbance is located in an area of “Quaternary Deposits (alluvium), or formations ranked as Moderate, Low or No paleontological importance no further assessment need to be done and the “N” column checked in the Initial Study. However, significance for formations listed as - Moderate to High or "High, must be determined by a paleontological consultant.

**7.3.2 Impacts**

Much of the pipeline route (most of the Championship Drive segment, the northern portion of the Walnut Canyon Road segment and the Broadway Road segment to Happy Camp Canyon) extend through the Saugus Formation. Although the pipeline route has been disturbed by agricultural activities and road construction, proposed pipeline trenches will be approximately 5.5 feet deep (66 inches deep) and 2.5 feet wide. Based upon the soils survey map for the Project area, it is anticipated that paralithic bedrock will be encountered during trenching. Previously undisturbed earth material within this formation along the pipeline route has the potential to include scientifically important fossils. Any excavation into such areas, should they

contain scientifically significant fossils, has the potential to result in a significant impact to the resource. In areas underlain by material other than Saugus formation, no intact, unique, paleontological resources are expected to exist. Because of the past exploitation of fossil resources, a project-specific impact may be considered cumulatively significant.

### **7.3.3 Mitigation and Residual Impacts**

The following measure shall be implemented to reduce paleontological project-specific and cumulative impacts to a less than significant level.

- P1** If excavation has the potential to extend into Saugus Formation, the District shall implement a paleontological monitoring program for project areas where excavation would impact native Saugus Formation materials. The paleontological monitoring program shall be comprised of at least the following elements:
- a) A qualified, Ventura County-approved paleontologist shall be retained by the District to monitor initial excavation activities within the pipeline routes where excavation has the potential to extend into native Saugus Formation materials to determine if continued monitoring is warranted, and if so, to develop a monitoring schedule.
  - b) The Project paleontologist will provide an educational overview relating to paleontological issues in Ventura County and protection of resources at the Project site to all construction employees who will be onsite during the ground-disturbing phases of Project construction.
  - c) In the event that fossil remains are found during Project construction in any location, work shall be stopped immediately or redirected away from the find. The Project paleontologist or other Ventura County approved paleontologist shall be called to the site immediately to assess the site and determine further mitigation measures to be implemented as necessary.
  - d) If fossils are encountered, the paleontologist will salvage scientifically significant fossil remains.
  - e) The paleontologist shall have the power to temporarily halt or divert grading efforts to allow evaluation and any necessary salvage of exposed fossils which are determined as potentially significant.
  - f) All significant fossils collected shall be identified. These remains shall be donated to an institution with research and/or educational interest in the materials and a retrievable storage system such as the Los Angeles County Museum of Natural History.

- g) Locations of recorded fossil localities are confidential and are to be released on a “need to know” basis only to reduce unauthorized collecting activities.
- h) A final report summarizing findings, including an itemized inventory and contextual stratigraphic data, shall accompany the fossils to the designated repository with a copy also retained by the District.

## 8.0 CULTURAL RESOURCES

The following evaluation is based upon *Phase I Archaeological Investigation of Approximately 16,500 Linear Feet/14.5 Acres for the MWTP Reclaimed Water Distribution System Phase IV, Moorpark, Ventura County, California* prepared by Conejo Archaeological Consultants (April 8, 2013). This report is provided in the Cultural Resources appendix to this Initial Study.

### 8.A ARCHAEOLOGICAL

#### 8.A.1 Setting

##### 8.A.1.1 Regional Setting

The Project area lies within the historic territory of the Native American Indian group known as the Chumash. The Chumash occupied the region from San Luis Obispo County to Malibu Canyon on the coast, and inland as far as the western edge of the San Joaquin Valley, and the four northern Channel Islands. The Chumash are subdivided into factions based on distinct dialects. The general Project area lies within the historic territory of the Ventureño Chumash.

The Ventureño were the southernmost Chumash group, occupying most of the area of present day Ventura County and the southwest corner of Los Angeles County. The name Ventureño is derived from the mission with local jurisdiction, San Buenaventura.

Chumash society developed over the course of some 9,000 years and achieved a level of social, political and economic complexity not ordinarily associated with hunting and gathering groups. The protohistoric Chumash are believed to have maintained one of the most elaborate bead money systems in the world, as well as one of the most complex non-agricultural societies.

The Chumash aboriginal way of life ended with Spanish colonization. As neophytes brought into the mission system, they were transformed from hunters and gatherers into agricultural laborers and exposed to diseases to which they had no resistance. By the end of the Mission Period in 1834, the Chumash population had been decimated by disease and declining birthrates. Population loss as a result of disease and economic deprivation continued into the next century.

Today many people claim their Chumash heritage in Ventura County. In general, they place high value on objects and places associated with their past history, especially burials, grave goods, and archaeological sites.

#### 8.A.1.2 Site Specific Setting

As indicated above, a Phase I archaeological investigation was conducted by Conejo Archaeological Consultants (Conejo) addressing the proposed Project. The Phase I cultural resources investigation included:

- Review of archaeological archives at the South Central Coastal Information Center (SCCIC), housed at California State University, Fullerton;
- A sacred lands file check by the Native American Heritage Commission (NAHC);
- Native American consultation; and
- Archaeological survey of the Project's area of potential effect (APE)

**a. Archaeological Sites.** The SCCIC archaeological site records identified eight archaeological sites within a 0.5-mile radius of the Project APE. The sites are described below.

**CA-VEN-671** was recorded as a lithic scatter within an area of dark soil by Lopez in 1980. Fused shale and quartzite flakes as well as several cores were observed within an approximate 500 meter square area. CA-VEN-671 is located over 0.25-mile south of the Project APE.

**CA-VEN-672** was also recorded as a lithic scatter of fused shale flakes within an area of dark soil by Lopez in 1980. The site was estimated to cover approximately 1,000 square meters. CA-VEN-672 is located approximately 200 meters east of the Project APE and atop a ridge.

**CA-VEN-1121** consists of a low density scatter of fused shale flakes covering an approximate 20 square meter area. The site was recorded by Miller and Rhodes in 1993a. CA-VEN-1121 is located at the outer edge of the 0.5-mile records search radius.

**CA-VEN -1122** was also recorded by Miller and Rhodes in 1993b. The site is described as a large predominately low density lithic scatter. The artifacts consist of numerous unmodified lithic flakes. Fire-affected rock, quartzite cobbles, scattered sandstone cobbles, and burned mammal bone was also observed. This site covers approximately 18,750 square meters. CA-VEN-1122 is located approximately 91 meters (300 ft.) west of the proposed pipeline alignment.

**CA-VEN-1126** was bisected by Broadway Road and consists of a small lithic scatter (Miller & Rhodes 1993c). CA-VEN-1126 is located almost 0.25-miles west of the Project APE.

**CA-VEN -1127** was recorded as low density lithic scatter consisting of 17 fused shale flakes and 1 hammerstone (Miller & Rhodes 1993d). This site includes and extends to the north

and south of the Happy Camp Canyon Park parking lot located on the west terrace of Happy Camp Canyon.

A Phase II Archaeological Test Excavation conducted at CA-VEN-1127 determined that the site consisted of low density, but non-cultural and non-archaeological scatters of float fused shale (W & S Consultants 2000:17). No cultural resources of any kind were found at this site location and CA-VEN-1127 was determined to have no cultural significance.

As CA-VEN-1127 has been determined to not be an archaeological site, construction of the pipeline through its recorded boundaries shall have no impact on cultural resources.

**CA-VEN -1128** consists of a large low density lithic scatter. The site extends across a low terrace between ephemeral drainages and the upper terrace to the east. Miller & Rhodes (1993e) suggest that the site possibly represented evidence of a prehistoric trail and temporary lithic reduction site.

A Phase II Archaeological Test Excavation conducted at CA-VEN-1128 determined that (like CA-VEN-1127) the site consisted of low density, but non-cultural and non-archaeological scatters of float fused shale (W & S Consultants 2000:17). No cultural resources of any kind were found at this site location and CA-VEN-1128 was determined to have no cultural significance.

As CA-VEN-1128 was determined to not be an archaeological site, construction of the pipeline through its recorded boundaries shall have no impact on cultural resources.

**CA-VEN-1573** consists of four flakes and marine shell fragments and was recorded by Horne in 1998. CA-VEN-1573 is located approximately 0.25-mile south of the Project APE.

**b. Previous Archaeological Investigations.** Twenty-nine previous archaeological investigations have been conducted within or immediately adjacent to portions of the Project APE. The majority of the Project APE was subject to previous archaeological investigation as described fully in the Conejo report provided in the Cultural Resources Appendix to this Initial Study.

**c. Federal, State and Local Historic Listings.** The National Register of Historic Places (NRHP) listings include no properties within a 0.5-mile radius of the Project APE (National Park Service 2013). No California Historical Landmarks or California Points of Historical Interest are located within a 0.5-mile radius of the Project APE (Office of Historic Preservation 2013, 1992). The California State Historic Resources Inventory lists one property within a 0.5-mile radius of the Project APE (Office of Historic Preservation 2012).

Property No. 170023; Located at 11800 Championship Dr.; SCE M23-T1, Saugus, Santa Susana, Moorpark. This property was evaluated as ineligible for listing on the National Register.

Property No. 170023 is located over 100 meters south of the Project APE and will not be directly or indirectly impacted by the Project.

There are no Ventura County Landmarks within a 0.5-mile radius of the Project APE (Ventura County 2004).

**d. Native American Consultation.** The Native American Heritage Commission (NAHC) sacred lands file search failed to indicate the presence of Native American sacred places/site in the Project area. The NAHC list of recommended Chumash contacts (22 in total) were emailed or mailed a Project description letter dated March 29, 2013, and asked to respond with any comments or concerns regarding the Project.

To date, three Native American responses have been received. On April 1, 2013, Mr. Romero of the Santa Ynez Band of Mission Indians emailed:

*The SYBCI Elders Council will not be commenting on this project at this time since it is located outside of our commenting area and will leave it up to the local tribes.*

On April 5, 2013, in a telephone call, Mr. Tumamait recommended that that Project trenching be monitored by a Native American, based on the length of the pipeline and the general sensitivity of the Moorpark area. Mr. Tumamait did not identify any specific resources near the Project APE.

On May 14, 2013, Ms. Isabel Ayala, Ventura County Regional Representative of the Coastal Band of the Chumash Nation emailed the following comment:

*We are requesting you have a cultural record search and site survey conducted at your project site. Please contact us if your project should have any potential to or will impact any Native American cultural resources.*

Ms. Mary Maki of Conejo Archaeological Consultants responded to Ms. Ayala on May 21, 2012, that a cultural records search had been conducted and the site surveyed with no cultural resources identified at the site.

**e. Archaeological Survey.** Ms. Maki conducted an archaeological survey of the Project APE on April 3 and 5, 2013. The archaeological survey encompassed approximately a 40 feet wide corridor of approximately 16,500 feet; totaling approximately 14.5 acres. The survey focused on the pipeline's proposed alignment. The proposed booster pump station was not surveyed as its APE was previously surveyed by Conejo and no prehistoric or historic resources were identified. Since the 2019 survey, the proposed booster pump station's APE was extensively disturbed by grading associated with the construction of the existing water tank in 2011.

The objective of the survey was the visual detection of historical resources, including lithic debris and aboriginal artifacts, midden deposits, archaeological features, historical-era foundations or refuse, and other evidence of past land use.

Conejo's field survey identified no prehistoric or historic resources within the Project APE. The ground surface throughout the entire Project APE alignment was previously disturbed.

### 8.A.1 3 Regulatory Setting

The federal law that deals with cultural resources that could be affected by federal undertakings is the National Historic Preservation Act (NHPA) of 1966, as amended. Section 106 of the Act requires that federal agencies take into account the effect of a federal undertaking on properties listed in or eligible for the National Register of Historic Places (NRHP).

The State of California has formulated laws for the protection and preservation of archaeological resources. Generally, a cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

- a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b. Is associated with the lives of persons important in our past;
- c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- d. Has yielded, or may be likely to yield, information important in prehistory or history.

The County Guidelines indicate that damage or destruction of unique archaeological resources is considered a significant impact.

### 8.A.4 Project Consistency with Applicable Policies

The policy discussion provided in Section 7.2 applies to this section.

### 8.A.5 Impact Discussion

#### 8.A.5.1 Significance Thresholds

The County Initial Study Guidelines state that a project that may cause a substantial adverse change in the significance of an archaeological resource is a project that may have a significant effect on the environment. The significance of an archaeological resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) requirements of Section 5024.1(g) of the Public Resources Code,

unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not archaeologically or culturally significant; or

2. Demolishes or materially alters in an adverse manner those physical characteristics of a archaeological resource that convey its archaeological significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

#### 8.A.5.2 Impacts

Conejo's background research indicates that the Project APE is located within a general area that has a high sensitivity for Native American resources. Eight archaeological sites are recorded within a 0.5-mile radius of the Project APE. Archaeological sites CA-VEN-1127 and CA-VEN-1128 are both located within the Project APE. However, a Phase II Test Excavation at these two sites determined that the locations of CA-VEN-1127 and CA-VEN-1128 do not constitute true archaeological sites. Except for a portion of Walnut Canyon Road, the entire Project APE was previously subject to archaeological survey. The NAHC failed to identify any sacred lands within the Project area. Native American notification did not result in the identification of any cultural resources within the Project APE. However, Chumash consultant Patrick Tumamait recommended that a Chumash consultant be hired to monitor all Project related earth disturbances. Conejo's field survey identified no prehistoric or historic resources within the Project APE. The ground surface throughout the entire Project APE alignment was previously disturbed. Based on the findings above, the proposed Project is not expected to impact known prehistoric or historic resources. However, since an archaeological survey can only confidently assess the potential for encountering surface cultural resource remains, there is the potential that previously undiscovered remains could exist. In the unlikely event that site preparation activities disturb previously unidentified, intact prehistoric or historic resources within the Project APE and such resources were determined to be significant, Project activities would have the potential to result in a significant cultural resource impact.

In the unlikely event of Project impacts to previously unidentified and unanticipated significant cultural resources, such impacts may be considered cumulatively significant due to the historic abuse of cultural resource sites.

#### 8.A.5.3 Mitigation and Residual Impacts

The following measures will be incorporated into the Project to ensure that potential project-specific and cumulative cultural resource impacts would be less than significant.

- CUL1** In the event that archaeological resources are exposed during Project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended until a qualified archaeologist has evaluated the nature and significance of the find. The District shall be notified of any such find. A Chumash representative should monitor any archaeological field work associated with Native American materials.

**CUL2** 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. The District shall also be notified of any such find.

## **8.B HISTORICAL**

### **8.B.1 Setting**

As indicated above in Section 8A, the NRHP listings include no properties within a 0.5-mile radius of the Project APE. No California Historical Landmarks or California Points of Historical Interest are located within a 0.5-mile radius of the Project APE. The California State Historic Resources Inventory lists one property within a 0.5-mile radius of the Project APE, but it is located over 100 meters south of the Project APE. Additionally, there are no Ventura County Landmarks within a 0.5-mile radius of the Project APE.

### **8.B.2 Project Consistency with Applicable Policies**

The assessment in Section 7.2 applies to historic resources as well as archaeological and paleontological resources.

### **8.B.3 Impact Discussion**

#### **8.B.3.1 Significance Thresholds**

The Ventura County thresholds for historic resources state that a project that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

#### **8.B.3.2 Impacts**

The Project will not impact any historical resources. As such, it would not contribute to any cumulative impact to historic resources.

#### **8.B.3.3 Mitigation and Residual Impacts**

No impact to historic resources would result. Therefore, no mitigation is warranted.

## **9.0 COASTAL BEACHES AND SAND DUNES**

### **9.1 SETTING**

The Project area is located over 15 miles from the coast.

### **9.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

There are no applicable policies from Ventura County's General Plan.

### **9.3 IMPACT DISCUSSION**

Due to the distance of the Project site from the coast, Project implementation would not directly or indirectly impact coastal beaches or sand dunes. In addition, the Project would not result in the paving of significant open areas or other activities that could indirectly affect the deposition or erosion of sand at the coast. No impact to coastal beaches or sand dunes would result. Since there would be no project-specific impact, the Project would not contribute significantly to cumulative impacts. Therefore, no mitigation is required.

## **10.0 FAULT RUPTURE**

### **10.1 SETTING**

The State Division of Mines and Geology indicates that on a statewide basis the potential hazard to structures from the surface displacement of faults is low compared to such geologic phenomena as earthquake shaking and landsliding. The greatest potential for fault activity is along any of the faults, which lie within the several major fault systems which transect the County from east to west. Many of the faults in the County are associated with major fault systems extending beyond County boundaries. Several of these faults and fault systems are considered to be active, but a great deal of additional information must be assembled to determine the potential for, as well as the nature of the activity of most of the faults presently considered to be active.

Based on a review of the State of California Earthquake Fault Zones mapping for Moorpark and Simi Valley West Quadrangles (1999) and County of Ventura Geographic Information Systems Mapping the Project site is not crossed by a known fault (Dibblee Included) nor is it located within a State Special Studies Fault Zone (Alquist Priolo). Additionally, Ventura County GIS hazards mapping prepared for the Project show no faults within the Project area.

### **10.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No County policies relating to fault rupture are applicable to the Project.

## **10.3 IMPACT DISCUSSION**

### **10.3.1 Significance Thresholds**

Threshold of significance criteria for determining whether a project is potentially at risk with respect to fault rupture is its location within any of the following areas:

- State of California designated Alquist-Priolo Special Fault Study Zone, or
- County of Ventura designated Fault Hazard Area.

### **10.3.2 Impacts**

There is no known cumulative fault rupture hazard impact that would occur as a result of other approved, proposed or probable projects.

The Project site would not include construction of new facilities or upgrade of facilities within an Alquist-Priolo Special Fault Study Zone, or County of Ventura designated Fault Hazard Area. Therefore, no impact would result.

### **10.3.3 Mitigation and Residual Impacts**

No impact would result. Therefore, no mitigation is required.

## **11.0 GROUND SHAKING**

### **11.1 SETTING**

The entire southern California region is seismically active given the numerous faults throughout the region. Several faults are present in the general area including the Simi-Santa Rosa Fault, San Oak Ridge Fault, Cayetano Fault, Ventura Fault, and Malibu Coast Fault. The active San Andreas Fault Zone is located about 32 miles north-northeast of Project area.

Ground-shaking is the cause of most damage during earthquakes. The predominant (10 percent probability of exceedance in 50 years) earthquake in the Project area is magnitude 6.9. In the Project area, the peak ground acceleration with a probability of 10 percent exceedance in 50 years is 0.63 to 0.64 g; 0.69 to 0.70 g; and 0.71 to 0.72 g; in firm rock, soft rock and alluvium conditions respectively (California Department of Conservation Division of Mines and Geology, 2000 and 1997).

### **11.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No policies relating to ground shaking from Ventura County's General Plan are applicable to the Project.

## **11.3 IMPACT DISCUSSION**

### **11.3.1 Significance Thresholds**

The County Guidelines provide the following significance thresholds for groundshaking impacts.

1. Is the proposed structure designed to be built in accordance with all applicable requirements of the Ventura County Building Code? If the answer is no, then the project has the potential to expose people or other structures to potential significant adverse effects, including the risk of loss, injury or death involving ground shaking hazards. If the answer is yes, then the project design will reduce the adverse effects of ground shaking to less than significant.
2. The hazards from ground shaking will affect each project individually; and no cumulative ground shaking hazard would occur as a result of other approved, proposed or probable projects.

### **11.3.2 Impacts**

As previously stated, there are no faults or special study fault zones located beneath the Project site, however due to the location of the sites within the Southern California area, the potential exists for seismic ground shaking events to occur that may damage the proposed structures (e.g., pipeline and pump station) during the design life of the Project. However, the Project structures will be designed in compliance with the Uniform Building Code (UBC) and local earthquake design standards. Further, the Project would not involve the construction of habitable structures, and would not subject additional people to risk of injury or loss of life in the event that strong ground shaking occurs. Considering the above, hazards associated with ground shaking would be a less than significant impact with respect to the proposed Project. An assessment of cumulative development impacts is not relevant to the issue of ground shaking.

### **11.3.3 Mitigation and Residual Impacts**

Impacts are less than significant. Therefore, no mitigation is required.

## **12.0 LIQUEFACTION**

### **12.1 SETTING**

Liquefaction occurs when strong, cyclic motions during an earthquake cause water-saturated soils to lose their cohesion and take on a liquid state. Liquefied soils are unstable and can subject overlying structures to substantial damage. The occurrence of liquefaction is highly dependent on local soil properties, depth to groundwater, and the strength and duration of a given ground-shaking event. Shallow ground-water conditions in the Moorpark Quadrangle

occur in and adjacent to the floodplains of the Santa Clara River, Arroyo Las Posas/Arroyo Simi, and their tributaries.

Liquefaction-induced ground failure has historically been a major cause of earthquake damage in southern California. During the 1971 San Fernando and 1994 Northridge earthquakes, significant damage to roads, utility pipelines, buildings, and other structures in the Los Angeles area was caused by liquefaction-induced ground displacement.

According to the Seismic Hazard Evaluation of the Moorpark 7.5-Minute Quadrangle, the Moorpark Quadrangle has no areas of documented historic liquefaction. However, based upon the Seismic Hazard Zones Map of the Moorpark Quadrangle (California Department of Conservation Division of Mines and Geology, November 17, 2000), a short segment of the proposed pipeline alignment on Championship Drive extends through an area with a potential for liquefaction. Ventura County Geographical Information Systems hazards mapping prepared for the Project confirms this finding (2013). Additionally, the County Hazards mapping shows that the Happy Camp Canyon Creek area is subject to liquefaction. (See Hazards Appendix to this Initial Study.)

## 12.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<p><i>County Policy 2.4.2: Prior to the issuance of building or grading permits for essential facilities, special occupancy structures, two-story single family residences, or hazardous materials storage facilities located within areas prone to liquefaction, a geotechnical report that includes a seismic analysis and evaluation of liquefaction in accordance with the State of California Guidelines shall be prepared in order to assess the liquefaction potential and provide recommendations for mitigation.</i></p>	<p>Consistent – The Project is limited to the installation of reclaimed water infrastructure. Appropriate construction methodologies will be utilized by VCWWD No. 1 to reduce any hazards associated with liquefaction to a less than significant level.</p>

## 12.3 IMPACT DISCUSSION

### 12.3.1 Significance Thresholds

The Project would have a significant impact if liquefaction hazards would subject persons or property to loss of life or substantial injury or damage.

### 12.3.2 Impacts

As indicated above, there is the potential for liquefaction along the proposed pipeline corridor given the existence of alluvial materials underlying a portion of the alignment and potential for high groundwater. During a large earthquake event, soil liquefaction could potentially develop in the sandy layers below groundwater level, depending on the density and composition of the soils. However, the District’s standard pipeline trench preparation and pipeline design, which is constructed for pressurized flow, is adequate to mitigate this hazard

(Keller, personal communication, April, 2013). This issue is not subject to cumulative analysis as it is site-specific.

### **12.3.3 Mitigation and Residual Impacts**

No significant impacts were identified. Therefore, no mitigation is necessary.

## **13.0 SEICHE AND TSUNAMI**

### **13.1 SETTING**

According to the General Plan Hazards Appendix (2007), there is no record of a seiche occurring in Ventura County. However, the worldwide history of the phenomenon illustrates the damage that seiches can do, and that seismic disturbances at great distances from Ventura County could have an effect here. As indicated within the County Guidelines, areas subject to seiche hazards are those located within 10 feet vertical elevation from an enclosed body of water such as a bay, lake, or reservoir.

Tsunamis are seismically induced sea waves that can be of sufficient size to cause substantial damage to coastal areas. The last major tsunami in Southern California was in 1812. The largest tsunami wave amplitude recorded in Ventura County was 8.8 feet, associated with the Chilean earthquake of 1960. Based on a review of the County of Ventura General Plan Hazards Appendix, the nearest tsunami hazard zone is located approximately 15 miles south of the Project area.

### **13.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No seiche or tsunami hazard policies from the Ventura County's General Plan are applicable to the proposed Project.

### **13.3 IMPACT DISCUSSION**

The Project site is not located near an enclosed body of water such as a bay or lake that would create a significant oscillating wave (seiche) in the event of an earthquake. Therefore, no impact would result. This issue is not subject to cumulative analysis as it is site specific.

The Project site is not located in a tsunami hazard zone and would not increase the severity or the number of persons potentially affected by a tsunami. No impact would result. This issue is not subject to cumulative analysis as it is site specific.

No significant impacts would result. Therefore, no mitigation is needed.

## **14.0 LANDSLIDES/MUDSLIDES**

### **14.1 SETTING**

Areas of high landslide or mudflow potential are typically hillside areas with slopes of greater than 10 percent. Based on a review of Ventura County mapping no actual or potential landslides are located in the immediate Project area; however, numerous areas along the pipeline route are mapped as earthquake induced landslide hazard areas. The proposed pump station site also has earthquake induced landslide hazard areas identified around it. However, as described in the Mitigated Negative Declaration/Initial Study for the MWTP Reclaimed Water Distribution System Phases II and III (June 7, 2010), the geologic mapping of the tank site shown in the Final Compacted Fill Report for the Reclaim Water Tank Pad, Tract 4928, Moorpark Country Club Estates prepared by Geolabs-Westlake Village does not show any landslides within the mapped tank site area. Additionally, a Padre Geotechnical Engineer briefly visited the site on January 27, 2010 as part of the environmental review process for the reclaimed water tank and no obvious landslide features were observed in the slopes above the tank pad area.

### **14.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No policies from Ventura County's General Plan relating to this issue are applicable to the proposed Project.

### **14.3 IMPACT DISCUSSION**

The proposed pipeline would be a subsurface structure and the District's standard pipeline trench preparation and pipeline design, which is constructed for pressurized flow, is adequate to mitigate this hazard for the pipeline (Keller, personal communication, April, 2013). This issue is not subject to cumulative analysis as it is site-specific. No significant impact would result, therefore, no mitigation is needed.

## **15.0 EXPANSIVE SOILS**

### **15.1 SETTING**

"Expansive soils" are soils that expand when wet and contract when dry. Based upon a review of the Expansive Soils Hazard Mapping provided by the Ventura County Geographic Information System Department, the Project pipeline alignment has a moderate to high potential for expansive soils. (Please see the Hazards Appendix to this Initial Study which includes the Expansive Soils Map for the Project.) The booster pump station is proposed to be located on the recently developed reclaimed tank site. Any expansive soil hazards have been mitigated for this site.

## 15.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 2.8.2.1: Construction must conform to established standards of the Ventura County Building Code, adopted from the California Building Code.</i>	Consistent - The Project will be constructed in compliance with applicable standards.

## 15.3 IMPACT DISCUSSION

### 15.3.1 Significance Thresholds

As described in the County Initial Study Assessment Guidelines, the determination of a significant soils expansion effect shall be based upon an inquiry of whether a proposed project will expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving soil expansion if it is located within a soils expansive hazard zone or where soils with an expansion index greater than 20 are present. The hazards from expansive soils will affect each project individually; and no cumulative expansive soils hazard would occur as a result of other approved, proposed or probable projects.

### 15.3.2 Impacts

The pipeline alignment is located within areas of moderate to high potential for expansion; however, the District’s standard pipeline trench preparation and pipeline design, which is constructed for pressurized flow, is adequate to mitigate this hazard (Keller, personal communication, April, 2013). This issue is not subject to cumulative analysis as it is site specific.

### 15.3.3 Mitigation and Residual Impacts

No mitigation required. Impacts would be less than significant.

## 16.0 SUBSIDENCE

### 16.1 SETTING

Subsidence is generally related to over pumping of groundwater or petroleum reserves from deep underground reservoirs. No recognized subsidence has been identified within the Project area (Ventura County General Plan Hazards Appendix, updated 2007). The closest mapped probable subsidence zone is to the north along the Santa Clara River corridor in Fillmore.

## 16.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 2.9.2.1: Structural design of buildings and other structures shall recognize the potential for hydro-compaction subsidence and provide mitigation recommendations for structures that may be affected.</i>	Consistent - Subsidence is not an issue in the Project area.

## 16.3 IMPACT DISCUSSION

The Project area is not located in a designated subsidence zone pursuant to the Ventura County Liquefaction and Subsidence Zones Map and Landslide Map. No subsidence impact would result from Project implementation. Therefore, no mitigation is needed.

## 17.0 HYDRAULIC HAZARDS

### 17.A NON-FEMA

#### 17.A.1 Setting

As indicated in the County Guidelines, hydraulic hazards, in the context of flood control and drainage, consist of the wearing away or deposition of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land clearing practices. Flooding is an overflow of water onto land that is normally dry.

There are several drainage channels within the proposed pipeline alignment which are described as follows. An unnamed intermittent blue-line stream channel, as shown on the U.S. Geologic Survey 7.5 minute series Moorpark Quadrangle Map, crosses Championship Drive at the western end of the alignment (within Gabbert Canyon as shown on County maps) another extends south from Championship Drive at the eastern portion of the alignment on that road. An intermittent blue-line stream channel is located along the eastern side of Walnut Canyon Road where the pipeline alignment is currently proposed. This same intermittent blue-line stream channel crosses Walnut Canyon Road and intersects Broadway Road along the pipeline alignment. Finally, the eastern terminus of the pipeline is located within an intermittent blue-line stream channel draining Happy Camp Canyon as shown on the U.S. Geologic Survey 7.5 minute series Simi Valley West Quadrangle Map.

Soils along the pipeline alignment are identified in Table C.5-1 and all are susceptible to erosion.

#### 17.A.2 Project Consistency with Applicable Policies

No policies of the Ventura County's General Plan relating to non-FEMA hydraulic hazards are applicable to the proposed Project.

### 17.A.3 Impact Discussion

#### 17.A.3.1 Significance Thresholds

Potential erosion/siltation hazards and flooding hazards are ubiquitous throughout Ventura County and are addressed by the Ventura County Public Works Agency-Watershed Protection District's Standards and Specifications Design Manual. Erosion/siltation hazards and the effects of flooding hazards are required to be considered within the existing framework of grading and building code ordinances, which apply to all sites and projects.

#### 17.A.3.2 Impacts

Construction activities can result in short-term erosion events (e.g., erosion of soil piles, erosion of previously covered soil by the removal of significant amounts of pavement, or living ground cover, etc.) These potential short-term impacts would be reduced to a less than significant level of impact with Project compliance with the local requirements of the Ventura Countywide Stormwater Quality Management Program, NPDES Permit conditions.

Over the long-term the proposed pipeline would be located below ground, constructed in accordance with the standard specifications for public works construction and the pre-Project surface conditions restored. The pump station would be located on the already developed reclaimed water tank site and as such would not change the erosion potential of that site. The Project's potential to increase flooding, erosion or siltation is considered less than significant.

While the pipeline is not expected to significantly increase erosion hazards, it would be susceptible to exposure where the pipeline would be located within a drainage channel. The pipeline will have 3.5 feet of cover from the top of pipe and will be constructed according to County requirements such that long-term hydraulic hazards would be less than significant. However, no analysis of potential channel degradation and channel scour under extreme events has been conducted, thus it is unknown if during the life of the Project, the pipeline will become exposed and damaged during significant storm events.

Because the Project would comply with the Countywide Stormwater Quality Management Program, and the Project would not create long-term erosion the Project's contribution to cumulative erosion/siltation impacts would be less than significant. (See also Surface Water Quality impact discussion provided in Section 4d., above).

#### 17.A.3.2 Mitigation and Residual Impacts

No significant non-FEMA hydraulic impacts would result. Therefore, no mitigation is needed. However, the following measure is recommended for the protection of the pipeline and to provide Project consistency with County Policy 2.10.2.4. regarding design of projects within floodplain areas as described in Section 17.B.

- HH1** For areas where the Project pipeline would be located within a designated stream channel, a Project-specific hydraulic analysis of potential long-term

channel degradation and channel scour of watercourses crossed by the proposed pipeline alignment shall be conducted prior to final Project design. Any necessary recommendations, such as appropriate depths of burial for the pipeline, needed to minimize the risk of exposure and damage of the structure shall be included in the analysis and incorporated into the final Project design.

**17.B FEMA**

**17.B.1 Setting**

As described in the Ventura County Initial Study Assessment Guidelines, flooding is a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation of runoff of surface waters from any source, and the condition resulting from flood-related erosion. Flood hazard is determined as being public and private lands and infrastructure that have a high risk of being damaged or destroyed as a result of major flooding conditions. These conditions have a one percent chance of being equaled or exceeded in any given year and are commonly referred to as the one-percent chance flood or the 100-year base flood. The calculated height of the 100-year base flood hazard that is anticipated to occur on any given property is called the base flood elevation. Properties that have been determined by the Federal Emergency Management Agency (FEMA) as being at risk are mapped through the National Flood Insurance Program (NFIP) on the Digital Flood Insurance Rate Maps (DFIRMs) and in Flood Insurance Studies (FISs), and are referred to as Special Flood Hazard Areas (SFHA).

The Ventura County Geographical Information System Floodplain Map for the Project area showing 100-year FEMA Floodplain was reviewed. The eastern end of the pipeline alignment at Happy Camp Canyon Creek is within the 100-year FEMA Floodplain. Federal Emergency Management Agency Flood Insurance Rate Maps (FIRMs) for the Project area were also viewed online. The FIRMs are consistent with the mapping provided by Ventura County GIS and show the Happy Camp Canyon Creek area as Zone A which is considered a Special Flood Hazard Area subject to inundation by the 1 percent chance annual flood.

As required by the California Dam Safety Act, preparation of dam inundation maps showing areas of potential flooding in the event of sudden or total dam failure have been prepared by the Ventura County Sheriff’s Department through its Office of Emergency Services (OES). Based upon a review of Figure 2.11.2, Dam Inundation Areas, provided within the General Plan Hazards Appendix (Ventura County 2007), the Project does not lie within an area subject to inundation in the event of dam failure.

**17.B.2 Project Consistency with Applicable Policies**

Policy	Consistency Determination
<i>County Policy 2.10.2.2: Within areas subject to flooding, the County shall require the recordation of a Notice of Flood Hazard or dedication of a flowage easement with the County Recorder for all divisions of land and discretionary permits.</i>	Consistent - The only Project areas subject to flooding are certain pipeline segments crossing drainages. District No. 1 will comply with Ventura County Ordinance WP-42 regarding encroachment of red-lined streams protection and regulation of

Policy	Consistency Determination
	<p><u>watercourses</u>. Specifically, District No. 1 will comply with the following Watershed Protection District standards.</p> <p>(i) <u>Any activity in, on, over, under or across any jurisdictional red line channel, including the channel bed and banks of Gabber Canyon and Happy Camp Canyon will require a permit from the Watershed Protection District. In addition, a project can not impair, divert, impede or alter the characteristics of the flow of water running in any jurisdictional red line channel.</u></p> <p>(ii) <u>The Watershed Protection District criteria for mitigating any increase in impervious area is that the peak flow after development shall not exceed the peak flow under existing conditions for any frequency event.</u></p> <p>No recordation of a Notice of Flood Hazard or dedication of a flowage easement with the County Recorder would be required.</p>
<p><i>County Policy 2.10.2.4: The design of any structures which are constructed in floodplain areas as depicted on the Hazards Protection Maps (Figure 2), shall be governed by Federal regulations, specifically Title 44 Code of Federal Regulations Sections 59 through 70, as well as the County Floodplain Management Ordinance and shall incorporate measures to reduce flood damage to the structure and to eliminate any increased potential flood hazard in the general area due to such construction.</i></p>	<p>Consistent – The proposed pipeline will cross a 100-year flood zone. The pipeline will be constructed in accordance with all applicable regulations and measure HH-1 will be implemented.</p>
<p><i>County Policy 4.6.2.1: All necessary flood control and drainage facilities shall be constructed to meet the minimum standards of the Public Works Agency and the County Flood Control District consistent with the goals, policies and programs of the General Plan.</i></p>	<p>Consistent - If any drainage features are included in the final design for the proposed Project, they would be constructed to County standards.</p>
<p><i>County Policy 4.6.2.2: Discretionary development shall be conditioned to provide flood control and drainage facilities deemed by the Public Works Agency and Flood Control District as necessary for the development, and shall be required to contribute toward flood control facilities necessitated by cumulative development.</i></p>	<p>Consistent - See response above.</p>

## 17.B.3 Impact Discussion

### 17.B.3.1 Significance Thresholds

Threshold criteria provided by the County Guidelines states that flooding hazards are ubiquitous throughout Ventura County and are accommodated by the building design and construction standards set forth in FEMA and County regulations pertinent to flooding hazards. The thresholds further state that if the proposed development, in part or in whole, is located within the boundaries of a Special Flood Hazard Area, but is located outside of the boundaries of the Regulatory Floodway, a determination of Less Than Significant project-specific and cumulative Impact (LS) will be made under Item 17.b.: Hydraulic Hazards – FEMA in the Initial Study Checklist. A determination of (LS) will be made if it can be demonstrated that the proposed development can be designed and constructed, as part of the Floodplain Development Permit and Building Permit processes, to be in compliance with all applicable floodplain management standards and measures set out in the Threshold Criteria. If the proposed development, in part or in whole, is located within the boundaries of the Regulatory Floodway, as determined using the Effective' and latest available DFIRMs provided by FEMA, a determination of Potentially Significant project-specific and cumulative Impact (PS) will be made under Item 17.b. Hydraulic Hazards - FEMA in the Initial Study Checklist. The Threshold Criteria specify that new habitable and non-habitable development will not be allowed within the Regulatory Floodway. Due to this restriction, development cannot be mitigated to either a PS-M or a LS level.

### 17.B.3.2 Impacts

A portion of the Project pipeline will be located within the 100-year Floodplain and the floodway of Happy Camp Canyon Creek. However, the pipeline would be subsurface and as such is not expected to affect the flood carrying capacity of the floodway and allowances are made by the County Watershed Protection District for such infrastructure (Bernard, personal communication, April 9, 2013). Thus the FEMA floodplain impact is considered to be less than significant on a project-specific and cumulative basis. The Project will however require a Floodplain Development Permit. Additional permits will likely include a streambed alteration agreement with the California Department of Fish and Wildlife, a Section 404 Permit from the United States Army Corps of Engineers and associated Section 401 Water Quality Certification from the Regional Water Quality Control Board.

Following construction, the drainage pattern at the Project site will remain essentially unchanged and runoff will continue to flow in the general existing pattern. Additionally, Project implementation will not result in a considerable increase in runoff from current levels. FEMA Hydraulic impacts would not be significant on a project-specific or cumulative basis.

### 17.B.3.3 Mitigation and Residual Impacts

No significant impact would result. Therefore, no mitigation is required.

## 18.0 FIRE HAZARDS

### 18.1 SETTING

Ventura County is characterized by a Mediterranean-type climate, featuring wet winters and very dry summers. In addition, the local meteorological phenomenon of Santa Ana winds contributes to the high incidence of wildfires in this area. Most of the Project area is not located within a high fire hazard area as shown on the Ventura County Fire Hazards Map (Figure 2.13.2b of the Ventura County General Plan Hazards Appendix). However, a small portion of the pipeline alignment at the eastern end is within a “very high” fire hazard area.

### 18.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 2.13.2.1: All discretionary permits shall be required, as a condition of approval, to provide adequate water supply and access for fire protection and evacuation purposes.</i>	Consistent - The proposed Project is water infrastructure and not subject to fire hazards. Furthermore, it would provide an additional source of water to the Project area.
<i>County Policy 2.13.2.2: All discretionary permits in fire hazard areas shall be conditioned to include fire-resistant vegetation, cleared firebreaks, or a long-term comprehensive fuel management program as a condition of approval. Fire hazard reduction measures shall be incorporated into the design of any project in a fire hazard area.</i>	Consistent - See response above.

### 18.3 IMPACT DISCUSSION

#### 18.3.1 Significance Thresholds

The County Guidelines indicate that the fire hazard section focuses on the rural or wildland areas of the County. The fire hazard area extends into all areas where native brush can be found growing in pure natural stands, which is most common on undeveloped hillside areas. Section 2.14 of the County General Plan covers goals and policies for fire hazard areas.

Ventura County Building Code, Article IV Section UBC Code 1601 identifies high fire hazard areas as any within 500 feet of uncultivated brush, grass, or forest covered land wherein an authorized representative of the Fire District determines that a potential fire hazard exists due to the presence of such flammable growth. Projects located within a high fire hazard area may have a significant impact. The impact can be mitigated by compliance with Building and Safety requirements for structures and the Fire District Weed Abatement program which calls for the clearing of brush, flammable vegetation, or combustible growth located within 100 feet of structures or buildings. Projects not located within a high fire hazard zone will not have a significant impact.

### **18.3.2 Impacts**

The Project consists of a subsurface water pipeline and a booster pump station. The booster pump station would be located on the developed reclaimed water tank site on Championship Drive. Due to the nature and location of the Project, it would not cause an increase in exposure of people or structures to risks of wildland fires. Available water supply and fire flow would not be adversely affected by the development of the Project either during construction (continuity of available flow would be maintained) or over the life of the Project. Water availability to the Project area would be improved by the Project. The Project would not have a fire hazard impact and, therefore, would not contribute to any cumulative fire hazard impacts.

### **18.3.3 Mitigation and Residual Impacts**

No impact would result; therefore no mitigation is required.

## **19.0 AVIATION HAZARDS**

### **19.1 SETTING**

The Project is not located in an area addressed in an Airport Land Use Plan. The Project is located roughly eight miles from the closest public use airport, Camarillo Airport, and is not near any private airstrip.

### **19.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No aviation hazard policies from the Ventura County General Plan are applicable to the proposed Project.

### **19.3 IMPACT DISCUSSION**

The Project area is not identified in any Airport Land Use Plans hazard zone, nor is it located within two miles of a public or private airport. No aviation hazard impacts are anticipated on a project-specific basis, nor would the Project contribute to cumulative impacts for this issue. No significant impact would result; therefore, no mitigation is required.

## **20.0 HAZARDOUS MATERIALS/WASTE (A AND B)**

### **20.1 SETTING**

By definition, hazardous material is any substance that, if improperly handled, can be damaging to the health and well being of humans. A hazardous material becomes hazardous waste when the material has been used for its original intended purpose and is going to be discarded or recycled.

Much of the proposed pipeline is within public road rights-of-way. However, portions are located within agricultural and open space areas. The portion of the Project site that is located within agricultural parcels can be assumed to have residual levels of persistent agricultural chemicals present in the soil.

A review of the California Department of Toxic Substances Control (DTSC) Envirostor database (accessed April 10, 2013) covering Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Evaluation Site School Investigation Sites, Military Investigation Sites, Tiered Permits, Hazardous Waste Permits, Corrective Action Sites, Monitoring Wells, for the Moorpark area revealed no active sites within 5,000 feet of the Project site.

A review of the Geotracker<sup>4</sup> web site for the Moorpark area on April 9, 2013 covering Leaking Underground Storage Sites, Land Disposal Sites, Military Sites, Permitted Underground Storage Tanks (UST), Waste Discharge Sites, Monitoring Wells, Department of Toxic Substances Control (DTSC) Cleanup Sites, DTSC Hazardous Waste Permit Sites revealed no active sites within 5,000 feet of the Project site with the exception of a permitted UST located at GSA/PWA-MOORPARK YARD SITE 6, 7150 Walnut Canyon Road Moorpark.

## **20.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No hazardous waste or hazardous materials policies apply to the Project as it does not require hazardous materials beyond fuels and lubricants for construction equipment, nor would it generate hazardous wastes.

## **20.3 IMPACT DISCUSSION**

### **20.3.1 Significance Thresholds**

As stated in the County Environmental Thresholds Manual, a project that is designed to meet all of the applicable requirements set forth in the following authorities shall not be considered to have a significant impact in this environmental area:

- Underground Storage Tanks - California Health and Safety Code, Division 20, Chapter 6.7 and the California Code of Regulations Title 23, Division 3, Chapter 16.
- Business Plan (BP) - California Health and Safety Code Section 25504.
- Risk Management Plan (RMP) - California Health and Safety Code, Division 20, Chapter 6.95, Article 2.
- California Unified Program Agencies (CUPA) - California Health and Safety Code, Division 20, Chapter 6.11.

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<sup>4</sup> GeoTracker is the California Water Boards' data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks [USTs], Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites.

- Fire Code - The Fire Code adopted by the Ventura County Fire Protection District in regards to aboveground hazardous materials. Reference California Health and Safety Code, Division 12, part 2.7

### 20.3.2 Impacts

Although the Project would not result in the use or storage of hazardous materials or generation of hazardous wastes, exposure of workers and the public to existing sources of hazardous materials may result from the Project as further described below.

During construction, the potential exists for workers to be exposed to residual pesticides located within agricultural soils during soil-disturbing construction-related activities in any areas that have been under recent agricultural production. This is a potentially significant impact. Additionally, undocumented dump sites are not uncommon within agricultural parcels. Exposure of workers or the public to such sites as a result of Project construction should they include hazardous materials is considered a potentially significant impact. Because hazardous materials are ubiquitous in our environment, potential exposure to such in association with the Project may be considered cumulatively significant.

No hazardous sites as reported on the DTSC Envirostor database or SWRCB Geotracker list are located in proximity to the Project site. Therefore, no impacts to workers or the public from such sites would result in association with the proposed Project.

### 20.3.3 Mitigation and Residual Impacts

The following measure will be implemented to ensure that potential impacts associated with short-term exposure to hazardous materials is reduced to a less than significant level.

- HAZ1** Ventura County Waterworks District No. 1 shall ensure that soil disturbing activities in agricultural areas will be done under the assumption that residual pesticides exist within these soils, and appropriate safety precautions as required under the applicable Occupational Safety and Health Administration (OSHA) regulations will be followed. Additionally, if during construction of the Project, any other type of soil contamination is suspected by the construction contractor, construction in the area shall stop and appropriate health and safety procedures shall be implemented including contact with the Ventura County Environmental Health Department. If determined necessary by the Ventura County Health Department or other regulatory agency with jurisdiction over the environmental resources affected, appropriate remedial activity shall be conducted prior to the resumption of work in the area of concern. Remediation could involve removal and proper disposal of contaminated materials, on-site treatment, etc.

## 21.0 NOISE AND VIBRATION

### 21.1 SETTING

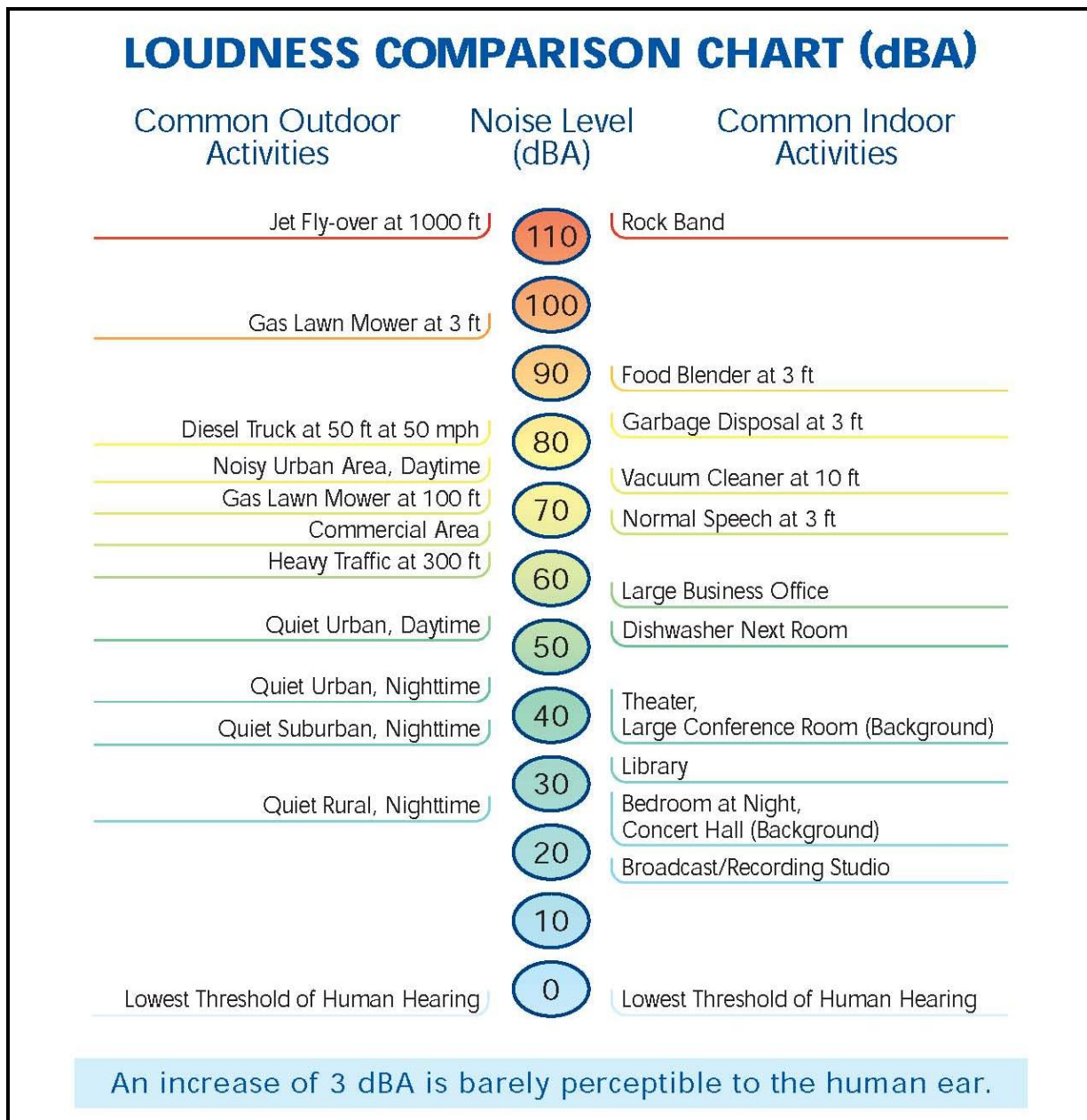
#### 21.1.1 Noise

Noise is defined as any unwanted sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying (Ventura County, 2010). Physically, sound magnitude is measured and quantified in terms of the decibel (dB), which is a unit on a logarithmic scale based on the ratio of the measured sound pressure to the reference sound pressure of 20 micropascals. The decibel system can be confusing to people since it is logarithmic and not arithmetic. For example, doubling or halving the number of sources of equal sound (a two-fold change in acoustic energy) changes the receptor sound level by only 3 dB, which is a barely perceptible sound loudness change for humans. However, a doubling or halving of the sound *loudness* at the receiver results from a 10 dB change, which also represents a 10-fold change in the acoustic energy (County of Ventura/Advanced Engineering Acoustics, 2005). A loudness comparison chart for common indoor and outdoor activities developed by the California Department of Transportation is provided as Figure C.21-1.

The duration of noise and the time period at which it occurs are important factors in determining the impact of noise on sensitive land uses. Noise is more disturbing at night than during the day and noise indices have been developed to account for the varying duration of noise events over time as well as community response to them. The Community Noise Level Equivalent (CNEL) and the Day-Night Average Level (DNL or Ldn) are such indices. They are time-weighted average values based on the equivalent sound level (Leq), which is a constant sound level that equals the same amount of acoustic energy as actual time-varying sound over a particular period. The CNEL penalizes noise levels during the night (10 p.m. to 7 a.m.) by 10 dB to account for the increased sensitivity of people to noise after dark. Evening noise levels (7 p.m. to 10 p.m.) are penalized 5 dB by the CNEL. Appropriately weighted hourly Leqs are then combined over a 24-hour period to result in a CNEL. The Ldn also penalizes nighttime noise levels, but does not penalize evening levels. These two indices are generally equivalent.

In general, the CNEL may be thought qualitatively as an accumulation of the noise associated with individual events occurring throughout a 24-hour period. The noise of each individual event is accounted for in a separate, discrete measurement that integrates the changing sound level over time as, for example, when an aircraft approaches, flies overhead, then continues off into the distance. These integrated sound levels for individual operations are referred to as Sound Exposure Levels or SELs. The accumulation of the SELs from each individual operation during a 24-hour period determines the CNEL for the day.

To limit population exposure to physically and/or psychologically significant noise levels, the State of California, various County governments, and most cities in the state have established guidelines and ordinances to control noise. Based upon the County of Ventura



**Figure C.21-1. Loudness Comparison Chart**

General Plan Hazards Appendix, an exterior noise level of 60 to 65 dBA CNEL is considered "normally acceptable" for residential uses. A noise level of 70 dBA CNEL is considered to be "conditionally acceptable" and a noise level of greater than 75 dBA CNEL is considered "clearly unacceptable" for residences. The 70 dBA CNEL noise level is considered to be the upper limit of "normally acceptable" noise levels for other sensitive uses such as schools, libraries, hospitals, nursing homes, churches, and parks. These noise criteria are based upon the California Office of Noise Control land use compatibility guidelines which are also referenced in the City of Moorpark General Plan Noise Element. A noise level of less than 70 dBA CNEL is

considered normally compatible with open space and open space uses such as golf courses (Table 1 - Land Use/Noise Matrix of the City of Moorpark General Plan Noise Element). The acceptable exterior and interior noise standards for residential uses in the city are 65 dBA CNEL and 45 dBA CNEL respectively (Table 2 - Noise Standards of the City of Moorpark General Plan Noise Element).

The Ventura County General Plan (Section 2.16.2-1 of the Goals, Policies and Programs) also establishes policies pertaining to noise. These policies are reflected in the County Guidelines, threshold criteria for noise as presented below in the impact analysis section of this noise discussion.

Noise sensitive land uses adjacent to the Project site include residential and to a lesser degree recreational uses (golf courses and Happy Camp Canyon Park). Noise sources in the Project area include roadway traffic, aircraft over-flight noise, and daily activities conducted at the various land uses (residential, public facility, agriculture and open space/recreation).

Ambient noise estimates from the Ventura County Hazards Appendix Figure 2.16.7, “Current Year and 2020 CNEL Contours for Highways in the County” specific to SR 23 near the Project area are presented in Table C.21-1.

Ambient noise levels were measured at specific locations in the Project area during the day on Wednesday, April 3, 2013 using a Larson Davis Type LXT Precision Sound Level Meter. Table C.21-2 shows the results of these ambient noise measurements. Data presented in Table C.21-2 are representative of single event fifteen minute Leq noise measurements only.

**Table C.21-1. 2005 and 2020 Noise Contours for Highway 23 (Walnut Canyon Road) in the Project Area**

Road Segment	ADT	Distance from Roadway Centerline in Feet					
		50 CNEL	55 CNEL	60 CNEL	65 CNEL	70 CNEL	75 CNEL
SR 23 from Broadway Road to Fillmore city limits	Current (2005): 6,400	730	360	175	85	-	-
SR 23 from Broadway Road to Fillmore city limits	Year 2020: 9,000	1,150	585	290	140	65	-

**Table C.21-2. Ambient Noise Levels within the Project Area**

Noise Measurement Locations	Time	Noise Sources	Ambient Noise Level Measured in dBA LEQ (15 min.)
Rustic Canyon Golf Course (west side)	12:25-12:40 PM	Overhead aircraft, golfers, birds, wind	39.6
Happy Camp Canyon Recreation Area	12:05-12:20 PM	Overhead aircraft, distant road traffic from SR 23, agricultural workers	47.1
Broadway Road 520 feet east of Happy Camp Road adjacent to lemon orchard on the south side of Broadway Road	2:40 – 2:55 PM	Traffic on Walnut Canyon Road, Broadway Road and Happy Camp Road	53.4
Championship Drive/Snead Drive entry (approximately 150 feet north of Championship Drive)	3:15 – 3:30 PM	Traffic on Championship Drive and gated entry to Snead Drive, overhead aircraft	49.5

### 21.1.2 Vibration

Vibration from construction activity is caused by general equipment operations and is usually highest during pile driving, blasting, soil compacting, jack hammering and construction related demolition. Although vibration is sometimes noticeable outdoors, it is almost exclusively an indoor problem (Transit Link Consultants, January 2007). Ground vibrations from construction activities do not often reach the levels that can damage structures (with the exception of fragile buildings), but they can achieve the audible and feelable ranges in buildings very close to the site (Federal Transit Administration, May 2006). A vibration that causes annoyance will be well below the damage threshold for normal buildings. Annoyance from vibrations can occur when the vibration exceeds the threshold of perception by only a small margin.

Construction vibration consists of a composite or spectrum of many frequencies, and is generally classified as broadband. The normal frequency range of most ground-borne vibration that can be felt generally ranges from 1 Hertz (Hz) to 200 Hz. Vibration energy spreads out as it travels through the ground. Therefore, vibration levels diminish with distance away from the source. High frequency vibration levels reduce more rapidly than low frequency vibrations. Therefore, low frequencies tend to dominate the vibration spectrum at large distances from the source. When a vibration encounters a building, a ground-to-foundation coupling loss will usually reduce the overall level of vibration that propagates into the building.

To evaluate construction vibration impacts to buildings, the peak particle velocity (ppv) in inches per second is the metric of interest. The peak particle velocity is defined as the maximum instantaneous positive or negative peak of the vibration event. Although ppv is the

appropriate metric for evaluating the potential for building damage, it is not suitable for evaluating human response to vibration. Because it takes some time for the human body to respond to vibration signals, the average or root mean square (rms) vibration level expressed in VdB is used in the Federal Transit Authority guidance manual to evaluate vibration impacts in terms of annoyance to humans. The threshold of perception for humans is around 65 VdB. If the vibration level in a residence reached 85 VdB, most people will be strongly annoyed by the vibration. The relationship of ppv to rms velocity is expressed in terms of the “crest factor”, defined as the ratio of the ppv amplitude to the rms amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than rms vibration velocity.

## 21.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 2.16.2.1. All discretionary development shall be reviewed for noise compatibility with surrounding uses. Noise compatibility shall be determined from a consistent set of criteria based on the standards listed below.</i>	Consistent - The following analysis ensures Project consistency with this policy.
<i>City of Moorpark General Plan Noise Element Policy N-1.4: Require stationary noise sources to limit noise to levels that do not interfere with adjacent uses.</i>	Consistent – With implementation of mitigation provided below.
<i>City of Moorpark General Plan Noise Element Policy N-1.6: Limit the impact of nuisance noise sources upon residential areas.</i>	Consistent – With implementation of mitigation provided below.

## 21.3 IMPACT DISCUSSION

### 21.3.1 Noise

#### 21.3.1.1 Significance Thresholds

The County Guidelines state the following. “Any project that produces noise in excess of the standards for noise in the Ventura County General Plan Goals, Policies and Programs (Section 2.16) or the applicable Area Plan has the potential to cause a significant noise impact. Noise-generating uses that either individually or when combined with other recently approved, pending, and probable future projects, exceeds the noise thresholds of General Plan Noise Policy 2.16.2-1(4) are considered to have a potentially significant impact.”

Pursuant to the statement above, the County Guidelines establish the following noise threshold (from General Plan Section 2.16.2-1 of the Goals, Policies, and Programs) criteria, above which significant noise impacts would be anticipated.

*Noise generators proposed to be located near any noise sensitive use shall incorporate noise control measures so that outdoor noise levels at the sensitive receptor do not exceed:*

- a. Leq 1H of 55 dBA or ambient noise level plus 3 dBA, whichever is greater during any hour from 6:00 am to 7:00 pm.
- b. Leq 1H of 50 dBA or ambient noise level plus 3 dBA, whichever is greater, during any hour from 7:00 pm to 10 pm.
- c. Leq 1H of 45 dBA or ambient noise level plus 3 dBA, whichever is greater during any hour from 10 pm to 6 am.

Discretionary development which would be impacted by noise or generate project related noise which cannot be reduced to meet the above standards, shall be prohibited. However, this criteria is not applicable to increased traffic noise identified along any of the roads identified within the 2020 Regional Roadway Network (Figure 4.2.3 of the Public Facilities Appendix of the Ventura County General Plan). In addition, State and Federal highways, all railroad line operations, aircraft in flight, and public utility facilities are noise generators having Federal and State Regulations that preempt local regulations.

General Plan Policy 2.16.2-1(5) requires construction noise to be evaluated and mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan prepared by Advanced Engineering Acoustics (2005). Based on this document, the following list identifies noise-sensitive uses along with their typical periods of sensitivity to construction noise:

- Hospitals and nursing homes (sensitive 24 hours/day);
- Residences (sensitive during evening and nighttime - 7 pm to 7 am);
- Hotels and motels (sensitive during evening and nighttime); and
- Schools, churches and libraries (daytime and evening, when in use).

Construction noise threshold criteria are provided in the County of Ventura Construction Noise Threshold Criteria and Control Measures (County of Ventura, 2005) and are presented below.

- During daytime hours, construction work should comply with the County of Ventura construction noise threshold criteria (NTC), defined hereafter. Normally, no evening or nighttime construction activity is permitted in areas having noise-sensitive receptors. However, in the event such activity is deemed necessary and is permitted, reduced noise threshold criteria are provided for construction that must occur during evening and/or nighttime hours. Emergency construction work is exempt from these construction noise thresholds.
- Daytime Construction - Daytime (7:00 a.m. to 7:00 p.m. Monday through Friday, and from 9:00 a.m. to 7:00 p.m. Saturday, Sunday and local holidays) generally means any time period not specifically defined as a more noise-sensitive time period. The daytime construction noise threshold criteria are given below. Depending on project duration, the daytime noise threshold criteria shall be the

greater of the fixed  $L_{eq}(h)$  limit (which includes non-construction evening and nighttime noise) or the measured ambient  $L_{eq}(h)$  plus 3 dB.

- Evening Construction - Evening hours (7:00 p.m. to 10:00 p.m.) are more noise-sensitive time periods. Therefore, evening construction noise threshold criteria differ from the daytime criteria. Overall project construction noise, for the noise-sensitive hours specified, shall not exceed the noise threshold criteria listed below, at the nearest noise-sensitive receptor area or 10 feet from the façade of the nearest noise-sensitive building.
- Nighttime Construction - Nighttime hours (10:00 p.m. to 7:00 a.m. Monday through Friday, and from 10:00 p.m. to 9:00 a.m. Saturday, Sunday and local holidays) are the most noise-sensitive time periods. Therefore, nighttime and holiday construction noise threshold criteria differ from the daytime and evening criteria. Overall project construction noise, for the noise-sensitive hours specified, shall not exceed the noise threshold criteria listed below, at the nearest noise-sensitive receptor area or 10 feet from the façade of the nearest noise-sensitive building.
- Maximum Construction Noise - In addition, the construction-related, slow response, instantaneous maximum noise ( $L_{max}$ ) shall not exceed the noise threshold criteria by 20 dBA more than eight times per daytime hour, more than six times per evening hour and more than four times per nighttime hour.
- Determination of Compliance - The construction noise at sensitive receptor locations for each construction phase is due to the contributions of each piece of noise producing equipment used in each construction phase. The resulting construction phase noise must be compared to the construction noise threshold criteria to determine whether noise mitigation measures are required. The construction noise monitoring methods are discussed in Appendix C of the County of Ventura Construction Noise Threshold Criteria and Control Measures and typical noise mitigation measures are given in Appendix D. During periods of greater construction noise activity, the construction noise shall be monitored by a designated person trained in the use of a sound meter in accordance with the methods of Appendix C of the County of Ventura Construction Noise Threshold Criteria and Control Measures. When construction noise fails to comply with the appropriate noise threshold criteria, or falls out of compliance during use, the designated noise monitor shall immediately identify the non-compliant activity or equipment. Either the non-compliant activity must be stopped and the equipment removed from service or effective remedial action must be taken, similar to the noise mitigation measures of Appendix D (of the County of Ventura Construction Noise Threshold Criteria and Control Measures), to restore compliance with the respective noise threshold criteria.

### Daytime Construction Activity Noise Threshold Criteria

Construction Duration Affecting Noise-sensitive Receptors	Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed Leq(h), dBA	Hourly Equivalent Noise Level (Leq), dBA <sup>1,2</sup>
0 to 3 days	75	Ambient Leq(h) + 3 dB
4 to 7 days	70	Ambient Leq(h) + 3 dB
1 to 2 weeks	65	Ambient Leq(h) + 3 dB
2 to 8 weeks	60	Ambient Leq(h) + 3 dB
Longer than 8 weeks	55	Ambient Leq(h) + 3 dB

Note 1. The instantaneous L<sub>max</sub> shall not exceed the NTC by 20 dBA more than 8 times per daytime hour.  
 Note 2. Local ambient Leq measurements shall be made on any mid-week day prior to project work.

### Evening Construction Activity Noise Threshold Criteria

Receptor Location	Evening Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed Leq(h), dBA	Hourly Equivalent Noise Level (Leq), dBA <sup>1,2</sup>
Residential	50	Ambient Leq(h) + 3 dB

Note 1. The instantaneous L<sub>max</sub> shall not exceed the NTC by 20 dBA more than 6 times per evening hour.  
 Note 2. Hourly evening local ambient noise measurements shall be made on a typical mid-week evening prior to project work.

### Nighttime Construction Activity Noise Threshold Criteria

Receptor Location	Nighttime Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed Leq(h), dBA	Hourly Equivalent Noise Level (Leq), dBA <sup>1,2</sup>
Resident, Live-in Institutional	45	Ambient Leq(h) + 3 dB

Note 1. The instantaneous L<sub>max</sub> shall not exceed the NTC by 20 dBA more than 4 times per nighttime hour.  
 Note 2. Hourly nighttime local ambient noise measurements shall be made on a typical mid-week night prior to project work.

#### 21.3.1.2 Impacts

The use of construction equipment would generate noise in the short term. Noise produced by construction equipment varies substantially depending on the type of equipment, and its operation and maintenance. Pipeline construction is expected to progress at a pace of

about 300 lineal feet per day. Construction will occur Monday through Friday between the hours of 7:00 am until 4:00 pm.

The Federal Highway Administration Roadway Construction Noise Model (RCNM - a computer-modeling program to estimate noise levels from construction activity) was used to estimate short-term noise levels that would result at the nearest existing noise sensitive land use (which is a residence on Haynie Court near Championship Drive) during booster pump station construction. The computed construction noise level estimate for the closest residence during booster pump station construction is 64.1 dBA Leq which is about 14 dBA over ambient (based upon the short-term sampling). Similarly, construction noise levels at the closest sensitive receptor (residence at the western end of Palmer Drive near Championship Drive located about 50 feet from the edge of Championship Drive) during pipeline installation was estimated using the RCNM. The computed construction noise level estimate for the closest residence during pipeline installation is 83.2 dBA Leq which is about 33 dBA over ambient (based upon the short-term sampling). Since pipeline construction is linear receptors would only be exposed to substantial construction noise for a couple of days. Because construction work would occur only during daytime hours and residential uses are considered to be noise sensitive from 7 pm to 7 am, construction noise impacts are considered to be adverse, but less than significant.

In addition to construction noise from the operation of construction equipment at the work sites, the construction phase would cause minor increases in traffic noise along access routes to and from the site from the movement of equipment, materials and workers. This short-term effect is considered to be a less than significant impact.

Long-term noise impacts would be associated with the operation of the booster pump station. The noise associated with a pump station is derived from the pumps and associated motors with motors being the more significant noise contributor. Motor noise is correlated to the horsepower of the motor and other design features. For example, based upon Seimans standard motor technical specifications, a 1 HP motor has a noise level around 60 dBA whereas a 60 HP motor has a noise level of 76 dBA. For the purposes of this report, it is assumed that a 5 HP Brinkman motor would power each pump. Based upon the technical specifications for Brinkman motors, this motor has an associated maximum noise level of 75 dBA. The operation of three such motors is estimated to result in a noise level of 47.2 dBA at the closest sensitive receptor (residence on Haynie Court). Actual noise from pump station operation will depend upon a number of factors including the type of pump and motor selected for use. Nighttime noise measurements were not taken at the subject site. However, it is expected that nighttime ambient noise levels would be in the 40-45 dBA range. Therefore, the booster pump station has the potential to exceed the most sensitive night time noise threshold for noise generating uses of 45 dBA (1 hr Leq) or ambient noise level plus 3 dBA, whichever is greater.

There are pending and approved projects within the Project area which have the potential to be constructed during the same time period as the proposed Project. These include construction of Well No. 20 Phase II treatment facilities and construction of residences within the City of Moorpark as identified in Section A.7.3. However, because Project construction

would be limited to daytime hours, the Project's noise impact is not considered to be cumulatively significant. Over the long-term, Well No. 20 treatment facility improvements together with the proposed Project could result in long-term cumulative noise impacts assuming that the filtration system has mechanical components and possibly power drives that would create noise.

#### 21.3.1.2 Mitigation and Residual Impacts

No significant short-term impacts would result; however, the following mitigation measures are recommended to reduce construction-related adverse noise effects.

- N1** The District shall notify all adjacent residents at least two weeks prior to project construction of the construction schedule including beginning and end dates and, days and hours of construction.
- N2** The contractor shall turn off idling equipment when not in use for periods longer than 30 minutes.
- N3** The contractor shall operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises near noise sensitive receptors.

The following mitigation measure is required to ensure that long-term noise impacts from operation of the booster pump station are less than significant on a project-specific and cumulative basis.

- N4** Booster pump station operation together with Well No 20 filtration improvements shall not result in an increase of above 3 dBA over ambient at noise sensitive locations (e.g., residential uses). Prior to pump station operation, a noise consultant shall be retained to evaluate final development plans for both District projects and ensure that any necessary noise reduction measures (e.g., appropriate pump and motor selection, shielding, etc.) have been incorporated as needed to ensure that the project will not result in project-specific or cumulative increase in noise levels over 3 dBA above ambient (1hr Leq) at nearby sensitive receptors.

Implementation of the above measure will reduce potential long-term noise impacts from stationary equipment to less than significant.

### 21.3.2 VIBRATION

#### 21.3.2.1 Significance Thresholds

The following vibration construction threshold from the County Guidelines is applicable to the proposed Project. "Any project that either individually or when combined with other recently approved, pending, and probable future projects, includes construction activities involving blasting, pile-driving, vibratory compaction, demolition, and drilling or excavation which

exceed the threshold criteria provided in the Transit Noise and Vibration Impact Assessment (Section 12.2), is considered to have a potentially significant impact.”

### 21.3.2.2 Impacts

Project construction will generally involve the temporary movement and use of trucks, and heavy equipment. These activities will result in some level of vibration. The following table (C.21-3) shows vibration source levels for construction equipment as documented in the Federal Highway Administration. (Although Table C.21-3 gives one level for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. The data in the table provide a reasonable estimate for a wide range of soil conditions.) Table C.21-4 shows the vibration limits that are recommended for use by the FHA during environmental assessments to identify potential problem locations that need to be address in final Project design.

**Table C.21-3. Vibration Source Levels for Construction Equipment**

Equipment	PPV at 25 feet (inches/second)	Approximate $L_v^1$ at 25 feet
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

<sup>1</sup> RMS velocity in decibels (VdB) re 1 micro-inch/second

**Table C.21-4. Construction Vibration Damage Criteria**

Building Category	PPV (inches/second)	Approximate $L_v^1$
Reinforced-concrete, steel or timber (no plaster)	0.5	102
Engineered concrete and masonry (no plaster)	0.3	98
Non-engineered timber and masonry buildings	0.2	94
Buildings extremely susceptible to vibration damage (historic buildings)	0.12	90

<sup>1</sup> RMS velocity in decibels (VdB) re 1 micro-inch/second

Pipeline installation would necessitate the use of a compactor as well as other heavy equipment. Structures along the pipeline alignment are of adequate construction and at an adequate distance (50 feet or more) from construction activities such that no damage to nearby structures is expected.

No other projects are expected to occur simultaneously with the proposed Project or in close enough proximity to the same sensitive receptors such that cumulative vibration impacts would result.

#### 21.3.2.3 Mitigation and Residual Impacts

No significant vibration impacts would result. Therefore, no vibration mitigation is required.

## 22.0 DAYTIME GLARE

### 22.1 SETTING

As defined by the County Guidelines, glare is intense light that is blinding or discomforting to humans. Glare has a potentially significant effect on motorists.

Conditions that create daytime glare are typically caused by the reflection of sunlight from highly reflective surfaces at or above eye level. Daytime glare is caused by the reflective surfaces of buildings with materials such as metal or glass that lead to disability glare or discomfort glare for motorists travelling on County's roads where the traffic volumes/speeds are generally high (e.g. Regional Road Network).

No highly reflective materials are present in the immediate vicinity of the Project site.

### 22.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

There are no General Plan policies for this issue area that are relevant to the proposed Project.

### 22.3 IMPACT DISCUSSION

#### 22.3.1 Significance Thresholds

A proposed project will be considered to have a significant project-specific or cumulative glare impact if the project will create a new source of disability glare or discomfort for motorist traveling along any road of the County Regional Road Network. A project would be considered significant when the glare source to the median of background radiation exceeds 3:1 in a luminance histogram.

#### 22.3.2 Impacts

There are no highly reflective materials or lighting that would be required as part of the proposed Project that would create a source of light or glare that would cause community discomfort. Because the Project would not result in a project-specific glare impact, it would not contribute to any cumulative glare impacts.

### **22.3.3 Mitigation and Residual Impacts**

No impact would result. Therefore, no mitigation is required.

## **23.0 PUBLIC HEALTH**

### **23.1 SETTING**

A public health issue is defined by the County's Initial Study Assessment Guidelines as a human health related issue, such as, but not limited to, vectors, bioaerosols, and other pathogens or environmental factors that may pose a substantial present or potential hazard to public health.

### **23.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No policies from the Ventura County's General Plan that relate to public health are applicable to the proposed Project.

### **23.3 IMPACT DISCUSSION**

As described in Section 20 (Hazardous Materials), some of the land along the proposed pipeline route has historically been used for agriculture and may contain residual agricultural chemicals. Also, unknown sources of contamination may be encountered during pipeline construction. As such, during construction there is a potential to expose workers and the public to such hazardous materials should such materials be present within the proposed excavation areas. Mitigation as proposed in Section 20 would reduce health impacts to less than significant.

## **24.0 GREENHOUSE GASES**

### **24.1 SETTING**

#### **24.1.1 Definition**

Greenhouse gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). These greenhouse gases lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the Greenhouse Effect. There is increasing evidence that the Greenhouse Effect is leading to global climate change.

### 24.1.2 Regulatory Framework

The California Global Warming Solutions Act (State Assembly Bill 32) focuses on reducing GHG emissions in California. GHG as defined under AB 32 include: water vapor, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. In addition, two State-level Executive Orders have been enacted by the Governor (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

In June 2008, CARB developed a Draft Scoping Plan for Climate Change, pursuant to AB-32. The Scoping Plan was approved at the Board hearing on December 12, 2008. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy. Key elements of the Scoping Plan for reducing California's greenhouse gas emissions to 1990 levels by 2020 include:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards;
- Expansion of the Renewables Portfolio Standard to 33 percent;
- Development of a California cap-and-trade program that links with other Western climate Initiative Partner programs to create a regional market system;
- Implementation of existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Targeted fees to fund the State's long-term commitment to AB 32 administration.

### 24.1.3 GHG and CEQA

From 2007 to 2009, CARB has promulgated several discrete early action measures to reduce GHG emissions prior to the full and final adoption of a plan to reduce aggregate California GHG emissions to 1990 levels by 2020. Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that greenhouse gas emissions and the effects of GHG emissions are appropriate for CEQA analysis. It directs the California Office of Planning and Research (OPR) to develop guidelines *"for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division."* (Pub. Res. Code § 21083.05(a)).

In December of 2009, the California Natural Resources Agency adopted amendments to the CEQA Guidelines (Title 14, Cal. Code of Regulations, §15000 et seq.) to comply with the mandate set forth in Public Resources Code §21083.05. These revisions became effective

March 18, 2010. According to GHG amendments to the CEQA Guidelines, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects, and the analysis must be based on best available information.

The CEQA Guideline amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. They do not, however, establish a specific threshold of significance. The amendments do identify a general methodology for assessing the significance of impacts from Project GHG emissions. Specifically, CEQA Guideline Section 15064.4 states:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
  - (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or*
  - (2) Rely on a qualitative analysis or performance based standards.**
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
  - (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;*
  - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*
  - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.**

#### 24.1.4 Climate Change Action Plans

Many California counties have developed a climate change action plan focusing on reducing GHGs from local sources, to facilitate meeting the State reduction targets of AB 32. To date, Ventura County has not published any draft documents related to GHG emissions reduction in the County.

#### 24.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

There are no County policies on greenhouse gases that are relevant to the proposed Project.

#### 24.3 IMPACT DISCUSSION

##### 24.3.1 Thresholds of Significance

To date, GHG thresholds of significance have not been adopted by Ventura County. On November 8, 2011, the Ventura County APCD completed a staff report assessing several options and strategies in developing GHG thresholds for land development projects. Although no GHG thresholds were developed, the November 8, 2011 staff report stated that consistency with any GHG thresholds developed by the South Coast Air Quality Management District (SCAQMD) is preferred. On December 5, 2008, the SCAQMD governing board adopted interim GHG significance thresholds for industrial sources. This document also included a suggestion of a potential threshold of 10,000 MTCO<sub>2</sub>E (metric tons, CO<sub>2</sub> equivalent) for industrial projects. Due to the lack of any other applicable threshold, this value will be used in this Study to determine the significance of the contribution of the Project to global climate change.

##### 24.3.2 Impacts

Implementation of the proposed Project would result in direct and indirect greenhouse gas emissions associated with Project construction and operation. Construction equipment GHG emissions were calculated using load factors and emission factors from the Nonroad Engine and Vehicle Emissions Study (EPA, 1991). On-road GHG emissions were estimated using the EMFAC2007 model. Table C.24-1 provides a summary of construction-related GHG emissions.

**Table C.24-1. Total Construction Greenhouse Gas Emissions**

Source	CO2 (tons)	CH4 (tons)	N2O (tons)	Metric Tons CO <sub>2</sub> equivalent
Construction equipment	149.9	0.021	0.002	137.1
Worker & materials transportation	29.5	0.002	0.002	27.5
<b>Total</b>	<b>179.4</b>	<b>0.023</b>	<b>0.004</b>	<b>164.6</b>
<b>Amortized over 30 years</b>				<b>5.5</b>

Table C.24-2 provides a summary of the annual greenhouse gas emissions associated with implementation of the proposed Project. The GHG emissions estimate for maintenance activities is based on one trip per month by District staff. The GHG emissions estimate for electricity consumption is based on 1.0 kilowatt-hour consumption for the booster pump station and 4,380 hours per year of operation. Total Project annual GHG emissions would be less than the SCAQMD suggested GHG significance threshold, and considered as a less than significant impact to global climate change.

**Table C.24-2. Total Annual Greenhouse Gas Emissions**

<b>Project Component</b>	<b>Metric Tons CO<sub>2</sub> equivalent</b>
Maintenance Activities (motor vehicles)	0.1
Energy Consumption (electricity)	1.4
Construction (amortized over 30 years)	5.5
<b>Total</b>	<b>7.0</b>
SCAQMD-suggested GHG significance threshold	10,000

### **24.3.3 Mitigation and Residual Impacts.**

No significant impacts would result; therefore, no mitigation is required.

## **25.0 COMMUNITY CHARACTER**

### **25.1 SETTING**

As defined by the County Guidelines, a community is a particular area within which people with common interests reside. Community character consists of the image of a community, as defined by such factors as its built environment, natural features, architectural form and style, existing uses (e.g., agricultural, residential, commercial, industrial, or institutional), and density and intensity of development. Central to the concept of community character is a sense of place, or the characteristics of a location that make it readily recognizable as being unique and different from its surroundings and that provides a feeling of belonging to, or being identified with, that particular place.

The Project is located within the following areas: the VCWWD No. 1 reclaimed water tank site, a single-family residential neighborhood of Moorpark, open/space recreation areas, and agricultural areas that are predominantly in orchard production.

## 25.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 3.1.2.3: Consistency of Land Use: Any land use shall be deemed consistent with the General Plan if it is permitted under a zoning designation which is consistent with Policy Number 2 above, and if the land use does not conflict with any other policy of the County General Plan.</i>	Consistent - The Project uses are allowable within the respective zoning designations.

## 25.3 IMPACT DISCUSSION

### 25.3.1 Significance Thresholds

The threshold of significance criteria in the County Guidelines for community character states that:

1. *A project that is inconsistent with any of the policies or development standards relating to community character of the Ventura County General Plan, Policies and Programs or Saticoy Area Plan is regarded as having potentially significant environmental impact; and/or*
2. *A project has the potential to have a significant impact on community character, if it either individually or cumulatively when combined with recently approved, current and reasonably foreseeable probable future projects would introduce physical development that is incompatible with existing land uses, architecture form or style, site design/layout, or density/parcel sizes with the community in which the project is located.*

### 25.3.2 Impacts

The Project would only result in short-term construction impacts, pipelines would be located below ground, and the booster pump station would be located within an existing public works water facility site. Therefore, no long-term community character impacts would result.

Water filtration improvements at the Well No. 20 site located adjacent to the reclaimed water tank site are proposed. However, both these improvements and the booster pump station are at sites already developed with public works infrastructure, no significant cumulative impact to community character would result.

### 25.3.3 Mitigation and Residual Impacts

No mitigation measures are required.

## 26.0 HOUSING

### 26.1 SETTING

The Project is located within the City of Moorpark and unincorporated Ventura County.

### 26.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

No housing-related policies from Ventura County's General Plan are applicable to the proposed Project.

### 26.3 IMPACT DISCUSSION

#### 26.3.1 Significance Thresholds

The County Guidelines indicate that any project that would eliminate existing dwelling units would have an impact.

The County Guidelines also state that *any project that involves construction has an impact on the demand for additional housing due to potential housing demand created by construction workers. However, construction worker demand is a less than significant project-specific and cumulative impact because construction work is short-term and there is a sufficient pool of construction workers within Ventura County and the Los Angeles metropolitan regions.*

Additionally, the County Guidelines state that *pursuant to General Plan Policy 3.4.2-9, projects that would result in new jobs in the County have an impact on the demand for housing. However, only projects that result in 30 or more new full-time-equivalent ("FTE") lower-income employees would have a significant project-specific and cumulative impact on the demand for housing because the General Plan shows that there is potentially insufficient inventory of land to develop lower-income housing.*

#### 26.3.2 Impacts

The Project would not involve the removal of any existing housing. Additionally, the Project would not result in the need for additional long-term employees and therefore, would not create a demand for housing.

#### 26.3.3 Mitigation and Residual Impacts

No significant impact to housing would result; therefore, no mitigation is required.

## 27.0 TRANSPORTATION/CIRCULATION

### 27.A ROADS AND HIGHWAYS (1-3)

#### 27.A.1 Setting

The quality of traffic service provided by a roadway system can be described through the Level of Service (LOS) concept. LOS is a standardized means of describing traffic conditions by comparing traffic volumes in a roadway system with the system's capacity. A LOS rating of A-C indicates that the roadway is operating efficiently. Minor delays are possible on an arterial with a LOS of D. LOS E represents traffic volumes at or near the capacity of the highway, resulting in possible delays and unstable flow. LOS F represents the least favorable level of service.

Roads that would be directly impact by the Project due to the installation of pipeline include: Championship Drive, Walnut Canyon Road (State Route 23), Happy Camp Road and Broadway Road. It is expected that SR 118 (Los Angeles Avenue) would be affected by construction traffic. Other roads that may be used by construction vehicles include but are not necessarily limited to Grimes Canyon Road, SR 118/Los Angeles Avenue and SR 34 (Somis Road).

Roadway segments and intersections in the Project area with level of service constraints include SR 118/Los Angeles Avenue between Moorpark Avenue and Spring Road and the SR 111/SR 34 intersection. The Los Angeles Avenue/Moorpark Road intersection and Los Angeles Avenue/Spring Road intersections operate at LOS C and D, and E and E during the AM and PM peak periods respectively (2012 projections reported in Caltrans 2009). The SR 118/SR 34 intersection operates at LOS F in both the AM and PM peak periods (CalTrans, June 2010).

#### 27.A.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<p><i>County Policy 4.2.2.3: The minimum acceptable Level of Service (LOS) for road segments and intersections within the Regional Road Network and Local Road Network shall be as follows:</i></p> <p><i>(a) LOS-'D' for all County thoroughfares and Federal highways and State highways in the unincorporated area of the County, except as otherwise provided in subparagraph (b);</i></p> <p><i>(b) LOS-'E' for State Route 33 between the northerly end of the Ojai Freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, State Route 34 north of the City of Camarillo and State Route 118 between Santa Clara Avenue and the City of Moorpark;</i></p> <p><i>(c) LOS-'C' for all County-maintained local</i></p>	<p>Consistent - With the implementation of traffic mitigation incorporated into the project as described below, the Project is not considered to significantly impact LOS.</p>

Policy	Consistency Determination
<p><i>roads; and</i></p> <p><i>(d) The LOS prescribed by the applicable city for all Federal highways, State highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County (similar to Policies 4.2.2-3 through 4.2.2-6) respecting development in the city that would individually or cumulatively affect the LOS of Federal highways, State highways, County thoroughfares and County-maintained local roads in the unincorporated area of the County. At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the lower LOS of the two shall be the minimum acceptable LOS for that intersection.</i></p>	
<p><i>County Policy 4.2.2.6: Development that would generate additional traffic shall pay its pro rata share of the costs of necessary improvements to the Regional Road Network per the County's Traffic Impact Mitigation Fee Ordinance as amended time to time.</i></p>	<p>Consistent: Due to the nature of the Project, transportation mitigation fees are not required.</p>
<p><i>City of Moorpark General Plan Circulation Element Policy 2.4: All new development shall participate in a transportation improvement fee program...</i></p>	<p>Consistent: Due to the nature of the Project, transportation mitigation fees are not expected to be required.</p>

### 27.A.3 Impact Discussion

#### 27.A.3.1 Level of Service

**a. Significance Thresholds.** The County Guidelines state that the minimum acceptable level of service for road segments within the Regional Road Network and the Local Road Network is as shown in Table C.27.A-1.

**Table C.27-1. Minimum Acceptable Level of Service for Roadway Segments  
 (Table 1 from Ventura Initial Study Assessment Guidelines Section 27A(1)  
 Roads and Highways - Levels of Service)**

County of Ventura - Minimum Acceptable Level of Service	
Minimum LOS	Description
C	All County maintained local roads.
D	All County thoroughfares and state highways within the unincorporated area of the County accept as provided below.
E	<ol style="list-style-type: none"> <li>1. State Route 33 between the end of the freeway and the City of Ojai.</li> <li>2. State Route between 118 between Santa Clara Avenue and the city of</li> </ol>

County of Ventura - Minimum Acceptable Level of Service	
Minimum LOS	Description
	Moorpark 3. State Route 34 (Somis Road) north of the City of Camarillo. 4. Santa Rosa Road between the Camarillo city limits line and Thousand Oaks city limits line. 5. Moorpark Road north of Santa Rosa Road to Moorpark city limits line.
Varies	The LOS prescribed by the applicable city for all State highways, city thoroughfares, and the city maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, county thoroughfares and county-maintained local roads in the unincorporated area of the County
	County LOS standards are applicable for any city that has not adopted its own standards.

At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.

The County considers any project that would cause the existing LOS on a roadway segment to fall to an unacceptable level, or any project that adds one or more peak hour trips to a roadway operating at an unacceptable LOS to have a significant project-specific impact. The County guidelines further state that if a project will add one or more peak hour trips to a roadway segment that is part of the regional road network and is currently operating at an unacceptable LOS; or 10 or more peak hour trips to a roadway segment that is part of the regional road network and is projected to fall to a less-than-acceptable level LOS by the year 2020 it will result in a significant cumulative impact.

**b. Impacts.** The Project will generate an estimated 330 truck trips for the import and export of material to and from the Project site. Additional worker trips would also be generated. These trips would be spread throughout the construction period which is expected to three or four months during the period between mid-December 2014 and mid December 2015. Due to the poor LOS on Highway 118 within the City of Moorpark and specifically the Los Angeles Avenue/Spring Road intersection which operated at LOS E during the peak AM and PM periods, short-term traffic LOS impacts may be considered to be significant on a project-specific and cumulative basis.

Project implementation would not require additional permanent staff. Therefore, no increase in long-term trips would be generated by additional employees. Existing staff will be required to do periodic maintenance on the proposed facilities. However, less than one vehicle trip per day would be generated, thus no long-term impacts to LOS on the local roadway network are anticipated. No significant long-term impacts to LOS would result. The Project's contribution to any long-term cumulative increase in traffic is not considerable and is therefore less than significant.

**c. Mitigation and Residual Impacts.** The following measures will be incorporated into the Project to ensure that short-term LOS impacts would be less than significant.

- T1** The District shall make a condition of the construction contractor bid specifications that during the construction phase of the Project, all construction-related trips affecting State Highways will occur outside of the peak hours to the maximum extent feasible. Peak hours are 6:30 to 9:30 am and 3:30 to 6:30 p.m. weekdays.

#### 27.A.3.2 Safety and Design of Public Roads

**a. Impacts.** The Project consists of installation of reclaimed water pipeline and a booster pump station. No new roads or access driveways are proposed. However, the Project would result in potentially significant short-term safety impacts associated with the encroachment into public roads during construction of the reclaimed water pipeline. However, compliance with required road encroachment permit requirements and additional measures identified below would reduce this impact to a less than significant level.

**b. Mitigation and Residual Impacts.** The following measures will be incorporated into the Project to ensure that short-term roadway safety impacts would be less than significant.

- T2** The District shall apply for Encroachment Permits from the Permits Division of the County Transportation Department for work on County roads. The District should contact the Permits Division at 805-654-2055 for the requirements of this permit.
- T3** A Traffic Control Plan(s) shall be prepared by a traffic engineer, submitted, reviewed and approved by the appropriate jurisdiction (County, City CalTrans) for any road closure, partial road closure, or detours on area roads. Plans for all Project-impacted roads shall be designed to mitigate any potential disruptions to vehicle, pedestrian and bicycle movements, as well as property access during construction within road rights of way. The plan(s) must be approved the required minimum number of days (e.g., a minimum of seven calendar days for the County) prior to the actual road closure, or detour. The Traffic Control Plan(s) should include, but not necessarily be limited to the following as appropriate:
- Use of a flagger at work access areas;
  - Maintain two-way traffic at all times, where feasible;
  - Provide safety measures to separate motorists from the construction workers and the work zone;
  - Ensure access for emergency vehicles at all times;
  - Provide access to adjacent residences and businesses to the extent feasible;

- Open lanes as soon as possible to restore normal traffic patterns;
  - Provide advance notification of the construction Project to residences and business in the affected area;
  - Notify the public during construction, using methods such as large electronic monitoring signs, notification to impacted residents, appropriate detour signs, and notifications to schools and emergency providers;
  - Provide an information hotline to be manned during business hours;
  - Provide a designated traffic control coordinator to ensure compliance with the Traffic Control Plan;
  - Identify temporary pedestrian detours if sidewalks are encroached on by construction activities;
  - Reopen bicycle lanes and pedestrian facilities if impacted as soon as possible to minimize disruption to facility users;
  - During construction, cover open trenches with metal plates at the end of the work day;
  - After construction, restore the roads to their pre-construction condition;
  - During the hauling of material to or from the Project sites, the trucks shall be covered to secure all material so that any nuisance or danger to the public from flying debris can be avoided, and
  - Inspect and maintain truck safety equipment.
- T4** Provide the Transportation Department of the affected jurisdiction with a Site Plan that shows the proximity of trenching operation, construction equipment, and storage of materials to the right-of-way and road edge on the roads affected by the Project.
- T5** Oversize vehicle permits shall be obtained from Caltrans, the County of Ventura and the City of Moorpark as appropriate if such vehicles are to be used in the truck hauling operations.
- T6** The District shall apply for Encroachment Permits from the City of Moorpark for work in City streets.
- T7** The District shall apply for Encroachment Permits from the Caltrans for work in State highways.

- T8** All construction within roadway rights-of-way shall conform to the applicable City, County, or CalTrans Road Standards.
- T9** Any wide loads or unusual loads (e.g., excessively long loads) to be transported on State highways will require a Transportation Permit from Caltrans.
- T10** The District shall comply with the Ventura County Transportation Department policy regarding a moratorium on trenching on recently paved roads. If the road has been paved in the last five years, then the District will be responsible for overlaying the entire width of the road.
- T11** The District shall require the construction contractor(s) for the Project to protect pavement, berms, and drainage structures within the Project work area from damage that may be caused by trucks and construction-related trips. Any portion damaged during construction, in the opinion of the Transportation Department or Designee, shall be replaced in accordance with the current Standard Construction Details and/or in a manner acceptable to the Transportation Department or designee of the affected roadway within 30 days of completion of the Project.
- T12** Prior to and during construction within Happy Camp Regional Park and Rustic Canyon Golf Course the District and selected contractor shall coordinate with the managers of those facilities in order to minimize any impacts to the operation of roads within these recreational areas.

**27.A.3.3 Safety and Design of Private Access, and Tactical Access**

No new private road access is proposed as part of the Project. No impact would result; therefore, no mitigation is required.

**27.B PEDESTRIAN/BICYCLE**

**27.B.1 Setting**

There is a designated bicycle lane on Championship Drive as well as a pedestrian path. Additionally, the Moorpark General Plan designates Walnut Canyon Road as a bike path.

**27.B.2 Project Consistency with Applicable Policies**

County Policy	Consistency Determination
<p><i>County Policy 4.2.2.8: Discretionary development shall be conditioned, where feasible, to minimize traffic impacts by incorporating pedestrian and bicycle pathways, bicycle racks and lockers, ridesharing programs, transit improvements (bus turnouts, shelters, benches), and/or transit subsidies for employees or residents of the proposed development.</i></p>	<p>Consistent - The Project does not include the type of development that requires alternative transportation facilities.</p>

## **27.B.3 Impact Discussion**

### **27.B.3.1 Significance Thresholds**

County Guidelines state that a project that will cause actual or potential barriers to existing or planned pedestrian/bicycle facilities may have a significant impact. Additionally, projects that generate or attract pedestrian/bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities may have a significant impact.

### **27.B.3.2 Impacts**

The proposed Project has the potential to significantly impact existing pedestrian or bicycle facilities on Championship Drive on a temporary basis as a result of pipeline installation depending where within the roadway right-of way the pipeline is installed. Where the pipeline would cross Walnut Canyon Road, the use of the road by bicyclists and pedestrians would be impacted as it would on Broadway Road to Happy Camp Regional Park. Construction of pending and approved development such as proposed improvements at the Well No. 20 site and residential development on Walnut Canyon Road would have the potential to result in safety impacts to the same bicycle facilities on Championship Drive and Walnut Canyon Road such that Project impacts to bicycle facilities may be considered cumulatively significant. The Project, due to its nature as a water infrastructure project, would not generate pedestrians or bicyclists and would not result in long-term impacts on pedestrian or bicycle facilities.

### **27.B.3.2 Mitigation and Residual Impacts**

Implementation of measure T3 (traffic control plan) would reduce impacts on a project-specific and cumulative basis to less than significant.

## **27.C BUS TRANSIT**

### **27.C.1 Setting**

Based upon a review of public transit information on the Ventura County Transportation Commission web site, there is no public transit in the Project area. Additionally, staff from Padre did not observe transit stops in proximity to the Project site during a field visits in April of 2013.

### **27.C.2 Project Consistency with Applicable Policies**

See policy discussion for 27B.

### **27.C.3 Impact Discussion**

According to the County Guidelines a project will have a significant impact on bus transit if it would interfere with existing bus transportation or if it would increase demand for new bus transit services. The Project would not individually or cumulatively impact public transit because

it would not create a demand for bus transit, and currently there are no public transit routes in the Project area. No impact would result; therefore, no mitigation is required.

## 27.D RAILROADS

### 27.D.1 Setting

There are no railroads in the Project area. The closest railroad line is located north of Los Angeles Avenue in the City of Moorpark

### 27.D.2 Project Consistency with Applicable Policies

No policies from the Ventura County's General Plan with respect to railroads are applicable to the proposed Project.

### 27.D.3 Impact Discussion

According to the County Guidelines, a project would have a significant impact on a railroad if it would substantially interfere with an existing railroad's facilities or operations. The Project would not impact railroad facilities or operations on either a project-specific or cumulative basis. No impact would result; therefore, no mitigation is required.

## 27.E AIRPORTS

### 27.E.1 Setting

There are no airports near the Project site; therefore, there are no impacts due to airport transportation. (For further information please refer to Section 19 of Aviation Hazards).

### 27.E.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 4.2.2.10: Discretionary development that would endanger the efficient, safe operation of an airport or would result in significant land use incompatibility with an airport shall be prohibited.</i>	Consistent - The Project would not impact airport operations.

### 27.E.3 Impact Discussion

The Project site is not near an existing airport and would not directly, indirectly or cumulatively impact such a facility. No impact would result; therefore, no mitigation is required.

## **27.F HARBORS**

### **27.F.1 Setting**

There are no harbors in the vicinity of the Project area as it about 15 miles from the ocean.

### **27.F.2 Project Consistency with Applicable Policies**

The General Plan does not include any harbor-related policies that are applicable to the proposed Project.

### **27.F.3 Impact Discussion**

The Project area is not near an existing harbor and would not directly, indirectly or cumulatively impact such a facility. No impact would result; therefore, no mitigation is required.

## **27.G PIPELINES**

### **27.G.1 Setting**

Based upon a review of the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration National Pipeline Information System - Mapping for Ventura County (April 15, 2013), no gas transmission pipelines of hazardous liquid pipelines are located in the Project area. However, pipelines not mapped through this system such as natural gas distribution pipelines, are certain to exist in the Project area.

### **27.G.2 Project Consistency with Applicable Policies**

No General Plan policies relating to pipelines are applicable to the proposed Project.

### **27.G.3 Impact Discussion**

It is likely that oil or gas pipelines are located within the potential area of impact for the Project. However, prior to construction; the standard precaution of contacting Dig Alert to determine the presence of such lines and their location would be performed prior to any excavation. If pipelines are identified, they would then be avoided. Using this standard precaution, exposure to hazards from oil and gas pipes as well as other pipelines would be less than significant on a project-specific and cumulative basis. No impact would result. Therefore, no mitigation is required.

## **28.0 WATER SUPPLY**

### **28.A QUALITY**

#### **28.A.1 Setting**

According to the Ventura County General Plan Public Facilities and Services Appendix (1988 last amended May 2007), local water supply is divided between groundwater, imported water (from Metropolitan Water District of Southern California provided through local wholesale agency Calleguas Municipal Water District), and surface water with groundwater being the largest single source of water (67 percent of total). A small amount of reclaimed water is also used. Ventura County consumes more groundwater than is available locally, resulting in an overdraft of groundwater resources and increasing dependence on imported water supplies.

VCWD No. 1 water supplies include approximately 80 percent imported water. However, in times of drought or limited groundwater allocations, the District must rely almost completely on imported water (VCWD No. 1, June 1, 2011).

#### **28.A.2 Project Consistency with Applicable Policies**

There are no water quality policies from the Ventura County's General Plan that are applicable to the Project.

#### **28.A.3 Impact Discussion**

The County Guidelines thresholds for water quality state that the quality of water available to development must be in compliance with: the applicable State Drinking Water Standards as described in Title 22 of the California Code of Regulations, Section 64421 et seq., California Health and Safety Code, Division 104, Part 13, Chapter 4, Ventura County ordinance Code, Division 4, Chapter 8, and Ventura County Building Code, Article 1, Article 6.

The Project does not require a domestic water supply and is limited to the distribution of reclaimed water for irrigation purposes. Therefore, no domestic water quality impacts would result in association with this Project. No impact would result; therefore, no mitigation is required.

### **28.B QUANTITY**

#### **28.B.1 Setting**

Ventura County Waterworks District No. 1 is responsible for providing potable water within the Project area.

### 28.B.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 4.3.2.3: Discretionary development shall be conditioned to incorporate water conservation techniques and the use of drought resistant native plants pursuant to the County's Guide to Landscape Plans.</i>	Consistent - The Project does not include landscaping plans. However, to ensure consistency with this policy measure WS1 below is proposed

### 28.B.3 Impact Discussion

Limited short-term water demands may result during construction operations for dust suppression and irrigation of revegetated areas after construction. However, this short-term impact to water supplies would be less than significant and not cumulatively considerable due to its limited nature.

As the Project involves construction and operation of reclaimed water infrastructure, it will not require a new source of domestic water and would not require an additional long-term water supply. The Project will help reduce local dependence on increasingly limited supplies of imported and local groundwater and may be considered to result in a beneficial impact on water supply quantity.

No mitigation measures are required; however, the following measures are recommended to provide Project consistency with Policy 4.3.2.3 and to reduce the Project's potential short-term demand on water supplies.

- WS1** Project impacts areas requiring revegetation, other than areas dedicated to agricultural production, shall be revegetated using drought-tolerant native plants and water conserving techniques.
- WS2** Short-term Project construction water demands shall be met using reclaimed water (e.g., dust suppression and irrigation of revegetated areas).

### 28.C FIRE FLOW REQUIREMENTS

#### 28.C.1 Setting

Fire flow is defined as the number of gallons per minute (GPM) of water at a minimum residual pressure of 20 pounds per square inch (PSI) for a designated duration available from a fire hydrant in the event of an emergency situation.

#### 28.C.2 Applicable Policies

No policies relating to fire flow from the Ventura County's General Plan are applicable to the Project.

### 28.C.3 Impact Discussion

The proposed Project is limited to reclaimed water infrastructure improvements and would therefore not result in fire flow impacts on a project-specific or cumulative basis. No significant adverse impact would result therefore no mitigation is required.

## 29.0 WASTE TREATMENT/DISPOSAL

### 29.A INDIVIDUAL SEWAGE DISPOSAL SYSTEM

The Project site is not served by an individual sewage disposal system. No impacts pertaining to individual sewage disposal would result.

### 29.B SEWAGE COLLECTION/TREATMENT FACILITIES

The wastewater treatment provider for the Project area is the VCWD No 1. No new employees would be required for the proposed Project. Additional wastewater collection and treatment demand will be limited to that generated during Project construction. This impact to wastewater collection and treatment facilities would be less than significant and is not cumulatively considerable. No significant adverse impact would result. Therefore, no mitigation is required.

### 29.C SOLID WASTE MANAGEMENT

#### 29.C.1 Setting

The Simi Valley Landfill and Recycling Center serves the solid waste disposal needs of the Moorpark Project area. Simi Valley Landfill and Recycling Center is located at 2801 Madera Road, in the City of Simi Valley. Currently, this facility is permitted 3,000 tons per day of municipal solid waste and 6,250 tons per day of recyclables. As of 2007 the landfill had a remaining capacity of 21,993,270 cubic yards (CIWMB website, 2013). The estimated closure date as identified on the facilities Solid Waste Facility Permit (56-AA-0007) is 2022.

#### 29.C.2 Project Consistency with Applicable Policies

Policy	Consistency Determination
<i>County Policy 4.4.2-6: Applicants for discretionary development shall be encouraged to employ practices that reduce the quantities of wastes generated and shall be requested to engage in recycling activities to further reduce the volume of waste disposed of in landfills.</i>	Consistent – With implementation of the solid waste reduction measures as described below.

#### 29.C.3 Impact Discussion

The County Guidelines indicate that a project that has a direct or indirect adverse effect on a landfill such that impairs the landfill’s disposal capacity in terms of reducing its useful life to

less than 15 years has a potentially significant impact on the demand for solid waste disposal capacity. In addition, Ventura County Ordinance 4155 minimizes the potential solid waste disposal capacity impacts for any project by mandating the recycling of materials found on the “Director’s List of Recyclables”.

Project construction-related waste that would require disposal is expected to be minimal due to the nature of the Project which requires no demolition activities. Similarly, over the long-term, the Project would result in the generation of only very minor amounts of incidental solid waste as a result of maintenance and repair activities.

#### **29.C.4 Mitigation and Residual Impacts**

Impacts would be less than significant. Therefore, no mitigation is required. However, the District shall comply with the general requirements of Ventura County Ordinance 4421 to assist the County in its efforts to meet and exceed the requirements of Assembly Bill 939, which mandates statewide jurisdictions to divert a minimum of 50 percent of their solid waste from landfills. Per Ventura County Ordinance 4421, permit applicants working on construction and/or demolition projects within the County’s unincorporated area must practice waste prevention, and recycle, reuse, or salvage recyclable construction and demolition (C&D) debris generated by their project. All residual non-recyclable debris must be disposed at a permitted solid waste facility. Ordinance 4421 may be reviewed at: [www.wasteless.org/ord4421](http://www.wasteless.org/ord4421).

Specifically, the District shall implement the following measures/contract specification to the extent practicable which are provided here to ensure inclusion in the mitigation monitoring program for the project.

- SW1** Recyclable Construction Materials: Contract specifications for this project must require that all recyclable materials generated during the demolition and/or construction phases of the project (e.g., concrete, asphalt, rebar, wood, and metal) be recycled at an appropriate, permitted, recycling facility. A complete list of permitted construction and demolition debris recycling facilities in Ventura County is available at: [www.wasteless.org/construction&demolitionrecyclingresources](http://www.wasteless.org/construction&demolitionrecyclingresources). All non-recyclable materials must be disposed at a permitted solid waste disposal facility.
  
- SW2** Soil - Recycling & Reuse: Contract specifications for this project must include a requirement that soil and sand not reused on-site during the construction phase of the project be transported to an authorized or permitted organics facility for recycling or reuse. Illegal disposal and landfilling of soil is prohibited. A complete list of facilities in Ventura County that recycle soil is available at: [www.wasteless.org/construction&demolitionrecyclingresources](http://www.wasteless.org/construction&demolitionrecyclingresources).
  
- SW3** Green Materials - Recycling & Reuse: The Contract Specifications for this **project must include a requirement that all wood waste and vegetation removed** during the construction phase of this project must be diverted from the landfill. This can be accomplished by on-site chipping and land-application at

various project sites, or by transporting the materials to an authorized or permitted greenwaste facility in Ventura County. A complete list of authorized greenwaste facilities is located at: [www.wasteless.org/greenwasterecycling](http://www.wasteless.org/greenwasterecycling) facilities.

**SW4** Recyclable Construction & Demolition Debris – Required Report: Contractors shall submit a **Form B – Recycling Plan** to the IWMD for approval prior to the issuance of the Notice to Proceed, as provided in Section 6-7.4. of the VCSS. The **Recycling Plan** must specify how all recyclable materials generated by the project (e.g., metal, concrete, wood, greenwaste, and soil) will be diverted from the landfill. A copy of IWMD’s **Form B – Recycling Plan** is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD).

**SW5** Recyclable Construction & Demolition Debris – Required Report: Contractors shall submit a Form C – Recycling Report to the IWMD for approval prior to the Engineer’s preparation of the final estimate, as provided in Section 9-3.2 of the VCSS. The Form C – Recycling Report must have original recycling facility receipts and/or other documentation attached to verify recycling, on-site reuse, or salvage occurred. A copy of IWMD’s Form C – Recycling Report is available at: [www.wasteless.org/recycling/greenbuildingCD](http://www.wasteless.org/recycling/greenbuildingCD).

## 29.D SOLID WASTE FACILITIES

The Project does not include any new solid waste facilities. Thus an evaluation of this issue is not necessary.

## 30.0 UTILITIES

### 30.1 SETTING

Utilities include electrical, gas and communication facilities. Within the City of Moorpark and the Project area, electrical services are provided by Southern California Edison (SCE). Gas services are provided by Southern California Gas Company. Multiple communication providers service the Project area including those for telephone, cable and other communications equipment.

### 30.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

There are no relevant policies.

### 30.3 IMPACT DISCUSSION

Electrical service is currently available in the Project area as would be required for the operation of the booster pump station. Natural gas and communication services are not required for Project implementation. Project implementation is not expected to result in the

disruption of utility service as standard procedures for calling Dig Alert would be conducted prior to any excavation. Thus impacts to utilities would be less than significant and not cumulatively considerable. No significant impact would result; therefore, no mitigation is required.

## 31.0 FLOOD CONTROL FACILITIES/WATER SOURCES

### 31.A WATERSHED PROTECTION DISTRICT (WPD)

#### 31.A.1 Setting

The Ventura County Watershed Protection District (previously known as the Ventura County Flood Control District) was formed on September 12, 1944, when the California State Legislature approved the Ventura County Flood Control Act. The Watershed Protection District was formed, in part, to provide for the control and conservation of flood and storm waters and for the protection of watercourses, watersheds, public highways, life and property in the district from damage or destruction from these waters.

The Watershed Protection District's authority over its jurisdictional channels is established through a number of ordinances and policies passed by its Board of Supervisors. The primary ordinance establishing Watershed Protection District's authority and the requirement to obtain permits for any encroachment into jurisdictional channels, including rights of way, is Ventura County Ordinance (VC Ord. WP-12), An Ordinance Relating to the Protection and Regulation of Flood Control Facilities and Watercourses Ventura County Watershed Protection District Ordinance. The Watershed Protection District also implements the Flood Plain Management Ordinance 3841 on behalf of the County of Ventura to ensure compliance with the National Flood Insurance Program. This includes permit review for structures built in the floodplain and evaluation of site plans for developments that include identified floodplains.

The Project area is located within the Calleguas watershed, the Conejo-Calleguas Drainage Areas, and Ventura County Watershed Protection District Zone 3. Based upon a review of County mapping, within the Project area, two streams, (located at Grabbert Canyon which crosses Championship Drive and Happy Camp Canyon) have been identified by the Ventura County Watershed Protection District as Red Line Streams.

The Ventura County Watershed Protection District standards applicable to the project include:

- i. Any activity in, on, over, under or across any jurisdictional red line channel, including the channel bed and banks of Gabber Canyon and Happy Camp Canyon will require a permit from the Watershed Protection District. In addition, a project can not impair, divert, impede or alter the characteristics of the flow of water running in any jurisdictional red line channel.

- ii. The Watershed Protection District criteria for mitigating any increase in impervious area is that the peak flow after development shall not exceed the peak flow under existing conditions for any frequency event.

### **31.A.2 Project Consistency with Applicable Policies**

See policy discussion presented in Section 17B.2.

### **31.A.3 Impact Discussion**

#### **31.A.3.1 Significance Thresholds**

According to the County Guidelines, any project that will, either directly or indirectly, impact flood control facilities and watercourses by obstructing, impairing, diverting, impeding, or altering the characteristics of the flow of water, resulting in exposing adjacent property and the community to increased risk for flood hazards shall be considered to have a potentially significant impact.

#### **31.A.3.2 Impacts**

As described above in 2C, with development of the Project, the drainage patterns on-site would generally continue to flow in the existing pattern, and any increase in on-site runoff is expected to be minimal. The proposed Project would not reduce the capacity of flood control facilities or watercourses as the pipeline would be subsurface. VCWWD No. 1 will apply for the necessary encroachment permits for pipeline crossings at Gabbert and Happy Camp Canyons in accordance with County Ordinance WP-42. The pipeline segments proposed for these areas will be designed and constructed in a manner as approved by the Watershed Protection District such that impacts would be less than significant and the Project would not contribute to any cumulative impacts.

#### **31.A.3.3 Mitigation and Residual Impacts**

No significant impact would result; therefore, no mitigation measures are necessary.

### **31.B OTHER FACILITIES**

#### **31.B.1 Setting**

Non-WPD maintained watercourses in the Project area include an unnamed intermittent blue-line stream channel, as shown on the U.S. Geologic Survey 7.5 minute series Moorpark Quadrangle Map that extends south from Championship Drive at the eastern portion of the pipeline alignment on that road and the intermittent blue-line stream channel located along the eastern side of Walnut Canyon Road.

#### **31.B.2 Project Consistency with Applicable Policies**

See policy discussion presented in Section 17B.2.

### 31.B.3 Impact Discussion

Due to the limited nature of the Project as a subsurface pipeline and booster pump station to be constructed on a developed reclaimed water tank site, the Project is not expected to impede flows of any non-WPD maintained watercourse, nor would it result in increased runoff which would significantly affect the capacity of non-WPD maintained flood channels or Areas of Special Flood Hazard on a project-specific or cumulative basis. No significant impact will result. Therefore no mitigation is necessary.

## 32.0 LAW ENFORCEMENT/EMERGENCY SERVICES

### 32.1 SETTING

The Ventura County Sheriff's Department provides law enforcement services to the City of Moorpark and the unincorporated Project area on a contract basis. The nearest local office is located at 610 Spring Road, in the City of Moorpark. The city is divided into two primary beats which are patrolled by deputies 24 hours a day, seven days a week. An additional overlapping patrol deputy is provided during peak hours (11:00 a.m. to 3:00 a.m.) seven days a week.

### 32.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 4.7.2.2: Discretionary development shall be conditioned to provide adequate site security during the construction phase (e.g., licensed security guard and/or fencing around the construction site, and all construction equipment, tools, and appliances to be properly secured and serial numbers recorded for identification purposes).</i>	Consistent - Material and equipment storage is anticipated to occur at secured District facilities overnight. Additionally, a measure has been provided below to ensure Project consistency with this condition.
<i>County Policy 4.7.2.3: Discretionary development shall be conditioned to provide adequate security lighting (e.g., parking lots to be well lighted with a minimum 1 foot candle of light at ground level, lighting devices to be protected from the elements and constructed of vandal resistant materials and located high enough to discourage anyone on the ground from tampering with them).</i>	Consistent - The booster pump station will be located at the reclaimed water tank site which is an existing facility any necessary lighting is already located at the site. Water infrastructure such as pipelines are subsurface and do not require security lighting.

Policy	Consistency Determination
<p><i>County Policy 4.7.2.4: Discretionary development shall be conditioned to avoid landscaping which interferes with police surveillance (e.g., landscaping must not cover any exterior door or window, landscaping at entrances and exits or at any parking lot intersection must not block or screen the view of a seated driver from another moving vehicle or pedestrian, trees must not be placed underneath any overhead light fixture which would cause a loss of light at ground level).</i></p>	<p>Consistent - No landscaping that would be detrimental to security is proposed.</p>

### 32.3 IMPACT DISCUSSION

Water infrastructure is not identified on the list of development types that have the potential to increase demand for law enforcement or emergency services as identified in the County Initial Study Assessment Guidelines. No impacts relating to police protection to personnel, equipment and facilities are expected. The Project would, therefore, not contribute to any cumulative police protection impacts.

No impacts are anticipated. Therefore, no mitigation is required. However, the following measure shall be implemented to ensure Project consistency with applicable policies.

- L1** The District shall ensure that proper security measures are followed during the construction phase of the Project to protect materials, tools and equipment.

### 33.0 FIRE PROTECTION - (A) DISTANCE AND RESPONSE; AND (B) PERSONNEL, EQUIPMENT AND FACILITIES

#### 33.1 SETTING

The Project is located within the Ventura County Fire Protection District (VCFPD). The Fire Protection district was formed in 1928 in order to protect life and property by providing fire prevention, fire education fire suppression and rescue services. The Ventura County Fire Protection District operates 31 fire stations within the County including two within the City of Moorpark. The nearest fire station to the proposed Project is Station No. 42, located at 295 E. High Street, less than 2 miles from the nearest Project location at the intersection of Championship Drive and Walnut Canyon. Fire Station 42 serves the central and east Moorpark areas and provides support for larger incidents in the Santa Clara Valley. The Moorpark station is staffed daily by three firefighters and houses an engine (*Engine 42*); (*Engine 142*); and a brush engine (*Engine 342*) (Ventura County Fire Department web site accessed March 2013).

### 33.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<i>County Policy 4.8.2.1: Discretionary development shall be permitted only if adequate water supply, access and response time for fire protection can be made available.</i>	Consistent - The Project facilities water infrastructure that are not anticipated to require fire protection services.

### 33.3 IMPACT DISCUSSION

#### 33.3.1 Significance Thresholds

According to the County Guidelines, project distance from a full time paid fire department is considered a significant impact if the project is in excess of five (5) miles, measured from the apron of the fire station to the structure or pad of the proposed structure. The Guidelines also indicate that response time of more than 12 minutes would be considered significant.

The County thresholds of significance for fire-fighting personnel are based on population to firefighter ratios. However, the Guidelines state that most projects will have an impact on personnel due to increased needs for service, but it would not be significant due to increases in assessed value to compensate for increases in staffing. The County Guidelines further state that equipment and facility concerns become significant when the magnitude of the project or the distance from existing facilities indicates that a new facility or additional equipment would be required within the proposed Project.

#### 33.3.2 Impacts

The Project pipeline alignment is located between approximately 2 and 3 miles from the nearest fire station. Construction within Championship (and the portion within Broadway) will probably take out one traffic lane and/or the bike lane in one direction of travel, as dictated by a City and County approved traffic control plan. However, a temporary lane closure would not impede response times. The Project area is within the distance and response time criteria and would not result in a significant impact on fire protection services.

The proposed Project would not introduce a new population requiring fire protection services. Also, the Project does not include structures or uses that would require special or additional firefighting equipment. The impact on fire protection personnel, equipment and facilities would be less than significant on a project-specific and cumulative basis.

#### 33.3.2 Mitigation and Residual Impacts

No significant impact would result. Therefore, no mitigation is required.

## **34.0 EDUCATION - (A) SCHOOLS AND (B) LIBRARIES**

### **34.1 SETTING**

The Project is located in southeastern Ventura County. Ventura County encompasses 20 school districts, 3 community colleges, and a four-year university that opened in the fall of 1999. Schools within the Project vicinity are managed by the Moorpark Unified School District (MUSD). The MUSD serves students within the City of Moorpark and surrounding rural areas. MUSD operates eleven schools; six elementary schools, two middle schools, one comprehensive high school, a continuation high school and a middle college program. The nearest school to the proposed pipeline alignment is Walnut Canyon Elementary School located approximately 1.15 miles south of the intersection of Championship Drive and Walnut Canyon at 280 Casey Road in the City of Moorpark.

Ventura County is served by four separate public library jurisdictions: The Ventura County Library, the city of Oxnard, Blanchard-Santa Paula Public Library and the City of Thousand Oaks (County of Ventura, 2007). The City of Moorpark also hosts the Moorpark City Library located approximately 1.20 miles south of the intersection of Championship Drive and Walnut Canyon at 699 Moorpark Avenue in the City of Moorpark.

### **34.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES**

No education-related policies from Ventura County's General Plan are applicable to the proposed Project.

### **34.3 IMPACT DISCUSSION**

#### **34.3.1 Significance Thresholds**

According to the County Guidelines, a project will normally have a significant impact on school facilities if it would substantially interfere with the operations of an existing school facility. A project has a significant project-specific impact on public library facilities and services if it would substantially interfere with the operations of an existing public library facility, put additional demands on a public library facility which is currently deemed overcrowded, or limit the ability of individuals to access public library facilities by private vehicle or alternative transportation modes.

#### **34.3.2 Impacts**

Due to the distance between the Project site and school and library facilities, no short-term construction impacts on educational facilities are expected. The minimal number of construction personnel required are expected to come from the local population or if from outside of the area would only reside locally on a temporary basis and would not create a substantive new demand for local educational facilities. The proposed Project is not expected to cause an increase in demand for educational facilities (schools and libraries) over the long-

term as no housing or commercial/industrial development would be constructed, and no direct or indirect increase in population would result.

### 34.3.3 Mitigation and Residual Impacts

No impact would result. Therefore, no mitigation is required.

## 35.0 RECREATION

### 35.1 SETTING

The Project site is located within unincorporated Ventura County and the City of Moorpark. Park and recreation facilities in Ventura County area are provided by a wide array of agencies. These facilities enhance the quality of life of County residents as well as stimulate the County's tourist industry. Within the County, parks and recreation facilities are provided by the Ventura County General Services Agency, Parks Department. The County Parks Department is charged with the planning, development, maintenance, and operations of various recreational facilities throughout Ventura County. Within the City of Moorpark, the Parks, Recreation and Community Services Department is responsible for maintaining the grounds, equipment, and facilities of City parks; coordinating the design and construction of park improvements; and planning future parks. This department is also responsible for all the development, implementation, and promotion of all recreation activities.

Public recreational facilities within the Project area include Happy Camp Regional Park, Rustic Canyon Golf Course (both County facilities) and the designated bike lane and walking path on Championship Drive. Happy Camp Canyon Regional Park is located in eastern Ventura County and is a passive, natural open space park with no support facilities. The park provides visitors 12.5 miles of trails in a 3,000-acre wilderness area (Santa Monica Mountains Conservancy, 2013). Park resources include open grasslands and deep forests that are abundant with wildflowers and wildlife including rabbits, bobcats and golden eagles. The park is frequented by hikers, equestrian riders, and mountain bikers. Rustic Canyon Golf Course is located at the entrance of Happy Camp Regional Park. Parking and access to Happy Camp Regional Park is provided at two locations: 1) the eastern end of Broadway Road, referred to as the Upper Parking Area which is suitable for equestrians; and 2) Rustic Canyon Golf Course referred to as the Lower Parking Area which is used mainly by hikers and bikers. Happy Camp Regional Park, exclusive of the golf course, is managed by the Eastern Ventura County Conservation Authority, a joint power authority of the Santa Monica Mountains Conservancy, and is patrolled by Mountains Recreation and Conservation Authority rangers.

### 35.2 PROJECT CONSISTENCY WITH APPLICABLE POLICIES

Policy	Consistency Determination
<p><i>County Policy 4.10.2.2: Discretionary development which would obstruct or adversely impact access to a public recreation resource shall be conditioned to provide public access as appropriate.</i></p>	<p>Consistent – Although Project pipeline construction is proposed for the road accessing Happy Camp Regional Park and the park itself, the Project would not completely obstruct access to Happy Camp Regional Park. Additionally, Waterworks District No. 1 will need to negotiate a construction easement for the use of park land.</p>

### 35.3 IMPACT DISCUSSION

#### 35.3.1 Significance Thresholds

According to the County Guidelines, a project will have a significant impact on recreation if it would cause an increase in the demand for recreation, parks, and/or trails and corridors or would cause a decrease in recreation, parks, and/or trails or corridors when measured against specific standards provided in the Guidelines. A project will also have a significant impact on recreation if it would impede future development of Recreation Parks/Facilities and/or Regional Trails/Corridors.

#### 35.3.2 Impacts

The proposed Project would not cause an increase in demand for recreational facilities (including regional and local parks and trails), as no housing, commercial or industrial development would be constructed, and no direct or indirect increase in population would result. The minimal number of construction personnel are expected to come from the local population or if from outside of the area would only reside on a temporary basis locally.

The Project would however result in a short-term direct impact on Happy Camp Regional Park and Rustic Canyon Golf Course because the pipeline alignment extends into these facilities. Also the pipeline extends along Broadway Road which provides access to Happy Camp Regional Park. Direct construction impacts would be limited in area to the pipeline corridor and staging/laydown areas. The pipe and material laydown area will be adjacent to the trench as work proceeds, however an additional equipment and storage staging area for overnight storage may be located at Happy Camp Regional Park. VCWWD No. 1 would need to negotiate temporary construction easements for the use of any land for staging purposes. Although a defined area has not yet been identified for such potential staging purposes. It is possible that the entire parking area for Happy Camp Canyon Park located at the end of Broadway Road may need to be closed. This is a major access point to the park for equestrian, biking and hiking. The direct impacts on recreation are considered to be adverse, but less than significant due to the:

- short-term nature of the impact;

- limited physical area of impact;
- ability to open the parking area (if it used for Project staging) on weekends and other hours when use of the area for Project purposes is not required;
- continued availability of the public access point at Rustic Canyon Golf Course; and
- fact that the District will need to work with land owners in negotiating Project easements.

Indirect impacts of pipeline construction on persons using the regional park or golf course would include short-term construction noise, aesthetic effects, etc. (Noise and aesthetics are addressed in Sections C.21 and C.6 of this Initial Study.) These impacts would be limited to several days required for pipeline installation in the area, and potentially up to a few months if staging for the overall Project is provided at Happy Camp Regional Park.

There are no pending and approved projects that together with the proposed Project would result in cumulatively significant recreation impacts.

Over the long-term, the Project would provide reclaimed water for use within recreational facilities such as the Rustic Canyon Golf Course. This may be considered to be a beneficial impact for such recreational uses in that an additional source of irrigation water would be made available.

### **35.3.3 Mitigation and Residual Impacts**

No significant impact would result. Therefore, no mitigation is required. However, the following mitigation measures are provided to further reduce recreational impacts and will be incorporated into the Project.

- R1 VCWWD No. 1 will provide informational signage at both entrances to Happy Camp Regional Park at least two weeks prior to the initiation of Project construction activities that would impact the park. The signage will briefly describe the Project, identify the areas of impact and the period of time that park access will be impacted.
- R2 VCWWD No. 1 will provide for public access to the Upper Parking Area during periods when Project activities do not preclude its use due to safety considerations. This will include weekends, holidays and weekday hours prior to and after construction. Any, Project equipment and/or materials that remain within the Upper Parking Area during periods of public access will be contained within a secured area (e.g, surrounded by chain link fencing with locked gate).

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## **37.0 LIST OF PREPARERS**

### **37.1 COUNTY OF VENTURA STAFF**

R. Reddy Pakala, PE, Director County of Ventura Water and Sanitation Department

Eric Keller, Engineering Manager, County of Ventura Water and Sanitation Department

Susan Pan, Engineering Manager, County of Ventura Water and Sanitation Department

**37.2 PADRE ASSOCIATES, INC. STAFF:**

Simon Poulter - Principal Environmental Services

Donna M. Hebert – Project Manager Environmental Services

Matt Ingamells – Senior Biologist and Air Quality Analyst

Sierra Kelso – Environmental Analyst

Kristen Hart – Graphics

Pat McClure – Graphics

Annette Varner – Word Processing

**Subconsultant to Padre Associates, Inc.**

Conejo Archaeological Consultants, Mary Maki, Principal Archaeologist

**SECTION D - MANDATORY FINDINGS OF SIGNIFICANCE**

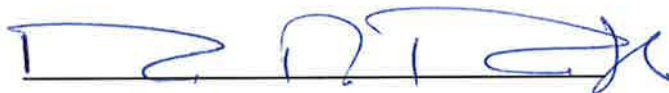
MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION E - DETERMINATION**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature:



R. Reddy Pakala, P.E.

Date:

11/11/13

Title:

Director, County of Ventura Water and Sanitation  
Department

## **APPENDICES**

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## **AIR QUALITY AND GREENHOUSE GASES**

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# HEAVY EQUIPMENT EMISSIONS

**Project:** Moorpark WWTP Phase IV Pipeline  
**Date:** 4/25/2013  
**Scenario:** Typical Trenching Spread

## INPUTS AND EMISSION FACTORS

Equipment Type	Model	Fuel	BHP	Number	Load Factor (Percent)	Hours/Day	Emission Factors (lb/BHP-hr)				
							NOx	ROC	CO	PM10	CO2
Tracked tractor	Caterpillar D6	Diesel	140	0	64	8	0.023	0.002	0.011	0.0010	1.150
Tracked tractor	Caterpillar D8N	Diesel	285	0	64	8	0.023	0.002	0.011	0.0010	1.150
Tracked tractor (cert.)	Caterpillar D8	Diesel	285	0	64	8	0.015	0.002	0.011	0.0009	1.150
Pipelayer	Caterpillar 527G	Diesel	200	1	64	8	0.023	0.002	0.011	0.0010	1.150
Wheeled tractor	Caterpillar 824C	Diesel	315	0	59	8	0.021	0.002	0.010	0.0005	1.150
Soil compactor	Caterpillar 815B	Diesel	216	1	59	8	0.021	0.002	0.010	0.0005	1.150
Elevating scraper	Caterpillar 623E	Diesel	365	0	72	8	0.019	0.001	0.011	0.0015	1.150
Elevating scraper (cert.)	Caterpillar 623	Diesel	365	0	72	8	0.015	0.002	0.011	0.0009	1.150
Tandem scraper	Caterpillar 637E	Diesel	700	0	72	8	0.019	0.001	0.011	0.0015	1.150
Standard scraper	Caterpillar 631E	Diesel	450	0	72	8	0.019	0.001	0.011	0.0015	1.150
Grader	Caterpillar 140G	Diesel	150	0	61	8	0.021	0.001	0.011	0.0015	1.150
Backhoe	Caterpillar 426	Diesel	70	1	55	8	0.022	0.003	0.015	0.0010	1.150
Wheeled loader	Bobcat	Diesel	65	0	68	8	0.023	0.002	0.011	0.0015	1.150
Wheeled loader	Caterpillar 950E	Diesel	160	0	68	8	0.023	0.002	0.011	0.0015	1.150
Wheeled loader	Caterpillar 966E	Diesel	216	0	68	8	0.023	0.002	0.011	0.0015	1.150
Wheeled loader	Caterpillar 988B	Diesel	375	0	68	8	0.023	0.002	0.011	0.0015	1.150
Excavator	Caterpillar 235	Diesel	250	1	57	8	0.024	0.001	0.011	0.0015	1.150
Excavator	Caterpillar 245	Diesel	360	0	57	8	0.024	0.001	0.011	0.0015	1.150
Off-highway truck	Caterpillar 773B	Diesel	650	0	57	8	0.026	0.005	0.032	0.0020	1.150
Crane	Cummins	Diesel	230	1	43	8	0.023	0.003	0.009	0.0015	1.150
Rock Crusher		Diesel	400	0	78	8	0.024	0.003	0.020	0.0015	1.150
Generator	Caterpillar 3114	Diesel	109	0	74	4	0.018	0.002	0.011	0.0010	1.150
Air compressor		Diesel	109	0	48	8	0.018	0.002	0.011	0.0010	1.150
Asphalt paver	Caterpillar AP-1200	Diesel	145	0	62	8	0.023	0.001	0.007	0.0010	1.150
Welding machine	Perkins 4-236	Diesel	63	0	45	8	0.018	0.002	0.011	0.0010	1.150
Water wagon	Caterpillar 3406B	Diesel	350	0	57	8	0.026	0.005	0.032	0.0020	1.150
Roller	Caterpillar CS-431B	Diesel	102	1	56	8	0.020	0.002	0.007	0.0010	1.150
Dewatering pumps		Gasoline	5	0	74	4	0.002	0.054	1.479	0.0003	1.080

## DAILY AND TOTAL EMISSIONS

Equipment Type	Emissions (lb/day)					Total Days	Emissions (Total Tons)				
	NOx	ROC	CO	PM10	CO2		NOx	ROC	CO	PM10	CO2
Tracked tractor	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Tracked tractor	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Tracked tractor (cert.)	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Pipelayer	23.6	2.0	11.3	1.0	1177.6	55	0.65	0.06	0.31	0.03	32.38
Wheeled tractor	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Soil compactor	21.4	2.0	10.2	0.5	1172.4	55	0.59	0.06	0.28	0.01	32.24
Elevating scraper	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Elevating scraper (cert.)	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Tandem scraper	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Standard scraper	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Grader	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Backhoe	6.8	0.9	4.6	0.3	354.2	55	0.19	0.03	0.13	0.01	9.74
Wheeled loader	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Wheeled loader	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Wheeled loader	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Wheeled loader	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Excavator	27.4	1.1	12.5	1.7	1311.0	55	0.75	0.03	0.34	0.05	36.05
Excavator	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Off-highway truck	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Crane	18.2	2.4	7.1	1.2	909.9	55	0.50	0.07	0.20	0.03	25.02
Rock Crusher	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Generator	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Air compressor	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Asphalt paver	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Welding machine	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Water wagon	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
Roller	9.1	0.9	3.2	0.5	525.5	55	0.25	0.03	0.09	0.01	14.45
Dewatering pumps	0.0	0.0	0.0	0.0	0.0	0	0.00	0.00	0.00	0.00	0.00
<b>SUM</b>	<b>106.4</b>	<b>9.4</b>	<b>48.9</b>	<b>5.2</b>	<b>5450.6</b>		<b>2.93</b>	<b>0.26</b>	<b>1.35</b>	<b>0.14</b>	<b>149.89</b>

Emissions = BHP\*Number\*Load factor/100\*Hours/day\*lb/BHP-hr

Emission factors from Nonroad Engine and Vehicle Emissions Study (EPA, 1991)

Load factors from EPA NONROAD Model (in prep): Average Life, Annual Activity, and Load Factor Values for Nonroad Engine Emissions Modeling (Report No. NR-005, Dec 1997)  
 1996 Federal Stds: 0.015 NOx, 0.0009 PM, 0.002 THC lb/BHP-hr

Fuel	Total Daily BHP-hr	N2O g/gal	CH4 g/gal	N2O g/BHP-hr	CH4 g/BHP-hr	Daily lbs N2O	Daily lbs CH4	Total tons N2O	Total tons CH4	CO2	TOTAL
Diesel	4739.68	0.1	1.4	0.0051	0.0720	0.054	0.753	0.0015	0.0207		
Gasoline	0	0.1	1.3	0.0056	0.0727	0.000	0.000	0.0000	0.0000		

GHG Summary (metric tons)  
 GHG CO2 Eq

0.0013 0.0188 136.27  
 0.4166 0.3951 136.27 **136.7**

CH4 and N2O emissions factors from California Climate Action Registry General Reporting Protocol, Table C5

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Project: Moorpark WWTP Phase IV Pipeline  
 Date: 4/25/13

Title : Ventura County Subarea Summer CYr 2014  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2013/04/19 13:47:48  
 Scen Year: 2014 -- All model years in the range 1970 to 2014 selected

Daily one-way trips: 50  
 Miles per trip: 15  
 Percent Autos: 30  
 Percent LDT: 45  
 Percent MDT: 5  
 Percent HDT: 20  
 Sum 100

Season : Summer  
 Area : Ventura  
 Year: 2014 -- Model Years 1970 to 2014 Inclusive -- Summer  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Ventura County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases

Temperature: 75F Relative Humidity: 60%

Speed MPH	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
25	5.449	0.037	0.166	0.044	5.676	0.046	0.086	0.075	5.53	0.063	0.124	0.071	7.193	0.089	0.079	0.11	3.857	0.178	0.156	0.178	3.857	0.114	0.217	0.165	5.833	0.349	0.175	0.215	15.786	3.475	0.817	0.911	5.833
30	4.639	0.029	0.142	0.036	4.833	0.037	0.074	0.062	4.709	0.05	0.106	0.057	6.129	0.07	0.068	0.088	2.962	0.136	0.133	0.139	2.962	0.087	0.186	0.135	4.491	0.265	0.15	0.177	12.189	2.669	0.675	0.746	4.491
35	4.135	0.024	0.125	0.03	4.308	0.031	0.064	0.053	4.198	0.042	0.093	0.048	5.466	0.058	0.059	0.074	2.371	0.109	0.117	0.113	2.371	0.069	0.163	0.115	3.602	0.21	0.131	0.151	9.809	2.136	0.567	0.622	3.602
40	3.861	0.021	0.112	0.027	4.023	0.028	0.058	0.048	3.919	0.037	0.083	0.043	5.105	0.051	0.053	0.066	1.978	0.091	0.105	0.096	1.978	0.057	0.146	0.1	3.013	0.173	0.117	0.132	8.229	1.783	0.491	0.537	3.013
45	3.776	0.02	0.102	0.025	3.934	0.026	0.053	0.046	3.833	0.034	0.076	0.04	4.994	0.048	0.049	0.062	1.722	0.079	0.096	0.084	1.722	0.05	0.134	0.09	2.628	0.149	0.108	0.119	7.198	1.553	0.449	0.488	2.628
50	3.869	0.02	0.096	0.025	4.031	0.025	0.05	0.046	3.927	0.034	0.071	0.039	5.116	0.047	0.046	0.062	1.565	0.071	0.09	0.077	1.565	0.045	0.125	0.084	2.392	0.135	0.101	0.11	6.565	1.412	0.44	0.475	2.392

Speed MPH	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT	
25	0.006	0.018	0.000	0.000	0.009	0.001	0.000	0.000	0.034	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.270	0.000	0.349
30	0.005	0.014	0.000	0.000	0.007	0.001	0.000	0.000	0.027	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.223	0.000	0.286
35	0.005	0.012	0.000	0.000	0.006	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.188	0.000	0.240	
40	0.004	0.010	0.000	0.000	0.006	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.162	0.000	0.209	
45	0.004	0.010	0.000	0.000	0.005	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.148	0.000	0.192	
50	0.004	0.010	0.000	0.000	0.005	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.146	0.000	0.188	

Pollutant Name: Carbon Monoxide

Temperature: 75F Relative Humidity: 60%

Speed MPH	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
25	54.467	1.712	0.807	1.785	54.743	2.268	0.634	2.481	53.324	2.742	0.738	2.813	97.008	3.142	0.615	3.414	79.984	1.983	0.863	1.842	79.984	1.453	0.987	1.313	119.976	5.319	1.651	2.504	442.211	42.396	3.453	4.903	119.976
30	48.83	1.572	0.667	1.638	49.077	2.077	0.524	2.265	47.805	2.513	0.61	2.577	86.967	2.88	0.508	3.124	66.309	1.644	0.714	1.527	66.309	1.205	0.816	1.088	99.464	4.41	1.365	2.073	366.606	35.147	3.029	4.226	99.464
35	46.101	1.452	0.578	1.514	46.334	1.918	0.454	2.096	45.133	2.319	0.528	2.379	82.106	2.661	0.44	2.892	58.08	1.44	0.618	1.336	58.08	1.055	0.707	0.949	87.121	3.862	1.182	1.805	321.111	30.786	2.696	3.743	87.121
40	45.835	1.348	0.523	1.41	46.067	1.787	0.411	1.966	44.873	2.155	0.479	2.215	81.634	2.479	0.399	2.71	53.749	1.333	0.56	1.234	53.749	0.976	0.64	0.872	80.624	3.574	1.071	1.651	297.165	28.49	2.453	3.423	80.624
45	47.992	1.26	0.496	1.325	48.235	1.68	0.39	1.873	46.985	2.016	0.454	2.079	85.476	2.33	0.378	2.573	52.553	1.303	0.531	1.203	52.553	0.955	0.607	0.844	78.83	3.495	1.015	1.589	290.553	27.856	2.301	3.253	78.83
50	52.92	1.185	0.492	1.257	53.187	1.596	0.387	1.817	51.809	1.901	0.45	1.972	94.252	2.213	0.375	2.482	54.289	1.346	0.527	1.238	54.289	0.986	0.602	0.86	81.434	3.61	1.007	1.608	300.151	28.776	2.239	3.227	81.434

Speed MPH	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT	
25	0.061	0.845	0.001	0.000	0.450	0.005	0.000	0.000	1.475	0.000	0.000	0.000	0.000	0.148	0.000	0.000	0.064	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.142	0.000	4.194
30	0.054	0.776	0.001	0.000	0.412	0.004	0.000	0.000	1.352	0.000	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.053	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.002	0.000	3.792	
35	0.051	0.717	0.001	0.000	0.381	0.003	0.000	0.000	1.247	0.000	0.000	0.000	0.000	0.126	0.000	0.000	0.000	0.047	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.892	0.000	3.466	
40	0.051	0.666	0.001	0.000	0.355	0.003	0.000	0.000	1.159	0.000	0.000	0.000	0.000	0.117	0.000	0.000	0.000	0.043	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.811	0.000	3.207	
45	0.053	0.622	0.001	0.000	0.334	0.003	0.000	0.000	1.084	0.000	0.000	0.000	0.000	0.110	0.000	0.000	0.000	0.042	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.761	0.000	3.012	
50	0.059	0.585	0.001	0.000	0.317	0.003	0.000	0.000	1.023	0.000	0.000	0.000	0.000	0.104	0.000	0.000	0.000	0.044	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.740	0.000	2.877	

Pollutant Name: Carbon Dioxide

Temperature: 75F Relative Humidity: 60%

Speed MPH	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
25	550.299	413.684	355.531	413.814	544.038	517.483	346.749	512.689	544.816	519.909	350.093	519.796	692.155	710.198	346.406	709.286	685.012	685.012	519.521	651.018	685.012	685.012	524.848	611.231	685.012	685.012	1505	1351.632	685.012	685.012	2042.685	1996.428	685.012
30	483.454	363.449	355.531	363.611	477.524	454.809	346.749	451.611	478.212	456.739	350.093	456.676	607.61	623.909	346.406	623.205	567.895	56															





Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases

Temperature: 75F Relative Humidity: ALL

Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT				
5	2.659	0.027	0	0.033	2.759	0.026	0	0.041	2.637	0.036	0	0.04	3.295	0.049	0	0.06	4.369	0.129	0	0.128	4.369	0.127	0	0.107	6.554	0.322	0	0.199	10.295	1.049	0	0.792	6.554				
10	2.636	0.052	0	0.058	2.735	0.05	0	0.064	2.614	0.071	0	0.075	3.267	0.096	0	0.107	4.332	0.252	0	0.24	4.332	0.248	0	0.197	6.498	0.627	0	0.297	10.207	2.045	0	1.27	6.498				
20	2.662	0.1	0	0.106	2.761	0.096	0	0.109	2.639	0.135	0	0.139	3.298	0.185	0	0.195	4.373	0.483	0	0.45	4.373	0.475	0	0.366	6.56	1.189	0	0.481	10.305	3.876	0	2.156	6.56				
30	2.781	0.143	0	0.15	2.885	0.138	0	0.15	2.758	0.194	0	0.198	3.446	0.266	0	0.276	4.57	0.692	0	0.641	4.57	0.681	0	0.52	6.855	1.685	0	0.646	10.768	5.495	0	2.949	6.855				
40	2.995	0.182	0	0.189	3.107	0.176	0	0.187	2.97	0.247	0	0.251	3.712	0.339	0	0.35	4.921	0.879	0	0.813	4.921	0.865	0	0.659	7.382	2.116	0	0.794	11.596	6.901	0	3.65	7.382				
50	3.304	0.217	0	0.224	3.427	0.21	0	0.222	3.276	0.293	0	0.298	4.094	0.404	0	0.416	5.428	1.046	0	0.965	5.428	1.029	0	0.782	8.142	2.482	0	0.924	12.79	8.093	0	4.259	8.142				
60	3.435	0.247	0	0.254	3.563	0.24	0	0.251	3.406	0.334	0	0.339	4.256	0.462	0	0.474	5.643	1.191	0	1.098	5.643	1.171	0	0.889	8.465	2.783	0	1.026	13.298	9.073	0	4.745	8.465				
120	3.768	0.343	0	0.35	3.909	0.342	0	0.351	3.737	0.468	0	0.473	4.67	0.66	0	0.672	6.192	1.656	0	1.523	6.192	1.625	0	1.229	9.288	3.397	0	1.238	14.59	11.077	0	5.748	9.288				
180	4.102	0.365	0	0.373	4.256	0.364	0	0.374	4.068	0.498	0	0.504	5.083	0.703	0	0.716	6.74	1.763	0	1.621	6.74	1.729	0	1.308	10.11	3.605	0	1.317	15.882	11.753	0	6.11	10.11				
240	4.436	0.386	0	0.395	4.602	0.386	0	0.397	4.399	0.528	0	0.534	5.497	0.745	0	0.76	7.289	1.867	0	1.717	7.289	1.832	0	1.386	10.933	3.806	0	1.394	17.174	12.408	0	6.462	10.933				
300	4.77	0.407	0	0.417	4.948	0.407	0	0.42	4.729	0.557	0	0.563	5.917	0.787	0	0.802	7.837	1.97	0	1.812	7.837	1.932	0	1.462	11.755	4	0	1.469	18.466	13.041	0	6.803	11.755				
360	5.103	0.428	0	0.439	5.294	0.428	0	0.442	5.06	0.585	0	0.592	6.324	0.827	0	0.844	8.385	2.07	0	1.904	8.385	2.03	0	1.537	12.578	4.188	0	1.542	19.758	13.653	0	7.134	12.578				
420	5.437	0.448	0	0.46	5.641	0.449	0	0.464	5.391	0.613	0	0.621	6.738	0.867	0	0.885	8.934	2.168	0	1.995	8.934	2.126	0	1.61	13.401	4.369	0	1.613	21.05	14.244	0	7.455	13.401				
480	5.771	0.468	0	0.48	5.987	0.469	0	0.485	5.722	0.64	0	0.648	7.151	0.906	0	0.925	9.482	2.264	0	2.084	9.482	2.22	0	1.682	14.223	4.543	0	1.682	22.342	14.813	0	7.765	14.223				
540	6.105	0.487	0	0.5	6.333	0.489	0	0.506	6.053	0.667	0	0.676	7.565	0.945	0	0.965	10.03	2.358	0	2.171	10.03	2.312	0	1.752	15.046	4.711	0	1.748	23.634	15.361	0	8.065	15.046				
600	6.438	0.506	0	0.52	6.679	0.508	0	0.527	6.384	0.693	0	0.702	7.978	0.982	0	1.004	10.579	2.45	0	2.256	10.579	2.403	0	1.82	15.868	4.872	0	1.812	24.926	15.887	0	8.355	15.868				
660	6.772	0.525	0	0.539	7.025	0.527	0	0.547	6.715	0.719	0	0.728	8.392	1.019	0	1.042	11.127	2.54	0	2.339	11.127	2.491	0	1.888	16.691	5.027	0	1.874	26.218	16.392	0	8.634	16.691				
720	7.106	0.543	0	0.558	7.372	0.546	0	0.567	7.046	0.744	0	0.754	8.806	1.056	0	1.079	11.676	2.628	0	2.421	11.676	2.576	0	1.953	17.513	5.175	0	1.934	27.511	16.875	0	8.903	17.513				
Pounds/day: 180 min soak																																	<b>SUM</b>				
0.000304144 0.012016 0 0 0.004819 0 0 0.017859 0 0 0.002211 0.0410114																																					

Pollutant Name: Carbon Monoxide

Temperature: 75F Relative Humidity: ALL

Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
5	23.157	0.276	0	0.33	24.134	0.318	0	0.447	23.573	0.394	0	0.433	45.241	0.493	0	0.645	40.99	1.352	0	1.335	40.99	1.199	0	1.008	61.485	4.766	0	2.434	235.197	12.751	0	12.69	61.485
10	20.506	0.542	0	0.59	21.371	0.626	0	0.727	20.875	0.775	0	0.808	40.062	0.971	0	1.102	36.297	2.658	0	2.511	36.297	2.358	0	1.858	54.446	9.338	0	3.819	208.272	24.984	0	17.84	54.446
20	15.83	1.049	0	1.083	16.497	1.213	0	1.261	16.114	1.499	0	1.522	30.925	1.877	0	1.971	28.02	5.13	0	4.739	28.02	4.552	0	3.471	42.029	17.901	0	6.424	160.774	47.895	0	27.569	42.029
30	11.987	1.522	0	1.544	12.493	1.759	0	1.762	12.202	2.173	0	2.188	23.418	2.718	0	2.781	21.217	7.416	0	6.801	21.217	6.582	0	4.966	31.826	25.69	0	8.809	121.744	68.735	0	36.534	31.826
40	8.978	1.959	0	1.972	9.356	2.265	0	2.229	9.139	2.796	0	2.804	17.539	3.494	0	3.533	15.891	9.516	0	8.698	15.891	8.45	0	6.344	23.837	32.704	0	10.974	91.182	87.501	0	44.735	23.837
50	6.802	2.36	0	2.367	7.089	2.731	0	2.663	6.925	3.369	0	3.372	13.29	4.206	0	4.226	12.041	11.43	0	10.429	12.041	10.154	0	7.603	18.061	38.943	0	12.919	69.089	104.196	0	52.171	18.061
60	5.461	2.727	0	2.73	5.691	3.157	0	3.064	5.559	3.892	0	3.891	10.669	4.853	0	4.86	9.666	13.157	0	11.995	9.666	11.694	0	8.745	14.499	44.408	0	14.645	55.464	118.818	0	58.844	14.499
120	14.722	4.086	0	4.105	15.343	4.745	0	4.644	14.987	5.822	0	5.831	28.762	7.208	0	7.262	26.059	19.242	0	17.573	26.059	17.158	0	12.864	39.089	60.884	0	20.354	149.527	162.899	0	82.719	39.089
180	23.262	4.389	0	4.428	24.244	5.104	0	5.041	23.68	6.249	0	6.272	45.446	7.713	0	7.821	41.176	20.444	0	18.705	41.176	18.257	0	13.725	61.764	62.664	0	21.259	236.264	167.661	0	87.427	61.764
240	30.897	4.667	0	4.723	32.201	5.433	0	5.404	31.453	6.642	0	6.677	60.362	8.178	0	8.334	54.69	21.562	0	19.757	54.69	19.278	0	14.524	82.035	64.502	0	22.148	313.809	172.58	0	91.956	82.035
300	37.627	4.921	0	4.992	39.215	5.732	0	5.731	38.303	7	0	7.045	73.51	8.604	0	8.802	66.603	22.599	0	20.73	66.603	20.221	0	15.26	99.904	66.399	0	23.022	382.161	177.656	0	96.304	99.904
360	43.452	5.149	0	5.233	45.285	6	0	6.025	44.233	7.322	0	7.377	84.89	8.99	0	9.225	76.913	23.553	0	21.624	76.913	21.086	0	15.933	115.369	68.355	0	23.881	441.32	182.888	0	100.473	115.369
420	48.372	5.351	0	5.447	50.412	6.238	0	6.283	49.241	7.609	0	7.672	94.501	9.336	0	9.602	85.621	24.424	0	22.44	85.621	21.873	0	16.544	128.431	70.369	0	24.723	491.287	188.278	0	104.462	128.431
480	52.386	5.529	0	5.633	54.596	6.446	0	6.507	53.328	7.861	0	7.93	102.344	9.643	0	9.934	92.727	25.213	0	23.175	92.727	22.582	0	17.093	139.09	72.442	0	25.551	532.061	193.825	0	108.271	139.09
540	55.496	5.681	0	5.793	57.837	6.623	0	6.696	56.493	8.078	0	8.152	108.419	9.911	0	10.221	98.231	25.919	0	23.832	98.231	23.213	0	17.579	147.346	74.574	0	26.362	563.642	199.529	0	111.899	147.346
600	57.7	5.809	0	5.925	60.134	6.77	0	6.851	58.737	8.26	0	8.337	112.725	10.139	0	10.462	102.133	26.543	0	24.41	102.133	23.767	0	18.002	153.199	76.765	0	27.159	586.03	205.389	0	115.348	153.199
660	58.999	5.911	0	6.03	61.488	6.887	0	6.971	60.06	8.407	0	8.486	115.263	10.327	0	10.658	104.433	27.085	0	24.908	104.433	24.242	0	18.363	156.649	79.014	0	27.939	599.226	211.407	0	118.618	156.649
720	59.394	5.988	0	6.107	61.899	6.974	0	7.056	60.461	8.519	0	8.598	116																				

Pollutant Name: Oxides of Nitrogen

Temperature: 75F

Relative Humidity: ALL

Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
5	1.039	0.144	0	0.146	1.043	0.164	0	0.163	1.026	0.292	0	0.293	1.72	0.371	0	0.375	0.505	1.356	0	1.235	0.505	1.374	0	1.025	0.758	1.256	0	0.419	2.954	3.86	0	1.944	0.758
10	1.13	0.162	0	0.164	1.134	0.181	0	0.18	1.115	0.327	0	0.328	1.869	0.414	0	0.418	0.549	1.55	0	1.412	0.549	1.591	0	1.188	0.824	1.892	0	0.627	3.211	5.816	0	2.894	0.824
20	1.294	0.195	0	0.197	1.299	0.212	0	0.211	1.278	0.388	0	0.389	2.141	0.49	0	0.495	0.629	1.895	0	1.726	0.629	1.976	0	1.475	0.944	3.01	0	0.992	3.678	9.251	0	4.564	0.944
30	1.437	0.222	0	0.225	1.442	0.237	0	0.236	1.418	0.44	0	0.441	2.377	0.554	0	0.559	0.698	2.182	0	1.987	0.698	2.295	0	1.713	1.047	3.921	0	1.29	4.083	12.05	0	5.925	1.047
40	1.557	0.244	0	0.247	1.563	0.258	0	0.257	1.537	0.481	0	0.482	2.576	0.605	0	0.61	0.757	2.409	0	2.194	0.757	2.547	0	1.901	1.135	4.625	0	1.52	4.425	14.213	0	6.977	1.135
50	1.656	0.26	0	0.263	1.662	0.273	0	0.272	1.634	0.512	0	0.513	2.74	0.644	0	0.649	0.805	2.577	0	2.347	0.805	2.732	0	2.039	1.207	5.121	0	1.682	4.705	15.74	0	7.722	1.207
60	1.732	0.271	0	0.274	1.739	0.284	0	0.283	1.71	0.532	0	0.534	2.866	0.669	0	0.675	0.842	2.687	0	2.447	0.842	2.852	0	2.128	1.263	5.411	0	1.777	4.923	16.631	0	8.157	1.263
120	1.736	0.286	0	0.289	1.743	0.302	0	0.3	1.714	0.564	0	0.565	2.873	0.71	0	0.715	0.844	2.824	0	2.572	0.844	2.986	0	2.229	1.266	5.43	0	1.783	4.934	16.688	0	8.185	1.266
180	1.695	0.285	0	0.288	1.701	0.301	0	0.299	1.673	0.562	0	0.563	2.804	0.707	0	0.713	0.824	2.816	0	2.564	0.824	2.977	0	2.222	1.235	5.41	0	1.776	4.816	16.627	0	8.152	1.235
240	1.64	0.283	0	0.286	1.646	0.299	0	0.297	1.619	0.558	0	0.559	2.713	0.702	0	0.707	0.797	2.796	0	2.546	0.797	2.957	0	2.207	1.195	5.379	0	1.766	4.66	16.533	0	8.103	1.195
300	1.571	0.28	0	0.283	1.578	0.296	0	0.293	1.551	0.552	0	0.553	2.6	0.695	0	0.699	0.764	2.767	0	2.519	0.764	2.926	0	2.184	1.146	5.338	0	1.752	4.466	16.407	0	8.037	1.146
360	1.49	0.276	0	0.278	1.495	0.291	0	0.288	1.47	0.543	0	0.544	2.465	0.684	0	0.688	0.724	2.727	0	2.483	0.724	2.885	0	2.153	1.086	5.287	0	1.734	4.233	16.248	0	7.954	1.086
420	1.394	0.271	0	0.273	1.4	0.285	0	0.282	1.376	0.533	0	0.534	2.307	0.671	0	0.674	0.678	2.677	0	2.437	0.678	2.834	0	2.114	1.017	5.225	0	1.713	3.963	16.058	0	7.854	1.017
480	1.286	0.264	0	0.266	1.291	0.278	0	0.274	1.269	0.52	0	0.521	2.127	0.654	0	0.658	0.625	2.616	0	2.382	0.625	2.772	0	2.068	0.937	5.152	0	1.688	3.654	15.834	0	7.738	0.937
540	1.164	0.257	0	0.259	1.168	0.27	0	0.256	1.149	0.505	0	0.506	1.926	0.635	0	0.638	0.566	2.545	0	2.317	0.566	2.699	0	2.014	0.848	5.069	0	1.66	3.307	15.579	0	7.605	0.848
600	1.028	0.248	0	0.25	1.032	0.26	0	0.256	1.015	0.488	0	0.488	1.701	0.614	0	0.616	0.5	2.464	0	2.243	0.5	2.616	0	1.952	0.75	4.975	0	1.628	2.922	15.291	0	7.456	0.75
660	0.879	0.239	0	0.24	0.883	0.249	0	0.245	0.868	0.469	0	0.469	1.455	0.589	0	0.59	0.427	2.373	0	2.16	0.427	2.522	0	1.882	0.641	4.871	0	1.593	2.499	14.971	0	7.289	0.641
720	0.717	0.228	0	0.229	0.72	0.237	0	0.232	0.708	0.447	0	0.447	1.186	0.562	0	0.562	0.349	2.271	0	2.067	0.349	2.418	0	1.804	0.523	4.756	0	1.554	2.038	14.618	0	7.106	0.523

Pounds/day: 180 min soak	0.000125676	0.009382	0	0	0.003985	0	0	0.020154	0	0	0.002224	0	0	0.006073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0419439
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Pollutant Name: PM10

Temperature: 75F

Relative Humidity: ALL

Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
5	0.011	0.001	0	0.001	0.011	0.001	0	0.001	0.011	0.001	0	0.001	0.012	0.001	0	0.001	0.011	0.001	0	0.001	0.011	0.001	0	0.001	0.011	0.001	0	0.001	0.011	0.002	0	0.001	0.011
10	0.01	0.001	0	0.001	0.01	0.001	0	0.001	0.01	0.002	0	0.002	0.01	0.003	0	0.003	0.01	0.002	0	0.001	0.01	0.002	0	0.001	0.01	0.002	0	0.001	0.01	0.004	0	0.002	0.01
20	0.008	0.002	0	0.002	0.008	0.002	0	0.002	0.008	0.005	0	0.005	0.008	0.005	0	0.005	0.008	0.003	0	0.003	0.008	0.003	0	0.002	0.008	0.004	0	0.002	0.008	0.007	0	0.003	0.008
30	0.006	0.003	0	0.003	0.006	0.003	0	0.003	0.006	0.007	0	0.007	0.006	0.007	0	0.007	0.006	0.004	0	0.004	0.006	0.005	0	0.004	0.006	0.006	0	0.002	0.006	0.01	0	0.005	0.006
40	0.004	0.004	0	0.004	0.004	0.004	0	0.004	0.004	0.009	0	0.009	0.005	0.009	0	0.009	0.004	0.005	0	0.005	0.004	0.006	0	0.004	0.004	0.008	0	0.003	0.004	0.012	0	0.006	0.004
50	0.003	0.004	0	0.004	0.003	0.005	0	0.005	0.003	0.011	0	0.011	0.003	0.011	0	0.011	0.003	0.007	0	0.006	0.003	0.007	0	0.005	0.003	0.01	0	0.003	0.003	0.015	0	0.007	0.003
60	0.003	0.005	0	0.005	0.003	0.006	0	0.005	0.003	0.013	0	0.013	0.003	0.013	0	0.013	0.003	0.008	0	0.007	0.003	0.008	0	0.006	0.003	0.011	0	0.004	0.003	0.017	0	0.008	0.003
120	0.007	0.008	0	0.008	0.007	0.009	0	0.008	0.007	0.019	0	0.019	0.007	0.02	0	0.02	0.007	0.011	0	0.01	0.007	0.012	0	0.009	0.007	0.015	0	0.005	0.007	0.023	0	0.011	0.007
180	0.011	0.008	0	0.008	0.011	0.01	0	0.009	0.011	0.021	0	0.021	0.012	0.022	0	0.021	0.011	0.012	0	0.011	0.011	0.013	0	0.01	0.011	0.016	0	0.005	0.011	0.024	0	0.012	0.011
240	0.015	0.009	0	0.009	0.015	0.01	0	0.01	0.015	0.022	0	0.022	0.016	0.023	0	0.023	0.015	0.013	0	0.012	0.015	0.014	0	0.01	0.015	0.016	0	0.005	0.015	0.024	0	0.012	0.015
300	0.018	0.01	0	0.01	0.018	0.011	0	0.011	0.019	0.024	0	0.024	0.019	0.024	0	0.024	0.018	0.013	0	0.012	0.018	0.014	0	0.011	0.018	0.017	0	0.006	0.018	0.025	0	0.013	0.018
360	0.021	0.01	0	0.01	0.021	0.012	0	0.011	0.021	0.025	0	0.025	0.022	0.026	0	0.025	0.021	0.014	0	0.013	0.021	0.015	0	0.011	0.021	0.017	0	0.006	0.021	0.026	0	0.013	0.021
420	0.023	0.011	0	0.011	0.023	0.012	0	0.012	0.024	0.026	0	0.026	0.024	0.027	0	0.027	0.023	0.015	0	0.013	0.023	0.016	0	0.012	0.023	0.018	0	0.006	0.023	0.026	0	0.013	0.023
480	0.025	0.011	0	0.011	0.025	0.012	0	0.012	0.026	0.027	0	0.027	0.026	0.028	0	0.027	0.025	0.015	0	0.014	0.025	0.016	0	0.012	0.025	0.018	0	0.006	0.025	0.027	0	0.014	0.025
540	0.027	0.011	0	0.011	0.027	0.013	0	0.012	0.027	0.028	0	0.027	0.028	0.028	0	0.028	0.027	0.015	0	0.014	0.027	0.017	0	0.012	0.027	0.019	0	0.006	0.027	0.028	0	0.014	0.027
600	0.028	0.011	0	0.011	0.028	0.013	0	0.013	0.028	0.028	0	0.028	0.029	0.029	0	0.029	0.028	0.016	0	0.014	0.028	0.017	0	0.013	0.028	0.019	0	0.007	0.028	0.029	0	0.015	0.028
660	0.029	0.012	0	0.012	0.028	0.013	0	0.013	0.029	0.029	0	0.028	0.03	0.029	0	0.029	0.029	0.016	0	0.015	0.029	0.017	0	0.013	0.029	0.02	0	0.007	0.029	0.03	0	0.015	0.029
720	0.029	0.012	0	0.012	0.028	0.013	0	0.013	0.029	0.029	0	0.029	0.03	0.03	0	0.03	0.029	0.016	0	0.015	0.029	0.018	0	0.013	0.029	0.02	0	0					

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases		Temperature: 75F										Relative Humidity: ALL																					
Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
5	0.865	0.056	0	0.058	0.902	0.055	0	0.058	0.894	0.06	0	0.061	0.296	0.056	0	0.056	0.383	0.017	0	0.016	0.384	0.017	0	0.014	0.221	0.015	0	0.008	0.22	0.017	0	0.014	0.221
10	1.594	0.103	0	0.107	1.66	0.101	0	0.107	1.646	0.111	0	0.114	0.545	0.103	0	0.104	0.706	0.031	0	0.03	0.706	0.032	0	0.026	0.407	0.028	0	0.015	0.405	0.032	0	0.027	0.406
20	2.706	0.177	0	0.182	2.818	0.173	0	0.183	2.794	0.19	0	0.194	0.925	0.176	0	0.178	1.198	0.054	0	0.052	1.199	0.055	0	0.045	0.69	0.049	0	0.026	0.688	0.055	0	0.046	0.689
30	3.457	0.227	0	0.234	3.597	0.223	0	0.235	3.567	0.245	0	0.25	1.181	0.227	0	0.23	1.53	0.071	0	0.068	1.53	0.072	0	0.058	0.881	0.064	0	0.034	0.878	0.072	0	0.059	0.88
40	3.73	0.246	0	0.254	3.88	0.241	0	0.255	3.847	0.265	0	0.271	1.273	0.246	0	0.249	1.65	0.077	0	0.074	1.651	0.079	0	0.063	0.95	0.07	0	0.037	0.947	0.079	0	0.065	0.949

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Pounds/day: 30 min	SUM																															
0.00025632	0.007473	0	0	0.002952	0	0	0.008786	0	0	0.000714	0	0	0.000153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0203347

Table 7: Estimated Travel Fractions

Pollutant Name:		Temperature: ALL										Relative Humidity: ALL																						
	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT	
%VMT	0.001	0.467	0.001	0.468	0	0.088	0.003	0.091	0	0.237	0	0.238	0	0.12	0	0.121	0	0.024	0.006	0.031	0	0.005	0.004	0.009	0	0.002	0.01	0.013	0	0	0.014	0.015	0	
%TRIP	0.001	0.444	0.001	0.446	0	0.079	0.003	0.082	0	0.214	0	0.215	0	0.105	0	0.105	0	0.072	0.007	0.079	0	0.014	0.005	0.019	0.001	0.012	0.024	0.036	0	0.001	0.001	0.003	0	
%VEH	0.002	0.474	0.001	0.476	0.001	0.084	0.003	0.088	0.001	0.229	0	0.23	0.001	0.112	0	0.113	0	0.014	0.004	0.018	0	0.003	0.003	0.005	0	0.002	0.006	0.007	0	0	0.002	0.002	0	
Project:	0.001	0.299	0.001	0.000	0.120	0.005	0.000	0.325	0.000	0.029	0.000	0.000	0.029	0.000	0.000	0.000	0.020	0.002	0.000	0.020	0.002	0.000	0.000	0.005	0.000	0.002	0.006	0.007	0	0	0.002	0.002	0.2	SUM:

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Reactive Org Gases		Temperature: 75F										Relative Humidity: ALL																					
Time min	LDA NCAT	LDA CAT	LDA DSL	LDA ALL	LDT1 NCAT	LDT1 CAT	LDT1 DSL	LDT1 ALL	LDT2 NCAT	LDT2 CAT	LDT2 DSL	LDT2 ALL	MDV NCAT	MDV CAT	MDV DSL	MDV ALL	LHD1 NCAT	LHD1 CAT	LHD1 DSL	LHD1 ALL	LHD2 NCAT	LHD2 CAT	LHD2 DSL	LHD2 ALL	MHD NCAT	MHD CAT	MHD DSL	MHD ALL	HHD NCAT	HHD CAT	HHD DSL	HHD ALL	LHV NCAT
1	1.426	0.012	0	0.014	1.996	0.36	0	0.358	1.857	0.446	0	0.447	0.504	0.385	0	0.385	2.258	0.301	0	0.241	2.294	0.311	0	0.169	1.921	0.529	0	0.101	3.338	0.408	0	0.015	1.918
2	1.288	0.014	0	0.016	1.216	0.183	0	0.183	1.129	0.226	0	0.227	0.299	0.196	0	0.196	1.261	0.158	0	0.127	1.362	0.161	0	0.088	1.159	0.277	0	0.053	1.879	0.216	0	0.008	1.179
3	1.239	0.017	0	0.019	0.955	0.126	0	0.126	0.885	0.155	0	0.156	0.23	0.135	0	0.135	0.928	0.111	0	0.089	1.05	0.113	0	0.062	0.904	0.196	0	0.038	1.391	0.155	0	0.006	0.931
4	1.212	0.02	0	0.022	0.823	0.099	0	0.1	0.762	0.121	0	0.122	0.196	0.106	0	0.106	0.761	0.089	0	0.071	0.893	0.09	0	0.049	0.775	0.156	0	0.03	1.146	0.126	0	0.005	0.806
5	1.194	0.022	0	0.024	0.743	0.084	0	0.085	0.687	0.101	0	0.101	0.175	0.089	0	0.089	0.66	0.076	0	0.061	0.798	0.076	0	0.042	0.697	0.132	0	0.026	0.999	0.109	0	0.004	0.73
10	1.146	0.026	0	0.028	0.577	0.054	0	0.055	0.533	0.062	0	0.063	0.132	0.056	0	0.057	0.456	0.05	0	0.041	0.601	0.05	0	0.028	0.536	0.086	0	0.017	0.697	0.075	0	0.003	0.572
15	1.116	0.027	0	0.029	0.515	0.045	0	0.046	0.475	0.051	0	0.051	0.117	0.047	0	0.047	0.385	0.043	0	0.035	0.53	0.042	0	0.023	0.477	0.072	0	0.014	0.591	0.065	0	0.002	0.512
20	1.092	0.028	0	0.029	0.48	0.041	0	0.042	0.443	0.046	0	0.046	0.108	0.043	0	0.043	0.347	0.04	0	0.032	0.489	0.039	0	0.022	0.443	0.065	0	0.013	0.533	0.06	0	0.002	0.478
25	1.071	0.028	0	0.029	0.455	0.039	0	0.04	0.42	0.044	0	0.044	0.102	0.041	0	0.041	0.323	0.038	0	0.031	0.462	0.037	0	0.021	0.42	0.062	0	0.012	0.495	0.057	0	0.002	0.454
30	1.053	0.027	0	0.028	0.445	0.037	0	0.038	0.411	0.042	0	0.042	0.1	0.039	0	0.04	0.317	0.037	0	0.03	0.451	0.036	0	0.02	0.411	0.06	0	0.012	0.484	0.055	0	0.002	0.444
35	1.036	0.026	0	0.027	0.435	0.036	0	0.037	0.402	0.04	0	0.04	0.099	0.038	0	0.038	0.311	0.036	0	0.029	0.441	0.035	0	0.019	0.402	0.058	0	0.011	0.473	0.054	0	0.002	0.434
40	1.02	0.025	0	0.027	0.425	0.034	0	0.035	0.393	0.038	0	0.039	0.097	0.036	0	0.036	0.306	0.034	0	0.028	0.432	0.034	0	0.018	0.394	0.056	0	0.011	0.463	0.052	0	0.002	0.425
45	1.004	0.024	0	0.026	0.417	0.033	0	0.034	0.385	0.037	0	0.037	0.095	0.035	0	0.035	0.3	0.033	0	0.027	0.423	0.032	0	0.018	0.386	0.054	0	0.011	0.453	0.051	0	0.002	0.416
50	0.961	0.024	0	0.025	0.408	0.032	0	0.033	0.378	0.035	0	0.036	0.094	0.034	0	0.034	0.295	0.032	0	0.026	0.414	0.031	0	0.017	0.378	0.053	0	0.01	0.443	0.049	0	0.002	0.407
55	0.907	0.023	0	0.024	0.4	0.03	0	0.031	0.37	0.034	0	0.034	0.092	0.032	0	0.032	0.29	0.031	0	0.025	0.406	0.03	0	0.017	0.371	0.051	0	0.01	0.434	0.048	0	0.002	0.399
60	0.86	0.022	0	0.023	0.392	0.029	0	0.03	0.363	0.032	0	0.033	0.091	0.031	0	0.031	0.286	0.03	0	0.024	0.398	0.029	0	0.016	0.364	0.049	0	0.01	0.425	0.047	0	0.002	0.392

Pounds/day: 30 min per trip	SUM																															
7.8075E-05	0.000889	0	0	0.00049	0	0	0.001506	0	0	0.000123	0	0	7.98E-05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0031654

**RESULTS: pounds per day**

Speed	ROG	CO	NOx	PM10	CO2
25	0.41	4.70	3.04	0.18	1323.13
30	0.35	4.30	2.88	0.17	1204.75
35	0.30	3.97	2.75	0.15	1122.95
40	0.27	3.71	2.67	0.15	1071.08
45	0.26	3.52	2.62	0.15	1045.58
50	0.25	3.38	2.61	0.16	1045.12

### Construction

Source	CO2		CH4		N2O		MTCO2 eq
	lbs/day	Tons	lbs/day	Tons	lbs/day	Tons	
Construction equipment	5450.6	149.9	0.753	0.021	0.054	0.001	137.1
On-road transportation	1071.1	29.5	0.082	0.002	0.085	0.002	27.5
<b>Total</b>	<b>6521.7</b>	<b>179.3</b>	<b>0.835</b>	<b>0.023</b>	<b>0.139</b>	<b>0.004</b>	<b>164.6</b>

Days:

**55**

### Operation

Source	CO2		CH4		N2O		MTCO2 eq
	lb/MW-hr	Tons	lb/MW-hr	Tons	lb/MW-hr	Tons	
Pumps	724.12	1.6	0.0302	0.00007	0.0081	0.00002	1.4

Assume 1 KW-hr for all 3 pumps, run half-time (4380 hours/year) or 4.38 MW-yr

Source	CO2		CH4		N2O		MTCO2 eq
	lb/year	Tons	lb/year	Tons	lb/year	Tons	
Maintenance trips	156.35	0.08	0.02	0.00001	0.024	0.00001	0.1

Assume one trip/month

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## **BIOLOGICAL RESOURCES**

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California Department of Fish and Game  
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**Aspidoscelis tigris stejnegeri**

coastal whiptail

**Element Code:** ARACJ02143

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> None	<b>Global:</b> G5T3T4	<b>CDFG Status:</b>
<b>State:</b> None	<b>State:</b> S2S3	

<b>Occurrence No.</b> 11	<b>Map Index:</b> 33615	<b>EO Index:</b> 30049	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Fair			<b>Element:</b> 1996-05-22
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1996-05-22
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1997-01-06

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** ALAMOS CANYON ROAD, NORTH OF HWY 118, 1.5 MILES EAST OF MOORPARK COLLEGE, SIMI VALLEY.

<b>Lat/Long:</b> 34.29051° / -118.81185°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3795853 E333240	<b>Range:</b> 18W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 06 <b>Qtr:</b> NW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 750 ft

<b>Occurrence No.</b> 12	<b>Map Index:</b> 33616	<b>EO Index:</b> 30050	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Fair			<b>Element:</b> 1996-05-22
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1996-05-22
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1997-01-06

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** UNNAMED CANYON, BETWEEN ALAMOS CANYON AND BREA CANYON, NORTH SIDE OF HWY 118, NW OF SIMI.

<b>Lat/Long:</b> 34.28618° / -118.80485°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3795361 E333877	<b>Range:</b> 18W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 06 <b>Qtr:</b> SE
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 710 ft

California Department of Fish and Game  
 Natural Diversity Database  
 Location Summary Report  
 Moorpark & Simi quads

Athene cucularia		Element Code: ABNSB10010	
burrowing owl			
_____ Status _____	NDDB Element Ranks	_____ Other Lists _____	
Federal: None	Global: G4	CDFG Status: SC	
State: None	State: S2		

Occurrence No. 85      Map Index: 17045      EO Index: 9848      — Dates Last Seen —  
 Occ Rank: Fair      Element: 1990-03-27  
 Origin: Natural/Native occurrence      Site: 1990-03-27  
 Presence: Presumed Extant  
 Trend: Stable      Record Last Updated: 1992-01-28

Quad Summary: Santa Susana (3411836/138C), Simi (3411837/139D)

County Summary: Ventura

Location: UPPER DRY CANYON, APPROX 2 MI N OF SIMI VALLEY, S OF BIG MOUNTAIN.

Lat/Long: 34.31262° / -118.73681°	Township: 03N
UTM: Zone-11 N3798185 E340190	Range: 18W
Mapping Precision: NON-SPECIFIC	Section: 26      Qtr: SW
Symbol Type: POLYGON	Meridian: S
Area:	Elevation: 1,300 ft

Occurrence No. 796      Map Index: 64646      EO Index: 64725      — Dates Last Seen —  
 Occ Rank: Good      Element: 2006-03-05  
 Origin: Natural/Native occurrence      Site: 2006-03-05  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2006-05-09

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: OAK RIDGE, ~6 MILES NORTH OF SIMI VALLEY

Lat/Long: 34.36153° / -118.79832°	Township: 03N
UTM: Zone-11 N3803708 E334625	Range: 18W
Mapping Precision: SPECIFIC	Section: 07      Qtr: XX
Symbol Type: POINT	Meridian: S
Radius: 80 meters	Elevation: 2,410 ft

California Walnut Woodland

Element Code: CTT71210CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
Federal: None Global: G2  
State: None State: S2.1

Occurrence No. 31 Map Index: 00533 EO Index: 13488 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
Occ Rank: Unknown Element: 1934-XX-XX  
Origin: Natural/Native occurrence Site: 1934-XX-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-09-01

Quad Summary: Simi (3411837/139D), Piru (3411847/139A)

County Summary: Ventura

Location: NORTH & WEST OF OAK RIDGE & IN SMITH CANYON FROM GUIBERSON ROAD U/S FOR ABOUT 2 MILES.

Lat/Long: 34.37854° / -118.76451° Township: 03N  
UTM: Zone-11 N3805539 E337768 Range: 18W  
Mapping Precision: SPECIFIC Section: 04 Qtr: XX  
Symbol Type: POLYGON Meridian: S  
Area: 457.3 acres Elevation: 1,200 ft



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**Calochortus plummerae**

Plummer's mariposa-lily

**Element Code:** PMLIL0D150

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
Federal: None State: None	Global: G4 State: S4	CNPS List: 4.2

<b>Occurrence No.</b> 73	<b>Map Index:</b> 47964	<b>EO Index:</b> 47964	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Fair			<b>Element:</b> 1998-06-25
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1998-06-25
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2002-05-21

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** SIMI VALLEY LANDFILL, NORTH OF SIMI VALLEY, RIDGE BETWEEN BREA AND ALAMOS CANYONS.

<b>Lat/Long:</b> 34.29502° / -118.79664°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3796329 E334650	<b>Range:</b> 18W
<b>Mapping Precision:</b> NON-SPECIFIC	<b>Section:</b> 32 <b>Qtr:</b> SW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b>	<b>Elevation:</b>

<b>Occurrence No.</b> 107	<b>Map Index:</b> 61022	<b>EO Index:</b> 61058	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Poor			<b>Element:</b> 2004-05-24
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2004-05-24
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2005-04-19

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** 1 AIR MILE SE OF MOORPARK COLLEGE. JUST NORTH OF HIGHWAY 118 NEAR THE WESTERN EDGE OF OAK PARK.

<b>Lat/Long:</b> 34.28883° / -118.82307°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3795685 E332204	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 01 <b>Qtr:</b> NW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 780 ft

<b>Occurrence No.</b> 187	<b>Map Index:</b> 77476	<b>EO Index:</b> 78415	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Poor			<b>Element:</b> 2007-06-29
<b>Origin:</b> Transplant Outside of Native Hab./Range			<b>Site:</b> 2007-06-29
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Decreasing			<b>Record Last Updated:</b> 2009-12-14

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** 0.1 MILE WEST OF THE WEST END OF PRESIDENTIAL DR, NORTH OF E OLSEN RD, NEAR THE BORDER BETWEEN SIMI VALLEY AND MOORPARK.

<b>Lat/Long:</b> 34.25449° / -118.82642°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3791883 E331827	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 13 <b>Qtr:</b> SW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 2.0 acres	<b>Elevation:</b> 1,100 ft

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Catostomus santaanae

Santa Ana sucker

Element Code: AFCJC02190

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
Federal: Threatened State: None	Global: G1 State: S1	CDFG Status: SC

Occurrence No. 9      Map Index: 00497      EO Index: 13484      — Dates Last Seen —  
Occ Rank: Good      Element: 2007-10-09  
Origin: Natural/Native occurrence      Site: 2007-10-09  
Presence: Presumed Extant  
Trend: Unknown      Record Last Updated: 2010-05-03

Quad Summary: Santa Paula (3411931/140D), Piru (3411847/139A), Val Verde (3411846/138B), Newhall (3411845/138A), Fillmore (3411848/139B), Moorpark (3411838/139C)  
County Summary: Ventura, Los Angeles

Location: SANTA CLARA RVR FROM SANTA PAULA TO VALENCIA, 9MI OF SESPEE CRK, PIRU CRK S OF LAKE, & CASTAIC CRK FROM 126 TO COMMERCE.

Lat/Long: 34.39926° / -118.78686°	Township: 04N
UTM: Zone-11 N3807874 E335753	Range: 18W
Mapping Precision: NON-SPECIFIC	Section: 29      Qtr: XX
Symbol Type: POLYGON	Meridian: S
Area:	Elevation: 650 ft

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Dudleya parva

Conejo dudleya

Element Code: PDCRA04016

_____ <b>Status</b> _____	_____ <b>NDDB Element Ranks</b> _____	_____ <b>Other Lists</b> _____
<b>Federal:</b> Threatened	<b>Global:</b> G2	<b>CNPS List:</b> 1B.2
<b>State:</b> None	<b>State:</b> S2	

<b>Occurrence No.</b> 19	<b>Map Index:</b> 86802	<b>EO Index:</b> 87767	— <b>Dates Last Seen</b> —
<b>Occ Rank:</b> Fair			<b>Element:</b> 1998-05-27
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1998-05-27
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2012-09-26

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** BETWEEN LAPEYRE ROAD AND ESPERANCE DRIVE, 0.5 MILE SOUTH OF TIERRA REJADA ROAD, MOORPARK.

<b>Lat/Long:</b> 34.26204° / -118.83117°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3792728 E331404	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 13 <b>Qtr:</b> NW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 3.0 acres	<b>Elevation:</b> 850 ft

<b>Occurrence No.</b> 20	<b>Map Index:</b> 86803	<b>EO Index:</b> 87768	— <b>Dates Last Seen</b> —
<b>Occ Rank:</b> Unknown			<b>Element:</b> 1988-06-XX
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1988-06-XX
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2012-09-26

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** NEAR RONALD REAGAN PRESIDENTIAL LIBRARY AND MUSEUM, PRESIDENTIAL DRIVE, NEAR SIMI VALLEY.

<b>Lat/Long:</b> 34.25690° / -118.81752°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3792136 E332651	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 13 <b>Qtr:</b> E
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 3.0 acres	<b>Elevation:</b> 1,240 ft

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**Empidonax traillii extimus**

southwestern willow flycatcher

**Element Code:** ABPAE33043

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> Endangered <b>State:</b> Endangered	<b>Global:</b> G5T1T2 <b>State:</b> S1	<b>CDFG Status:</b>

**Occurrence No.** 57      **Map Index:** 75755      **EO Index:** 76769      **Dates Last Seen**  
**Occ Rank:** Excellent      **Element:** 2009-05-16  
**Origin:** Natural/Native occurrence      **Site:** 2009-05-16  
**Presence:** Presumed Extant  
**Trend:** Unknown      **Record Last Updated:** 2009-07-06

**Quad Summary:** Moorpark (3411838/139C)

**County Summary:** Ventura

**Location:** SANTA CLARA RIVER, SOUTH OF THE END OF GLANVILLE RD, ~3.0 MI EAST OF SANTA PAULA.

<b>Lat/Long:</b> 34.36224° / -118.99802°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3804130 E316259	<b>Range:</b> 20W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 08 <b>Qtr:</b> XX
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 305 ft

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Emys marmorata

western pond turtle

Element Code: ARAAD02030

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G3G4	CDFG Status: SC
State: None	State: S3	

Occurrence No. 1218	Map Index: 78677	EO Index: 79643	— Dates Last Seen —
Occ Rank: Poor			Element: 2010-04-22
Origin: Natural/Native occurrence			Site: 2010-04-22
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2010-04-27

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: 0.1 MILES WEST OF THE N MADERA RD BRIDGE (HWY 118) OVER ARROYO SIMI, IN ARROYO SIMI, SIMI VALLEY.

Lat/Long: 34.27778° / -118.79833°	Township: 02N
UTM: Zone-11 N3794420 E334460	Range: 18W
Mapping Precision: SPECIFIC	Section: 07 Qtr: NW
Symbol Type: POINT	Meridian: S
Radius: 80 meters	Elevation: 710 ft

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Gasterosteus aculeatus williamsoni

unarmored threespine stickleback

Element Code: AFCPA03011

_____ <b>Status</b> _____	_____ <b>NDDB Element Ranks</b> _____	_____ <b>Other Lists</b> _____
<b>Federal:</b> Endangered	<b>Global:</b> G5T1	<b>CDFG Status:</b>
<b>State:</b> Endangered	<b>State:</b> S1	

<b>Occurrence No.</b> 3	<b>Map Index:</b> 78887	<b>EO Index:</b> 1204	_____ <b>Dates Last Seen</b> _____
<b>Occ Rank:</b> Unknown			<b>Element:</b> 2007-10-17
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2007-10-17
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Fluctuating			<b>Record Last Updated:</b> 2010-08-11

**Quad Summary:** Piru (3411847/139A), Fillmore (3411848/139B), Saticoy (3411932/140C), Santa Paula (3411931/140D), Newhall (3411845/138A), Moorpark (3411838/139C), Val Verde (3411846/138B)  
**County Summary:** Los Angeles, Ventura

**Location:** SANTA CLARA RIVER FROM JUST WEST OF HWY 118, EAST TO MOUTH OF SAN FRANCISQUITO CREEK, EAST OF I-5. LA & VENTURA COUNTIES

<b>Lat/Long:</b> 34.38793° / -118.89418°	<b>Township:</b> 04N
<b>UTM:</b> Zone-11 N3806796 E325863	<b>Range:</b> 19W
<b>Mapping Precision:</b> NON-SPECIFIC	<b>Section:</b> 32 <b>Qtr:</b> XX
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b>	<b>Elevation:</b> 950 ft

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Gila orcuttii		Element Code: AFCJB13120	
arroyo chub			
_____ Status _____	NDDB Element Ranks	_____ Other Lists _____	
Federal: None	Global: G2	CDFG Status: SC	
State: None	State: S2		

Occurrence No. 36      Map Index: 47976      EO Index: 47976      — Dates Last Seen —  
 Occ Rank: Good      Element: 2000-04-20  
 Origin: Transplant Outside of Native Hab./Range      Site: 2000-04-20  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2011-07-29

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: ARROYO SIMI, S OF LOS ANGELES AVE, FROM VIRGINIA COLONY TO 2.5 MI UPSTREAM, ABOUT 4 MI WNW OF SIMI.

Lat/Long: 34.29175° / -118.84497°	Township: 02N
UTM: Zone-11 N3796046 E330194	Range: 19W
Mapping Precision: SPECIFIC	Section: 02      Qtr: XX
Symbol Type: POLYGON	Meridian: S
Area: 164.1 acres	Elevation: 580 ft

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**Neotoma lepida intermedia**

San Diego desert woodrat

**Element Code:** AMAFF08041

_____ <b>Status</b> _____	_____ <b>NDDB Element Ranks</b> _____	_____ <b>Other Lists</b> _____
<b>Federal:</b> None	<b>Global:</b> G5T3?	<b>CDFG Status:</b> SC
<b>State:</b> None	<b>State:</b> S3?	

<b>Occurrence No.</b> 17	<b>Map Index:</b> 33553	<b>EO Index:</b> 29703	— <b>Dates Last Seen</b> —
<b>Occ Rank:</b> Excellent			<b>Element:</b> 1992-07-16
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1992-07-16
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1996-11-06

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** JUST NORTH OF SPRR-ROW, 0.7 MILE WEST OF OAK PARK AND SOUTH OF MOORPARK COLLEGE, SIMI VALLEY.

<b>Lat/Long:</b> 34.29241° / -118.83499°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3796102 E331114	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 02 <b>Qtr:</b> NE
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 680 ft

<b>Occurrence No.</b> 18	<b>Map Index:</b> 33554	<b>EO Index:</b> 29704	— <b>Dates Last Seen</b> —
<b>Occ Rank:</b> Good			<b>Element:</b> 1992-07-16
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1992-07-16
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1996-11-06

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** NORTH SIDE OF SPRR-ROW, 0.1 EAST OF MADERA ROAD, SIMI VALLEY.

<b>Lat/Long:</b> 34.28131° / -118.79485°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3794805 E334787	<b>Range:</b> 18W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 05 <b>Qtr:</b> SW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 800 ft

<b>Occurrence No.</b> 19	<b>Map Index:</b> 33555	<b>EO Index:</b> 29702	— <b>Dates Last Seen</b> —
<b>Occ Rank:</b> Fair			<b>Element:</b> 1992-07-16
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1992-07-16
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1996-11-06

**Quad Summary:** Moorpark (3411838/139C)

**County Summary:** Ventura

**Location:** 0.6 MILE WEST OF THE INTERSECTION OF GABBERT ROAD AND SPRR-ROW, SIMI VALLEY.

<b>Lat/Long:</b> 34.28057° / -118.91394°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3794923 E323822	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 06 <b>Qtr:</b> SW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 450 ft

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Orcuttia californica		
California Orcutt grass		Element Code: PMPOA4G010
<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
Federal: Endangered State: Endangered	Global: G1 State: S1	CNPS List: 1B.1

Occurrence No. 28      Map Index: 25604      EO Index: 8445      — Dates Last Seen —  
 Occ Rank: Poor      Element: 2005-XX-XX  
 Origin: Natural/Native occurrence      Site: 2007-04-25  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2008-04-08

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: IMMEDIATELY NW OF THE HWY 23 FREEWAY AND TIERRA REJADA RD, CLOVERLEAF.

Lat/Long: 34.26602° / -118.85550°	Township: 02N
UTM: Zone-11 N3793210 E329173	Range: 19W
Mapping Precision: SPECIFIC	Section: 10      Qtr: SE
Symbol Type: POLYGON	Meridian: S
Area: 6.0 acres	Elevation: 655 ft

Occurrence No. 35      Map Index: 55259      EO Index: 55259      — Dates Last Seen —  
 Occ Rank: Fair      Element: 2003-07-29  
 Origin: Natural/Native occurrence      Site: 2003-07-29  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2004-04-23

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: EAST OF TIERRA REJADA VALLEY, APPROXIMATELY 0.5 AIRMILE EAST OF LANDING FIELD.

Lat/Long: 34.25539° / -118.83831°	Township: 02N
UTM: Zone-11 N3792003 E330734	Range: 19W
Mapping Precision: SPECIFIC	Section: 14      Qtr: SE
Symbol Type: POLYGON	Meridian: S
Area: 1.8 acres	Elevation: 680 ft

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**Pentachaeta lyonii**

Lyon's pentachaeta

**Element Code:** PDAST6X060

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> Endangered <b>State:</b> Endangered	<b>Global:</b> G2 <b>State:</b> S2	<b>CNPS List:</b> 1B.1

<b>Occurrence No.</b> 29	<b>Map Index:</b> 24356	<b>EO Index:</b> 26999	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Poor			<b>Element:</b> 1994-XX-XX
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1994-XX-XX
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Decreasing			<b>Record Last Updated:</b> 2008-09-24

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** RONALD REAGAN PRESIDENTIAL LIBRARY SITE, ALONG PRESIDENTIAL DRIVE, WEST OF SIMI VALLEY.

<b>Lat/Long:</b> 34.25710° / -118.81698°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3792157 E332702	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 13 <b>Qtr:</b> E
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 8.0 acres	<b>Elevation:</b> 1,200 ft

<b>Occurrence No.</b> 30	<b>Map Index:</b> 25140	<b>EO Index:</b> 28650	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Good			<b>Element:</b> 2008-06-25
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2008-06-25
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Decreasing			<b>Record Last Updated:</b> 2012-11-06

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** CARLSBERG DEVELOPMENT; IMMEDIATELY NW OF THE INTERSECTION OF THE HWY 23 FREEWAY AND TIERRA REJADA RD, CLOVERLEAF.

<b>Lat/Long:</b> 34.26538° / -118.85495°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3793138 E329222	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 10 <b>Qtr:</b> SE
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 8.0 acres	<b>Elevation:</b> 675 ft

<b>Occurrence No.</b> 31	<b>Map Index:</b> 25971	<b>EO Index:</b> 5250	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Fair			<b>Element:</b> 1991-05-XX
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1991-05-XX
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1998-06-02

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** CLOVER CAST DEVELOPMENT; VICINITY OF SIMI VALLEY, EAST OF HWY 23, NORTH OF TIERRA REJADA ROAD.

<b>Lat/Long:</b> 34.27414° / -118.84160°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3794087 E330469	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 11 <b>Qtr:</b> NW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 12.2 acres	<b>Elevation:</b> 1,100 ft

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Pentachaeta lyonii

Lyon's pentachaeta

Element Code: PDAST6X060

Status	NDDB Element Ranks	Other Lists
Federal: Endangered State: Endangered	Global: G2 State: S2	CNPS List: 1B.1

Occurrence No. 37      Map Index: 38849      EO Index: 33856      — Dates Last Seen —  
Occ Rank: Fair      Element: 1995-05-22  
Origin: Natural/Native occurrence      Site: 1995-05-22  
Presence: Presumed Extant  
Trend: Unknown      Record Last Updated: 1998-05-29

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: ABOUT 4000 FT ESE OF INTERSECTION OF HWY 23 AND NEW LOS ANGELES AVE, EAST OF MOORPARK,  
TIERRA REJADA HILLS.

Lat/Long: 34.28090° / -118.84928°	Township: 02N
UTM: Zone-11 N3794849 E329776	Range: 19W
Mapping Precision: SPECIFIC	Section: 03      Qtr: SE
Symbol Type: POLYGON	Meridian: S
Area: 2.4 acres	Elevation: 920 ft

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**Phrynosoma blainvillii**

coast horned lizard

**Element Code:** ARACF12100

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> None	<b>Global:</b> G4G5	<b>CDFG Status:</b> SC
<b>State:</b> None	<b>State:</b> S3S4	

<b>Occurrence No.</b> 494	<b>Map Index:</b> 52852	<b>EO Index:</b> 52852	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Good			<b>Element:</b> 2002-05-28
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2002-05-28
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2003-10-08

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** BIG MOUNTAIN AREA, 4 MILES NNE OF MOORPARK

<b>Lat/Long:</b> 34.33752° / -118.85580°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3801140 E329290	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 15 <b>Qtr:</b> SE
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 1,700 ft

<b>Occurrence No.</b> 495	<b>Map Index:</b> 52853	<b>EO Index:</b> 52853	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Good			<b>Element:</b> 2002-05-28
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2002-05-28
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2003-10-08

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** BIG MOUNTAIN AREA, 4.5 MILES NNE OF MOORPARK

<b>Lat/Long:</b> 34.34738° / -118.85045°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3802225 E329802	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 15 <b>Qtr:</b> NE
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 15.3 acres	<b>Elevation:</b> 1,400 ft

<b>Occurrence No.</b> 496	<b>Map Index:</b> 52854	<b>EO Index:</b> 52854	<b>Dates Last Seen</b>
<b>Occ Rank:</b> Good			<b>Element:</b> 2002-05-28
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2002-05-28
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2003-10-08

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** BIG MOUNTAIN AREA, 5 MILES NNE OF MOORPARK

<b>Lat/Long:</b> 34.35005° / -118.83945°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3802503 E330820	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 14 <b>Qtr:</b> NW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 1,600 ft

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**Phrynosoma blainvillii**

coast horned lizard

**Element Code:** ARACF12100

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> None	<b>Global:</b> G4G5	<b>CDFG Status:</b> SC
<b>State:</b> None	<b>State:</b> S3S4	

<b>Occurrence No.</b> 497	<b>Map Index:</b> 52864	<b>EO Index:</b> 52864	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Good			<b>Element:</b> 2003-10-10
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2003-10-10
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2003-11-06

**Quad Summary:** Fillmore (3411848/139B), Moorpark (3411838/139C)

**County Summary:** Ventura

**Location:** BETWEEN TELEGRAPH ROAD (HIGHWAY 126) AND THE SANTA CLARA RIVER, 3 MILES SW OF FILLMORE

<b>Lat/Long:</b> 34.37641° / -118.96915°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3805650 E318945	<b>Range:</b> 20W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 03 <b>Qtr:</b> NW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 28.0 acres	<b>Elevation:</b> 400 ft

<b>Occurrence No.</b> 670	<b>Map Index:</b> 71371	<b>EO Index:</b> 72270	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Excellent			<b>Element:</b> 2008-04-16
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2008-04-16
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2008-05-27

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** ALAMOS CANYON, 150 METERS NORTH OF STATE ROUTE 118, NORTHWEST OF SIMI VALLEY.

<b>Lat/Long:</b> 34.29222° / -118.81000°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3796041 E333414	<b>Range:</b> 18W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 31 <b>Qtr:</b> NW
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 80 meters	<b>Elevation:</b> 780 ft

**Polioptila californica californica**

coastal California gnatcatcher

**Element Code:** ABPBJ08081

_____ <b>Status</b> _____	_____ <b>NDDB Element Ranks</b> _____	_____ <b>Other Lists</b> _____
<b>Federal:</b> Threatened	<b>Global:</b> G3T2	<b>CDFG Status:</b> SC
<b>State:</b> None	<b>State:</b> S2	

<b>Occurrence No.</b> 482	<b>Map Index:</b> 33296	<b>EO Index:</b> 2092	_____ <b>Dates Last Seen</b> _____
<b>Occ Rank:</b> Good			<b>Element:</b> 1995-07-27
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1995-07-27
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1995-09-28

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** 0.5 MILE NORTH OF MOORPARK AND LITTLE SIMI VALLEY.

<b>Lat/Long:</b> 34.29056° / -118.87402°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3795963 E327518	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 04 <b>Qtr:</b> NW
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 4.0 acres	<b>Elevation:</b> 650 ft

<b>Occurrence No.</b> 865	<b>Map Index:</b> 71244	<b>EO Index:</b> 72148	_____ <b>Dates Last Seen</b> _____
<b>Occ Rank:</b> Fair			<b>Element:</b> 2008-06-25
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2008-06-25
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 2010-08-03

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** LITTLE SIMI VALLEY, NORTHWEST OF STATE HWY 23 AND TIERRA REJADA RD, MOORPARK.

<b>Lat/Long:</b> 34.26918° / -118.85844°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3793566 E328908	<b>Range:</b> 19W
<b>Mapping Precision:</b> NON-SPECIFIC	<b>Section:</b> 10 <b>Qtr:</b> W
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b>	<b>Elevation:</b> 600 ft

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Riparia riparia		Element Code: ABPAU08010	
bank swallow			
_____ Status _____	NDDB Element Ranks	_____ Other Lists _____	
Federal: None	Global: G5	CDFG Status:	
State: Threatened	State: S2S3		

Occurrence No. 112      Map Index: 84175      EO Index: 85196      — Dates Last Seen —  
 Occ Rank: None      Element: 1926-05-13  
 Origin: Natural/Native occurrence      Site: 1926-05-13  
 Presence: Extirpated  
 Trend: Unknown      Record Last Updated: 2011-11-08

Quad Summary: Moorpark (3411838/139C), Fillmore (3411848/139B)

County Summary: Ventura

Location: SANTA CLARA RIVER NEAR SESPE.

Lat/Long: 34.38728° / -118.94483°	Township: 04N
UTM: Zone-11 N3806812 E321205	Range: 20W
Mapping Precision: NON-SPECIFIC	Section: 35      Qtr: XX
Symbol Type: POINT	Meridian: S
Radius: 1 mile	Elevation: 380 ft

Occurrence No. 116      Map Index: 84328      EO Index: 85359      — Dates Last Seen —  
 Occ Rank: None      Element: 1897-05-15  
 Origin: Natural/Native occurrence      Site: 1897-05-15  
 Presence: Extirpated  
 Trend: Unknown      Record Last Updated: 2012-08-14

Quad Summary: Simi (3411837/139D), Santa Susana (3411836/138C)

County Summary: Ventura

Location: SIMI.

Lat/Long: 34.26620° / -118.74488°	Township: 02N
UTM: Zone-11 N3793050 E339358	Range: 18W
Mapping Precision: NON-SPECIFIC	Section: 11      Qtr: XX
Symbol Type: POINT	Meridian: S
Radius: 1 mile	Elevation: 870 ft

Southern Coast Live Oak Riparian Forest

Element Code: CTT61310CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
 Federal: None Global: G4  
 State: None State: S4

Occurrence No. 12 Map Index: 00535 EO Index: 16020 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1987-01-XX  
 Origin: Natural/Native occurrence Site: 1987-01-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-08-02

Quad Summary: Santa Susana (3411836/138C), Simi (3411837/139D)

County Summary: Ventura

Location: ALAMOS CANYON, FROM ABOUT 1/2 AIR MILE EAST OF LANDING STRIP U/S ABOUT 3 MILES.

Lat/Long: 34.31644° / -118.77719° Township: 03N  
 UTM: Zone-11 N3798673 E336481 Range: 18W  
 Mapping Precision: SPECIFIC Section: 28 Qtr: N  
 Symbol Type: POLYGON Meridian: S  
 Area: 276.9 acres Elevation: 1,140 ft

Occurrence No. 13 Map Index: 00416 EO Index: 16021 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1987-01-XX  
 Origin: Natural/Native occurrence Site: 1987-01-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: WEST FORK OF ALAMOS CANYON FROM NEAR WHERE IT FORKS FROM MAIN CANYON TO NEAR LANDING STRIP.

Lat/Long: 34.30199° / -118.81020° Township: 03N  
 UTM: Zone-11 N3797124 E333415 Range: 18W  
 Mapping Precision: SPECIFIC Section: 31 Qtr: W  
 Symbol Type: POLYGON Meridian: S  
 Area: 64.1 acres Elevation: 860 ft

Occurrence No. 14 Map Index: 00383 EO Index: 13417 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1987-01-XX  
 Origin: Natural/Native occurrence Site: 1987-01-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: CANYON & TRIBUTARIES EAST-NORTHEAST OF MOORPARK COLLEGE.

Lat/Long: 34.31553° / -118.81866° Township: 03N  
 UTM: Zone-11 N3798639 E332664 Range: 19W  
 Mapping Precision: SPECIFIC Section: 25 Qtr: N  
 Symbol Type: POLYGON Meridian: S  
 Area: 517.9 acres Elevation: 800 ft

Southern Coast Live Oak Riparian Forest

Element Code: CTT61310CA

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G4	
State: None	State: S4	

Occurrence No. 15	Map Index: 00153	EO Index: 16018	— Dates Last Seen —
Occ Rank: Unknown			Element: 1987-01-XX
Origin: Natural/Native occurrence			Site: 1987-01-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-08-31

Quad Summary: Moorpark (3411838/139C)

County Summary: Ventura

Location: TRIBUTARY TO GRIMES CANYON, WEST OF HWY 23, ABOVE QUARRY.

Lat/Long: 34.34141° / -118.92356°	Township: 03N
UTM: Zone-11 N3801688 E323064	Range: 20W
Mapping Precision: SPECIFIC	Section: 13 Qtr: SW
Symbol Type: POLYGON	Meridian: S
Area: 67.8 acres	Elevation: 940 ft

Occurrence No. 46	Map Index: 00576	EO Index: 15992	— Dates Last Seen —
Occ Rank: Unknown			Element: 1976-06-XX
Origin: Natural/Native occurrence			Site: 1976-06-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D), Santa Susana (3411836/138C)

County Summary: Ventura

Location: TRIPAS CANYON & BRANCH (UNNAMED ON USGS MAP) TO SOUTH OF MAIN CANYON.

Lat/Long: 34.34253° / -118.74931°	Township: 03N
UTM: Zone-11 N3801522 E339096	Range: 18W
Mapping Precision: SPECIFIC	Section: 15 Qtr: XX
Symbol Type: POLYGON	Meridian: S
Area: 476.9 acres	Elevation: 1,800 ft

Occurrence No. 47	Map Index: 00386	EO Index: 15990	— Dates Last Seen —
Occ Rank: Unknown			Element: 1934-XX-XX
Origin: Natural/Native occurrence			Site: 1934-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: STREAM TO EAST OF WILEY CANYON ON NORTH SLOPE OF OAK RIDGE.

Lat/Long: 34.36359° / -118.81788°	Township: 03N
UTM: Zone-11 N3803968 E332831	Range: 19W
Mapping Precision: SPECIFIC	Section: 12 Qtr: NE
Symbol Type: POLYGON	Meridian: S
Area: 64.1 acres	Elevation: 1,400 ft

Southern Coast Live Oak Riparian Forest

Element Code: CTT61310CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
Federal: None Global: G4  
State: None State: S4

Occurrence No. 48 Map Index: 00448 EO Index: 15991 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
Occ Rank: Unknown Element: 1934-XX-XX  
Origin: Natural/Native occurrence Site: 1934-XX-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: STREAM TO WEST OF TORREY CANYON, NORTH SLOPE OF OAK RIDGE.

Lat/Long: 34.37150° / -118.80025° Township: 03N  
UTM: Zone-11 N3804816 E334468 Range: 18W  
Mapping Precision: SPECIFIC Section: 06 Qtr: E  
Symbol Type: POLYGON Meridian: S  
Area: 20.4 acres Elevation: 1,650 ft

Occurrence No. 49 Map Index: 00371 EO Index: 15989 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
Occ Rank: Unknown Element: 1976-06-XX  
Origin: Natural/Native occurrence Site: 1987-06-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-08-02

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: HAPPY CAMP CANYON FROM NEAR HAPPY CAMP U/S FOR SEVERAL MILES.

Lat/Long: 34.34515° / -118.82398° Township: 03N  
UTM: Zone-11 N3801933 E332233 Range: 19W  
Mapping Precision: SPECIFIC Section: 13 Qtr: XX  
Symbol Type: POLYGON Meridian: S  
Area: 670.2 acres Elevation: 1,560 ft

Southern Riparian Scrub

Element Code: CTT63300CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
Federal: None Global: G3  
State: None State: S3.2

Occurrence No. 18 Map Index: 00063 EO Index: 28814 — Dates Last Seen —  
Occ Rank: Unknown Element: 1987-01-XX  
Origin: Natural/Native occurrence Site: 1987-01-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Moorpark (3411838/139C)

County Summary: Ventura

Location: ARROYO LAS POSAS, ABOUT 1.7 MILES EAST OF SOMIS.

Lat/Long: 34.26129° / -118.96723° Township: 02N  
UTM: Zone-11 N3792879 E318875 Range: 20W  
Mapping Precision: NON-SPECIFIC Section: 15 Qtr: XX  
Symbol Type: POINT Meridian: S  
Radius: 1/5 mile Elevation: 300 ft

Occurrence No. 19 Map Index: 00088 EO Index: 28812 — Dates Last Seen —  
Occ Rank: Unknown Element: 1987-01-XX  
Origin: Natural/Native occurrence Site: 1987-01-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Moorpark (3411838/139C)

County Summary: Ventura

Location: ARROYO LAS POSAS, ABOUT 1.7 MILES WEST OF JUNCTION OF GRIMES CANYON ROAD & HWY 118.

Lat/Long: 34.26500° / -118.95732° Township: 02N  
UTM: Zone-11 N3793272 E319795 Range: 20W  
Mapping Precision: NON-SPECIFIC Section: 10 Qtr: XX  
Symbol Type: POINT Meridian: S  
Radius: 1/5 mile Elevation: 340 ft

Occurrence No. 20 Map Index: 00224 EO Index: 13368 — Dates Last Seen —  
Occ Rank: Unknown Element: 1987-01-XX  
Origin: Natural/Native occurrence Site: 1987-01-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Moorpark (3411838/139C)

County Summary: Ventura

Location: GRIMES CANYON, U/S OF GRIMES CANYON ROAD ABOUT 0.6-1.0 MILE.

Lat/Long: 34.34926° / -118.89308° Township: 03N  
UTM: Zone-11 N3802505 E325885 Range: 19W  
Mapping Precision: SPECIFIC Section: 17 Qtr: N  
Symbol Type: POLYGON Meridian: S  
Area: 33.7 acres Elevation: 1,300 ft

Southern Riparian Scrub

Element Code: CTT63300CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
 Federal: None Global: G3  
 State: None State: S3.2

Occurrence No. 21 Map Index: 00262 EO Index: 15322 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1987-XX-XX  
 Origin: Natural/Native occurrence Site: 1987-XX-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: BREA CANYON, NORTH OF SOUTHERN PACIFIC RAILROAD TRACKS.

Lat/Long: 34.28847° / -118.79006° Township: 02N  
 UTM: Zone-11 N3795592 E335242 Range: 18W  
 Mapping Precision: SPECIFIC Section: 05 Qtr: NW  
 Symbol Type: POLYGON Meridian: S  
 Area: 52.6 acres Elevation: 800 ft

Occurrence No. 22 Map Index: 00263 EO Index: 13367 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1987-01-XX  
 Origin: Natural/Native occurrence Site: 1987-01-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: HAPPY CAMP CANYON FROM ABOUT 1 MILE NORTH OF VIRGINIA COLONY U/S TO VICINITY OF HAPPY CAMP.

Lat/Long: 34.32570° / -118.86753° Township: 03N  
 UTM: Zone-11 N3799849 E328187 Range: 19W  
 Mapping Precision: SPECIFIC Section: 21 Qtr: XX  
 Symbol Type: POLYGON Meridian: S  
 Area: 286.2 acres Elevation: 1,000 ft

Occurrence No. 23 Map Index: 00351 EO Index: 15321 — Dates Last Seen —  
 Occ Rank: Unknown Element: 1934-XX-XX  
 Origin: Natural/Native occurrence Site: 1934-XX-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: STREAM TO WEST OF WILEY CANYON, NORTH SLOPE OF OAK RIDGE.

Lat/Long: 34.36716° / -118.83084° Township: 03N  
 UTM: Zone-11 N3804386 E331646 Range: 19W  
 Mapping Precision: SPECIFIC Section: 01 Qtr: SW  
 Symbol Type: POLYGON Meridian: S  
 Area: 52.8 acres Elevation: 1,200 ft

Southern Riparian Scrub

Element Code: CTT63300CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
 Federal: None Global: G3  
 State: None State: S3.2

Occurrence No. 24 Map Index: 00362 EO Index: 15320 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
 Occ Rank: Unknown Element: 1934-XX-XX  
 Origin: Natural/Native occurrence Site: 1976-XX-XX  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: WILEY CANYON ON NORTH SIDE OF OAK RIDGE, NORTH OF BIG MOUNTAIN.

Lat/Long: 34.36494° / -118.82328° Township: 03N  
 UTM: Zone-11 N3804127 E332337 Range: 19W  
 Mapping Precision: SPECIFIC Section: 01 Qtr: XX  
 Symbol Type: POLYGON Meridian: S  
 Area: 91.0 acres Elevation: 1,550 ft

Occurrence No. 25 Map Index: 00106 EO Index: 15318 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
 Occ Rank: Unknown Element: 1986-12-10  
 Origin: Natural/Native occurrence Site: 1986-12-10  
 Presence: Presumed Extant  
 Trend: Unknown Record Last Updated: 1998-07-23

Quad Summary: Fillmore (3411848/139B), Piru (3411847/139A), Saticoy (3411932/140C), Santa Paula (3411931/140D), Moorpark (3411838/139C)

County Summary: Ventura

Location: SANTA CLARA RIVER BED FROM NEAR CONFLUENCE CALUMET CANYON D/S TO VICINITY OF SATICOY.

Lat/Long: 34.34567° / -119.05895° Township: 03N  
 UTM: Zone-11 N3802404 E310618 Range: 21W  
 Mapping Precision: SPECIFIC Section: 14 Qtr: XX  
 Symbol Type: POLYGON Meridian: S  
 Area: 4,299.3 acres Elevation: 360 ft

Southern Willow Scrub

Element Code: CTT63320CA

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G3	
State: None	State: S2.1	

Occurrence No. 16	Map Index: 00343	EO Index: 15279	— Dates Last Seen —
Occ Rank: Unknown			Element: 1987-01-XX
Origin: Natural/Native occurrence			Site: 1987-01-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-07-21

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: ARROYO SIMI, FROM VIRGINIA COLONY U/S TO JUST BEYOND EASTERN BOUNDARY OF OAK PARK.

Lat/Long: 34.28659° / -118.82527°	Township: 02N
UTM: Zone-11 N3795441 E331997	Range: 19W
Mapping Precision: SPECIFIC	Section: 01 Qtr: XX
Symbol Type: POLYGON	Meridian: S
Area: 261.1 acres	Elevation: 600 ft

Occurrence No. 17	Map Index: 00034	EO Index: 28808	— Dates Last Seen —
Occ Rank: Unknown			Element: 1987-01-XX
Origin: Natural/Native occurrence			Site: 1987-01-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1998-07-21

Quad Summary: Moorpark (3411838/139C)

County Summary: Ventura

Location: BALCOM CANYON, ABOUT 0.6 MILE OF SOUTH MOUNTAIN ROAD.

Lat/Long: 34.34416° / -118.97887°	Township: 03N
UTM: Zone-11 N3802090 E317982	Range: 20W
Mapping Precision: NON-SPECIFIC	Section: 16 Qtr: NE
Symbol Type: POLYGON	Meridian: S
Area:	Elevation: 425 ft

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Spea hammondii		Element Code: AAABF02020	
western spadefoot			
Status		NDDB Element Ranks	
Federal: None		Global: G3	
State: None		State: S3	
		Other Lists	
		CDFG Status: SC	

Occurrence No. 290      Map Index: 55430      EO Index: 55430      — Dates Last Seen —  
 Occ Rank: Excellent      Element: 2004-04-29  
 Origin: Natural/Native occurrence      Site: 2004-04-29  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2004-05-11

Quad Summary: Moorpark (3411838/139C)  
 County Summary: Ventura

Location: ALONG ROSELAND AVENUE, WEST OF HAPPY CAMP CANYON REGIONAL PARK, NORTH OF MOORPARK

Lat/Long: 34.33618° / -118.87951°      Township: 03N  
 UTM: Zone-11 N3801032 E327106      Range: 19W  
 Mapping Precision: SPECIFIC      Section: 16      Qtr: NW  
 Symbol Type: POINT      Meridian: S  
 Radius: 80 meters      Elevation: 1,500 ft

Occurrence No. 332      Map Index: 63622      EO Index: 63717      — Dates Last Seen —  
 Occ Rank: Good      Element: 2000-03-XX  
 Origin: Natural/Native occurrence      Site: 2000-03-XX  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2006-01-09

Quad Summary: Simi (3411837/139D)  
 County Summary: Ventura

Location: ~2.25 MILES NE OF THE INTERSECTION OF BREA CANYON ROAD AND HIGHWAY 118, SIMI VALLEY

Lat/Long: 34.30408° / -118.77622°      Township: 03N  
 UTM: Zone-11 N3797301 E336546      Range: 18W  
 Mapping Precision: SPECIFIC      Section: 33      Qtr: NW  
 Symbol Type: POLYGON      Meridian: S  
 Area: 3.1 acres      Elevation: 1,055 ft

Occurrence No. 334      Map Index: 63638      EO Index: 63733      — Dates Last Seen —  
 Occ Rank: Excellent      Element: 2003-04-22  
 Origin: Natural/Native occurrence      Site: 2003-04-22  
 Presence: Presumed Extant  
 Trend: Unknown      Record Last Updated: 2006-01-10

Quad Summary: Simi (3411837/139D)  
 County Summary: Ventura

Location: ~1.1 MILES NW OF THE INTERSECTION OF ALAMOS CANYON ROAD AND HIGHWAY 118, SIMI VALLEY

Lat/Long: 34.30090° / -118.82267°      Township: 03N  
 UTM: Zone-11 N3797024 E332265      Range: 19W  
 Mapping Precision: SPECIFIC      Section: 36      Qtr: SW  
 Symbol Type: POLYGON      Meridian: S  
 Area: 2.3 acres      Elevation: 935 ft

**Streptocephalus woottoni**

Riverside fairy shrimp

**Element Code:** ICBRA07010

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
<b>Federal:</b> Endangered <b>State:</b> None	<b>Global:</b> G1 <b>State:</b> S1	<b>CDFG Status:</b>

<b>Occurrence No.</b> 9	<b>Map Index:</b> 39360	<b>EO Index:</b> 34362	<b>— Dates Last Seen —</b>
<b>Occ Rank:</b> Excellent			<b>Element:</b> 1998-03-01
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1998-03-01
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Unknown			<b>Record Last Updated:</b> 1998-08-10

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** JUST NORTH OF THE INTERSECTION OF MOORPARK ROAD AND TIERRA REJADA ROAD, WEST OF SIMI.

<b>Lat/Long:</b> 34.26606° / -118.85556°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3793214 E329168	<b>Range:</b> 19W
<b>Mapping Precision:</b> SPECIFIC	<b>Section:</b> 10 <b>Qtr:</b> SE
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b> 4.6 acres	<b>Elevation:</b> 650 ft

California Department of Fish and Game  
Natural Diversity Database  
Location Summary Report  
Moorpark & Simi quads

Thamnophis hammondi

two-striped garter snake

Element Code: ARADB36160

<b>Status</b>	<b>NDDB Element Ranks</b>	<b>Other Lists</b>
Federal: None State: None	Global: G3 State: S2	CDFG Status: SC

Occurrence No. 4      Map Index: 23952      EO Index: 13496      — Dates Last Seen —  
Occ Rank: Poor      Element: 1993-05-27  
Origin: Natural/Native occurrence      Site: 1993-05-27  
Presence: Presumed Extant  
Trend: Unknown      Record Last Updated: 1994-04-08

Quad Summary: Simi (3411837/139D)

County Summary: Ventura

Location: ARROYO SIMI, 0.7 MILE NW OF THE JUNCTION OF LOS ANGELES AVENUE AND MADERA ROAD, SIMI VALLEY.

Lat/Long: 34.28073° / -118.80508°	Township: 02N
UTM: Zone-11 N3794758 E333845	Range: 18W
Mapping Precision: NON-SPECIFIC	Section: 06      Qtr: S
Symbol Type: POINT	Meridian: S
Radius: 1/5 mile	Elevation: 640 ft

Valley Oak Woodland

Element Code: CTT71130CA

\_\_\_\_\_ Status \_\_\_\_\_ NDDB Element Ranks \_\_\_\_\_ Other Lists \_\_\_\_\_  
Federal: None Global: G3  
State: None State: S2.1

Occurrence No. 65 Map Index: 00586 EO Index: 15116 \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
Occ Rank: Unknown Element: 1934-XX-XX  
Origin: Natural/Native occurrence Site: 1934-XX-XX  
Presence: Presumed Extant  
Trend: Unknown Record Last Updated: 1998-07-31

Quad Summary: Piru (3411847/139A), Simi (3411837/139D), Santa Susana (3411836/138C), Val Verde (3411846/138B)

County Summary: Ventura

Location: OAK RIDGE NEAR EUREKA CANYON, WEST OF TAPO CANYON. PARTS IN OAK RIDGE OIL FIELD.

Lat/Long: 34.37538° / -118.74088° Township: 03N  
UTM: Zone-11 N3805152 E339934 Range: 18W  
Mapping Precision: SPECIFIC Section: 02 Qtr: XX  
Symbol Type: POLYGON Meridian: S  
Area: 766.9 acres Elevation: 2,380 ft

California Department of Fish and Game  
 Natural Diversity Database  
 Location Summary Report  
 Moorpark & Simi quads

Vireo bellii pusillus

least Bell's vireo

Element Code: ABPBW01114

_____ <b>Status</b> _____	<b>NDDB Element Ranks</b>	_____ <b>Other Lists</b> _____
<b>Federal:</b> Endangered	<b>Global:</b> G5T2	<b>CDFG Status:</b>
<b>State:</b> Endangered	<b>State:</b> S2	

<b>Occurrence No.</b> 123	<b>Map Index:</b> 15934	<b>EO Index:</b> 14263	_____ <b>Dates Last Seen</b> _____
<b>Occ Rank:</b> Excellent			<b>Element:</b> 2009-05-16
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 2009-05-16
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Increasing			<b>Record Last Updated:</b> 2009-07-27

**Quad Summary:** Santa Paula (3411931/140D), Moorpark (3411838/139C)

**County Summary:** Ventura

**Location:** SANTA CLARA RIVER, APPROXIMATELY 3.5 MI EAST OF SANTA PAULA, NEAR DUCK PONDS.

<b>Lat/Long:</b> 34.36238° / -119.00991°	<b>Township:</b> 03N
<b>UTM:</b> Zone-11 N3804167 E315166	<b>Range:</b> 20W
<b>Mapping Precision:</b> NON-SPECIFIC	<b>Section:</b> 07 <b>Qtr:</b> XX
<b>Symbol Type:</b> POLYGON	<b>Meridian:</b> S
<b>Area:</b>	<b>Elevation:</b> 300 ft

<b>Occurrence No.</b> 130	<b>Map Index:</b> 00303	<b>EO Index:</b> 24960	_____ <b>Dates Last Seen</b> _____
<b>Occ Rank:</b> Unknown			<b>Element:</b> 1985-07-XX
<b>Origin:</b> Natural/Native occurrence			<b>Site:</b> 1985-07-XX
<b>Presence:</b> Presumed Extant			
<b>Trend:</b> Increasing			<b>Record Last Updated:</b> 1996-01-02

**Quad Summary:** Simi (3411837/139D)

**County Summary:** Ventura

**Location:** ARROYO SIMI, BTWN COLLEGE VIEW AVE AND MOORPARK RD.

<b>Lat/Long:</b> 34.29083° / -118.85121°	<b>Township:</b> 02N
<b>UTM:</b> Zone-11 N3795954 E329618	<b>Range:</b> 19W
<b>Mapping Precision:</b> NON-SPECIFIC	<b>Section:</b> 03 <b>Qtr:</b> NE
<b>Symbol Type:</b> POINT	<b>Meridian:</b> S
<b>Radius:</b> 1/5 mile	<b>Elevation:</b>

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## **CULTURAL RESOURCES**

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**PHASE I ARCHAEOLOGICAL INVESTIGATION  
of APPROXIMATELY 16,500 LINEAR FEET/14.5 ACRES for the  
MOORPARK WASTEWATER TREATMENT PLANT  
RECLAIMED WATER DISTRIBUTION SYSTEM PHASE IV  
MOORPARK, VENTURA COUNTY, CALIFORNIA  
(USGS 7.5' Moorpark & Simi Valley West Quadrangles)**

*Prepared for:*

**Padre Associates**

1861 Knoll Drive

Ventura, California 93003

805/644-2220

*Contact: Donna Hebert*

*Prepared by:*

**Conejo Archaeological Consultants**

2321 Goldsmith Avenue

Thousand Oaks, California 91360

805/494-4309

*Author: Mary Maki*

*CAC Document No. 12-608*

*April 8, 2013*

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**PHASE 1 ARCHAEOLOGICAL INVESTIGATION  
MWTP RECLAIMED WATER DISTRIBUTION SYSTEM PHASE IV  
MOORPARK, VENTURA COUNTY**

## **1.0 INTRODUCTION**

The Moorpark Wastewater Treatment Plant (MWTP) Reclaimed Water Distribution System Phase 4 Project (Project) includes the installation of approximately 5,030 linear meters (16,500 ft.) of reclaimed water pipeline and a booster pump station in the Moorpark area of Ventura County (Exhibits 1, 2 & 3).

Conejo Archaeological Consultants (Conejo) was retained to determine if the project could result in any potentially significant effects to prehistoric or historic cultural resources and, if so, present recommendations that would reduce any such effects to a less than significant level. Conejo's Phase 1 archaeological survey encompassed approximately a 10 meter (40 ft.) wide corridor of approximately 5,030 linear meters (16,500 ft.); totaling approximately 14.5 acres.

In addition to the field survey, this investigation consisted of a records search at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System, Native American Heritage Commission (NAHC) and Native American notification, and historic land uses research.

Background research indicates that the Project area of potential effect (APE) is located within a general area that has a high sensitivity for Native American resources. Eight archaeological sites are recorded within a 0.5-mile radius of the Project APE. Archaeological sites CA-VEN-1127 and CA-VEN-1128 are both located with the Project APE. However, a Phase II Test Excavation at these two sites determined that the locations of CA-VEN-1127 and CA-VEN-1128 do not constitute true archaeological sites (W & S Consultants 2000:i). Except for a portion of Walnut Canyon Road, the entire Project APE was previously subject to archaeological survey. The NAHC failed to identify any sacred lands within the project area. Native American notification did not result in any identification of any resources within the Project APE. However, Chumash consultant Patrick Tumamait recommended that a Chumash consultant be hired to monitor all project related earth disturbances. Conejo's field survey identified no prehistoric or historic resources within the Project APE. The ground surface throughout the entire Project APE alignment was previously disturbed.

Based on this investigation's findings, project implementation will not impact archaeological resources. Therefore, no further archaeological investigations are warranted prior to project approval. In the event that buried prehistoric or historic materials are encountered during construction, all earth disturbing work within the vicinity of the find must be temporarily halted until a qualified archaeologist can evaluate the nature and significance of the find, as detailed in Section VI of this report.

## **2.0 BACKGROUND**

### **2.1 PROJECT DESCRIPTION & LOCATION**

The Ventura County Waterworks District No. 1 (District) owns and operates the MWTP. The District proposes to implement the proposed components of the reclaimed water distribution system and specifically the Project to meet the following goals and objectives.

- Enable more reclaimed water to be used for non-potable purposes in lieu of imported water from the State Water Project and groundwater.
- Reduce demands on imported water from the State Water Project.
- Improve water supply reliability by providing a firm resource of water supply even during drought conditions.
- Expand the reclaimed water distribution system of Ventura County Waterworks District No. 1 (VCWWD 1) consistent with the Watersheds Coalitions of Ventura County Integrated Regional Water Management Plan (2006) and part of the Recycled Water Master Plan.

The location of the proposed Phase IV pipeline from west to east is described as follows. The pipeline alignment begins in the City of Moorpark on Championship Drive near the VCWWD 1 reclaimed water tank (located at 11501 Championship Drive) and extends east on Championship Drive to Walnut Canyon Road. The alignment along Championship Drive is within the roadway and right-of-way. At Walnut Canyon Road the alignment extends north to Broadway Road. Along this alignment the jurisdiction changes from City of Moorpark to unincorporated Ventura County. The alignment along the majority of Walnut Canyon is located on the west side of the road outside the Caltrans right of way. The alignment crosses Walnut Canyon and continues north outside of the right of way on the east side of Walnut Canyon Road. The final portion of the alignment extends east on Broadway Road to the Rustic Canyon Golf Course and will be within the roadway (County Road). The address of the Rustic Canyon Golf Course is 15100 Happy Camp Canyon Road, Moorpark, California. (However the golf course is in unincorporated Ventura County.) The proposed booster pump station will be located at the existing reclaimed water tank at 11501 Championship Drive. Reclaimed water from the MWTP would be served to customers along the route as they are identified and request service. This phase will provide 425 AFY of reclaimed water.

The Project regional and site specific locations are shown on Exhibit 1. An aerial view of the proposed pipeline alignment is provided on Exhibit 2. The project is located within Township 3 North, R 19 W, Section Nos. 29, 31, 32, & 33 on the USGS 7.5' Moorpark & Simi Valley West Quadrangles (Exhibit 3).

## **2.2 Survey Personnel**

The record search and pedestrian survey were conducted by Mary Maki, who also authored this report. Ms. Maki has over 23 years of archaeological experience in California (RPA # 10389).

## **3.0 AFFECTED ENVIRONMENT**

### **3.1 ECOLOGICAL SETTING**

The Project lies within the Simi Hills to the north of Little Simi Valley, within the City of Moorpark's northwestern limits and also includes an unincorporated area of Ventura County. This area is part of the Transverse Range, a region in which most main physiographic features are aligned in an east-west direction. Soils within the Project area consist of Quaternary Older Alluvial Deposits made up of unconsolidated to poorly cemented sands, clays, silts and gravels.

Ranching, agriculture and development have significantly altered the setting of the Project APE from prehistoric times. The alignment of the pipeline within Championship Drive is bordered by large residential homes, a golf course, the golf course club house, horse and bicycle trails, landscaping, and non-native annual grasses and sage scrub. The alignment then heads north along the west side of Walnut Canyon Road. This area was used as rangeland for livestock and includes a mixture of non-native grasses interspersed with some coastal sage scrub vegetation, and lemon orchards. The northern portion of the alignment along Walnut Canyon Road crosses to the east side of the road where it is adjacent/within a lemon orchard. The portion of the alignment along Broadway Road is bordered by a residence with horse facilities, lemon and avocado orchards. East of Broadway Road the alignment crosses a large dirt parking, and follows a dirt road bordered by non-native annual grasses into the Rustic Canyon Golf Course.

### **3.2 CULTURAL SETTING**

#### Regional Prehistoric Overview

The archaeological record indicates that sedentary populations occupied the coastal regions of California more than 9,000 years ago (Greenwood 1972). Several chronological frameworks have been developed for the Chumash region. One of the most definitive works on Chumash chronology is that of King (1990). King postulates three major periods -- Early, Middle and Late. Based on artifact typologies from a great number of sites, he was able to discern numerous style changes within each of the major periods.

The Early Period (8000 to 3350 Before Present [B.P.]) is characterized by a primarily seed processing subsistence economy. The Middle Period (3350 to 800 B.P.) is marked by a shift in the economic/subsistence focus from plant gathering and the use of hard seeds, to a more generalized

## **MWTP Reclaimed Water Distribution System Phase IV**

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hunting-maritime-gathering adaptation, with an increased focus on acorns. The full development of the Chumash culture, one of the most socially and economically complex hunting and gathering groups in North America, occurred during the Late Period (800 to 150 B.P.).

### Regional Ethnographic Overview

The Project area lies within the historic territory of the Native American Indian group known as the Chumash. The Chumash occupied the region from San Luis Obispo County to Malibu Canyon on the coast, and inland as far as the western edge of the San Joaquin Valley, and the four northern Channel Islands (Grant 1978:505). The Chumash are subdivided into factions based on distinct dialects. The general Project area lies within the historic territory of the Ventureño Chumash.

The Ventureño were the southernmost Chumash group, occupying most of the area of present day Ventura County and the southwest corner of Los Angeles County. The name Ventureño is derived from the mission with local jurisdiction, San Buenaventura.

The Chumash aboriginal way of life ended with Spanish colonization. As neophytes brought into the mission system, they were transformed from hunters and gatherers into agricultural laborers and exposed to diseases to which they had no resistance. By the end of the Mission Period in 1834, the Chumash population had been decimated by disease and declining birthrates. Population loss as a result of disease and economic deprivation continued into the next century. Today many people claim their Chumash heritage in Ventura County. In general, they place high value on objects and places associated with their past history, especially burials, grave goods, and archaeological sites.

### Regional Historic Overview

In 1769, the Portola Expedition departed the newly established San Diego settlement and marched northward toward Monterey, with the objective to secure that port and establish five missions along the route. The City of Moorpark area is located approximately halfway between Mission San Buenaventura to the west, founded by Father Serra in 1782, and Mission San Fernando to the east, which was founded in 1797 by Father Lasuen.

The Project is located within the historic boundaries of the Spanish land grant San Jose de Nuestra Senora de Altagracia y Simi (Rancho Simi), which was granted to the Santiago de la Cruz Pico family in 1795. The Pico family ranch operations were headquartered at the "Simi Adobe" (now Strathearn Historical Park). Don Jose de la Guerra y Noriega bought the Simi Rancho in 1942. The Project area is located at the western end of Rancho Simi, a marginal zone that did not Exhibit in any historical incidents or developments during the Spanish and Mexican Periods. The Mexican Period ended with the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848, which transferred control of California, New

Mexico, Texas, and other western properties to the United States.

During the early American Period, live stock grazing continued to be the major activity within the project region. A few years after Noriega's death in 1858, Rancho Simi was purchased by the Philadelphia and California Petroleum Company headed by Pennsylvania Railroad president, Thomas A. Scoot. Oil in quantity was not found, therefore, the Simi Land & Water Company was formed and the land began to be sold off in parcels. Orchards and row crops began to replace former grazing lands. Apricots, walnuts, citrus, and black-eyed peas were the early major crops in the Moorpark area. The townsite of Moorpark was laid out by Madeline R. Poindexter in 1900 in anticipation of the coming railroad (Triem 1985:112). The town grew after the 1904 completion of a 2246 meter (7,369 ft.) tunnel through the Santa Susana Mountains, which allowed the Southern Pacific Railroad to establish a depot in Moorpark.

The town and surrounding area remained a rural ranching and farming community up to the late 1950s , but with better roads and imported water Moorpark began to grow into a bedroom community for the Los Angeles Metropolitan Area. The City of Moorpark was incorporated in 1983. The 2000 census determined that Moorpark was the fastest growing city in Ventura County. Today Moorpark has a population of 36,372 (City-Data.com). The MWTP was built in the early 1980s and was recently expanded. The Reclaimed Water System Phase IV Project is needed to meet the projected future needs of the City of Moorpark and portions of unincorporated Ventura County.

## 4.0 CULTURAL RESOURCES INVESTIGATION/METHODS

### 4.1 RECORDS SEARCH

A records search was conducted by Ms. Maki at the SCCIC on March 27, 2013.

#### Archaeological Sites

Eight archaeological sites are recorded within a 0.5-mile radius of the Project APE and described below:

- **CA-VEN-671** was recorded as a lithic scatter within an area of dark soil by Lopez in 1980. Fused shale and quartzite flakes as well as several cores were observed within an approximate 500 meter square area.

*CA-VEN-671 is located over 0.25-mile south of the Project APE and will not be directly or indirectly effected by Project implementation.*

- **CA-VEN-672** was also recorded as a lithic scatter of fused shale flakes within an area of dark soil by Lopez in 1980. The site was estimated to cover approximately 1,000 square meters.

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CA-VEN-672 is located approximately 200 meters east of the Project APE and atop a ridge. This site will not be directly or indirectly effected by Project implementation.

- **CA-VEN-1121** consists of a low density scatter of fused shale flakes covering an approximate 20 square meter area. The site was recorded by Miller and Rhodes in 1993a.

CA-VEN-1121 is located at the outer edge of the 0.5-mile records search radius and will not be directly or indirectly effected by Project implementation.

- **CA-VEN -1122** was also recorded by Miller and Rhodes in 1993b. The site is described as a large predominately low density lithic scatter. The artifacts consist of numerous unmodified lithic flakes. Fire-affected rock , quartzite cobbles, scattered sandstone cobbles, and burned mammal bone was also observed. This site covers approximately 18,750 square meters.

CA-VEN-1122 is located approximately 91 meters (300 ft.) west of the proposed pipeline alignment it will not be directly or indirectly effected by Project implementation.

- **CA-VEN-1126** was bisected by Broadway Road and consists of a small lithic scatter (Miller & Rhodes 1993c).

CA-VEN-1126 is located almost 0.25-miles west of the Project APE and will not be directly or indirectly effected by Project implementation.

- **CA-VEN -1127** was recorded as low density lithic scatter consisting of 17 fused shale flakes and 1 hammerstone (Miller & Rhodes 1993d). This site includes and extends to the north and south of the Happy Camp Canyon Park parking lot located on the west terrace of Happy Camp Canyon.

A Phase II Archaeological Test Excavation conducted at CA-VEN-1127 determined that the site consisted of low density, but non-cultural and non-archaeological scatters of float fused shale (W & S Consultants 2000:17). No cultural resources of any kind were found at this site location and CA-VEN-1127 was determined to have no cultural significance.

As CA-VEN-1127 has been determined to not be an archaeological site, construction of the pipeline through its recorded boundaries shall have no impact on cultural resources.

- **CA-VEN -1128** consists of a large low density lithic scatter. The site extends across a low terrace between ephemeral drainages and the upper terrace to the east. Miller & Rhodes (1993e) suggest that the site possibly represented evidence of a prehistoric trail

and temporary lithic reduction site.

A Phase II Archaeological Test Excavation conducted at CA-VEN-1128 determined that (like CA-VEN-1127) the site consisted of low density, but non-cultural and non-archaeological scatters of float fused shale (W & S Consultants 2000:17). No cultural resources of any kind were found at this site location and CA-VEN-1128 was determined to have no cultural significance.

*As CA-VEN-1128 was determined to not be an archaeological site, construction of the pipeline through its recorded boundaries shall have no impact on cultural resources.*

- **CA-VEN-1573** consists of four flakes and marine shell fragments and was recorded by Horne in 1998.

*CA-VEN-1573 is located approximately 0.25-mile south of the Project APE and will not be directly or indirectly effected by Project implementation.*

### Previous Archaeological Investigations

Twenty-nine previous archaeological investigations have been conducted within or immediately adjacent to portions of the project APE. The majority of the project APE was subject to previous archaeological investigation. The investigation that included portions of the current project APE are described below.

In 1993, W & S Consultants surveyed 650 acres for the Moorpark Golf Course Project. This survey encompassed the current project's alignment along Championship Drive and the proposed booster pump station location. The intensive Phase 1 archaeological survey and cultural resources assessment failed to find any evidence of extant cultural resources. Walked transects spaced at 15 to 20 meters were used to survey the property. The southernmost portion of the APE along Walnut Canyon Road was also covered by this survey. The survey report concluded that no additional archaeological study was warranted on this property (W & S Consultants 1993:21).

Clay Singer surveyed the western half of the proposed alignment along Championship Drive in 1981, as part of a larger survey for Tentative Tact No. 3319 in Moorpark. Singer's survey identified no prehistoric or historic resources (Singer 1981:8). Chumash consultant, Charlie Cooke participated on the field survey. In 1977, Lopez surveyed much of the same area for proposed oil developments. This survey identified no cultural resources within a 0.5-mile radius of the current project.

The portion of the current project that extends from the intersection of Walnut Canyon Road and Broadway Road east to the Rustic Canyon Golf Course was surveyed by Macfarlane Archaeological Consultants in 1993. This survey resulted in the recordation of CA-VEN-1127 and CA-VEN-1128 within

## MWTP Reclaimed Water Distribution System Phase IV

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the Project APE. Neither site was formerly evaluated under the study, so both sites were considered to be potentially significant (McFarlane 1993:33).

In 1998, W & S Consultants conducted a survey for the Happy Camp Golf Course Study Area, which included the eastern third of the current project area (just east of Broadway Road). This survey relocated sites CA-VEN-1127 and CA-VEN-1128, but no other resources were identified within the approximately 700 acres surveyed. W & S Consultants (1998:22) recommended that Phase II test excavations and determinations of significance be conducted at both prehistoric sites.

In 2000, W & S Consultants conducted a Phase II test excavation and determinations of significance at CA-VEN-1127 and CA-VEN-1128. The investigation included the location, mapping and collection of all surface remains present on the ground surface. Next two 1 x1 meter units were hand excavated at CA-VEN-1127 and four 1x 1 meter units were excavated within CA-VEN-1128. Excavation was conducted in 10 cm levels with the excavated soil being screened through 1/8-inch mesh. The field results are described as follows:

*...Phase II fieldwork at sites CA-VEN-1127 and CA-VEN-1128 demonstrated that both sites are devoid of extant archaeological remains. Specimens of fused shale were located at each site. Although fused shale is a common lithic material used for tool manufacture in this region, all of the recovered specimens were natural examples of float, however, most likely derived from geological outcrops in the Happy Camp Canyon and transported down-canyon by natural processes. That is, none of the specimens exhibited human modification of use. CA-VEN-1127 and -1128, in other words, do not constitute archaeological sites or cultural resources of any kind (W & S Consultants 2000:16).*

Based on these findings, no additional archaeological work was recommended for either site (W & S Consultants 2000:18). Richard Angulo, representing the California Indian foundation, served as Native American monitor and liaison for the Phase II excavations.

### Federal, State & County Historic Listings

The National Register of Historic Places (NRHP) listings includes no properties within a 0.5-mile radius of the Project APE (National Park Service 2013). No California Historical Landmarks or California Points of Historical Interest are located within a 0.5-mile radius of the Project APE (Office of Historic Preservation 2013, 1992). The California State Historic Resources Inventory lists one property within a 0.5-mile radius of the project APE (Office of Historic Preservation 2012).

Property No. 170023; Located at 11800 Championship Dr.; SCE M23-T1, Saugus, Santa Susana, Moorpark. This property was evaluated as ineligible for listing on the National Register.

*Property No. 170023 is located over 100 meters south of the Project APE and will not be directly or indirectly impacted by the Project.*

There are no Ventura County Landmarks within a 0.5-mile radius of the Project APE (Ventura County 2004).

### **4.2 ARCHAEOLOGICAL FIELD SURVEY METHODOLOGY & FINDINGS**

Ms. Maki conducted an archaeological survey of the project APE on April 3 & 5, 2013 (Exhibits 2 & 3). The archaeological survey encompassed approximately a 12 meter (40 ft.) wide corridor of approximately 5,030 linear meters (16,500 ft.); totaling approximately 14.5 acres. The survey focused on the pipeline's proposed alignment. The proposed booster pump station was not surveyed as its APE was previously surveyed by Conejo and no prehistoric or historic resources were identified (Maki 2009). Since the 2019 survey, the proposed booster pump station's APE was extensively disturbed by grading associated with the construction of the existing water tank in 2011.

The objective of the survey was the visual detection of historical resources, including lithic debris and aboriginal artifacts, midden deposits, archaeological features, historical-era foundations or refuse, and other evidence of past land use. Survey boundaries were determined using aerial photographs provided by the client. A description of the survey methods and results is broken down by the Project's roadway alignments below.

#### Championship Drive

The alignment along Championship Drive is within the roadway and right-of-way. Conejo surveyed both sides of the road up to 6 meters (20 ft.) from the edge of pavement. On the south side of Championship Drive, landscaping and a horse trail afforded some ground surface visibility. On the north side of Championship Drive visibility was limited to where landscaping allowed and a few areas where sage scrub existed between the road and golf course. No prehistoric or historic resources were observed along Championship Drive, which is bordered by single-family residences and the Moorpark Country Club golf course. Overall ground surface visibility ranged from fair to poor along Championship Drive. This portion of the Project APE was previously disturbed by road construction and landscaping. Prior to construction of Championship Drive and its surrounding development, the Project APE was surveyed by Lopez in 1977, by Singer in 1981, and by W & S Consultants in 1993. None of these surveys identified any prehistoric or historic resources within or adjacent to Championship Drive.

### Walnut Canyon Road

The alignment along Walnut Canyon Road is outside of the Caltrans right-of-way and may extend up to 12.2 meters (40 ft.) from the edge of pavement. The majority of this section of the Project APE was not subject to previous archaeological reconnaissance. Conejo used four parallel transects spaced approximately 3 meters apart (10 ft.) to survey this section of the alignment. This survey corridor include lemon orchards, Eucalyptus windrows, and non-native annual grasslands interspersed with some sage scrub vegetation. The survey area included a dry drainage, which parallels Walnut Canyon Road. The drainage sidewalls and the numerous rodent mounds in the non-native annual grass areas, allowed for inspection of subsurface soils for evidence of buried resources. Ground surface visibility was fair overall along Walnut Canyon Road. Previous ground disturbances included agricultural disking, planting of orchards, road grading, and the construction of a small Calleguas Municipal Water District facility. No prehistoric or historic resources were observed.

### Broadway Road & County Road Extension into the Rustic Canyon Golf Course

Conejo surveyed both sides of Broadway Road up to 6 meters (20 ft.) from the edge of pavement where feasible. The corridor did not extend into the fenced off residential yard. However, the remainder of Broadway Road is bordered by lemon and avocado orchards and the full corridor width was surveyed. Ground surface visibility was good in this section of the Project APE. No prehistoric or historic resources were observed. Previous ground disturbances in the portion of the Project APE included grading of Broadway Road, and agricultural activities associated with orchard production.

Broadway Road eastern end terminates at the Happy Camp Canyon Parking lot. The Project APE extends east across the southern portion of the large dirt parking lot following a County dirt road to the golf course, the Project APE continues east across a small portion of the golf course and a dry drainage and terminates in a "natural vegetation" area of the golf course. Four transects spaced 3 meters (10 ft.) apart were used to survey this APE corridor. Ground surface visibility ranged from fair to excellent. No prehistoric or historic resources were observed. Previous ground disturbances included grading of the dirt road and parking lot, and construction of the golf course.

This entire section of the Project APE was previously surveyed by MacFarlane & Associates (1993). The western half of this portion of the Project APE, including the golf course and dirt parking lot, was also surveyed by W & S Consultants (1998). Two archaeological sites, CA-VEN-127 and CA-VEN-128, were recorded within this section of the Project APE. However, Phase 2 Archaeological Excavations determined that the originally recorded artifacts at both CA-VEN-127 and CA-VEN-128 were actually ecofacts and not cultural in origin (W & S Consultants (2000:16).

### **4.3 NATIVE AMERICAN CONSULTATION**

The Native American Heritage Commission (NAHC) sacred lands file search failed to indicate the presence of Native American sacred places/site in the Project area (Singleton 2013) (See Exhibit 4).

The following NAHC list of recommended Chumash contacts were emailed or mailed a project description letter dated March 29, 2013, and asked to respond with any comments or concerns regarding the project:

- Alva-Padilla, Adelina, Chair Woman, Santa Ynez Tribal Elders Council;
- Baker, Crystal, Coastal Band of the Chumash Nation;
- Banuelos, Raudel Joe Jr., Barbareño/Ventureño Band of Mission Indians;
- Armenta, Vincent, Santa Ynez Band of Mission Indians;
- Arredondo, Frank;
- Cordero, Michael, Coastal Band of the Chumash Nation;
- Cordero, Toni, Coastal Band of the Chumash Nation;
- Folkes, Beverly Salazar;
- Garcia, Janet, Chairperson, Coastal Band of the Chumash Nation;
- Guzman-Folkes, Randy;
- Miller, Stephen William;
- Owl Clan;
- Pappo, Kathleen, Barbareño/Ventureño Band of Mission Indians;
- Parra, Charles;
- Parra-Hernandez, Melissa;
- Pulido, Carol;
- Romero, Freddie, Santa Ynez Elders Council;
- Salas, Ronnie, Fernandeno Tataviam Band of Mission Indians;
- Tumamait, Julie, Barbareño/Ventureño Band of Mission Indians;
- Tumamait, Patrick;
- Tribal Administrator, Santa Ynez Band of Mission Indians;
- Vigil, Chief Mark Steven, San Luis Obispo County Chumash Council;

To date, two Native American responses have been received. On April 1, 2013, Mr. Romero of the Santa Ynez Band of Mission Indians emailed:

*The SYBCI Elders Council will not be commenting on this project at this time since it is located outside of our commenting area and will leave it up to the local tribes.*

On April 5, 2013, in a telephone call, Mr. Tumamait recommended that that project trenching be monitored by a Native American, based on the length of the pipeline and the general sensitivity of the Moorpark area. Mr. Tumamait did not identify any specific resources near the Project APE.

Any future Native American responses received shall be forwarded to the Padre Associates, attention Donna Hebert, Senior Project Manager.

## **5.0 SUMMARY AND RECOMMENDATIONS**

Background research indicates that the Project area of potential effect (APE) is located within a general area that has a high sensitivity for Native American resources. Eight archaeological sites are recorded within a 0.5-mile radius of the Project APE. Archaeological sites CA-VEN-1127 and CA-VEN-1128 are both located with the Project APE. However, a Phase II Test Excavation at these two sites determined that the locations of CA-VEN-1127 and CA-VEN-1128 do not constitute true archaeological sites (W & S Consultants 2000:i). Except for a portion of Walnut Canyon Road, the entire Project APE was previously subject to archaeological survey. The NAHC failed to identify any sacred lands within the project area. Native American notification did not result in the identification of any cultural resources within the Project APE. However, Chumash consultant Patrick Tumamait recommended that a Chumash consultant be hired to monitor all project related earth disturbances. Conejo's field survey identified no prehistoric or historic resources within the Project APE. The ground surface throughout the entire Project APE alignment was previously disturbed. Therefore, no further archaeological investigation is warranted as long as the following two recommendations are included as conditions of project approval.

1. In the event that archaeological resources are unearthed during project construction, all earth disturbing work within 30 meters (100 ft) of the find must be temporarily suspended until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative should monitor any archaeological field work associated with Native American materials.
2. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Ventura 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 (NAHC).

## 6.0 SOURCES CITED

Grant, Campbell

- 1978 Chumash: Introduction. In *Handbook of North American Indians, California, Vol. 8*. Edited by Robert F. Heizer, Smithsonian Institution, Washington D.C.

King, Chester

- 1990 *The Evolution of Chumash Society: A Comparative Study of Artifacts Used in the Social Maintenance of the Santa Barbara Channel Islands Region Before A.D. 1804*. Garland Publishing, Inc., New York.

Lopez, Robert

- 1977 An Archaeological Survey of 2,500 Acres for a Proposed Oil Exploration Project by Neaves Petroleum Developments in the Vicinity of Moorpark, Ventura County, California. On file at the South Central Coastal Information Center.

MacFarlane, Heather

- 1993 Phase 1 Archaeological Survey: Santa Clara River alternative Broadway Feeder Option and San Fernando Valley Conveyance Project, Simi Valley Feeder Options A, B, C, SubOption, and Perliter Tunnel, Los Angeles and Ventura Counties, California. On file at the South Central Coastal Information Center.

Maki, Mary

- 2009 Archaeological Survey Report of Approximately 1 Acre & 13,000 Linear Feet For The Ventura County Water District No. 1 Reclaimed Water System Project - Phases II & III, Moorpark, Ventura County, California. On file at the South Central Coastal Information Center.

Moratto, Michael

- 1984 *California Archaeology*. Academic Press, San Diego, California.

National Park Service

- 2012 National Register Information System, Index by Goleta, Santa Barbara County, California. <http://nrhp.focus.nps.gov/natreshome.do>

Office of Historic Preservation

- 2013 California Historical Landmarks, Ventura County. [http://ohp.parks.ca.gov/listed\\_resources/?view=county&criteria=42](http://ohp.parks.ca.gov/listed_resources/?view=county&criteria=42)
- 2012 Directory of Properties in the Historic Property Data File for Moorpark, Ventura County, April 5, 2012.
- 1992 *California Points of Historical Interest*. Department of Parks and Recreation, Sacramento, California.

Singer, Clay

- 1981 Cultural Resource Survey and Impact Assessment for Tentative Tract No. 3319 in Moorpark, Ventura County, California. On file at the South Central Coastal Information Center.

Ventura County, Planning Division

- 2004 Ventura County Historical landmarks & Points of Interest. [http://www.ventura.org/rma/planning/pdf/programs/CHB/Points\\_of\\_Interest.pdf](http://www.ventura.org/rma/planning/pdf/programs/CHB/Points_of_Interest.pdf).

## **MWTP Reclaimed Water Distribution System Phase IV**

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### W & S Consultants

2000 Phase II Test Excavations and Determinations of Significance at CA-VEN-1127 and -1128, Ventura County, California. On file at the South Central Coastal Information Center.

1998 Phase 1 Archaeological Survey for the Happy Camp Golf Course Study Area, Ventura County, California. On file at the South Central Coastal Information Center.

1993 Phase 1 Archaeological Survey and Cultural Resources Assessment for the Moorpark Golf Course Project, Ventura County, California. On file at the South Central Coastal Information Center.

### Individuals and Institutions Contacted

Alva-Padilla, Adelina, Chair Woman, Santa Ynez Tribal Elders Council, letter dated March 29, 2013.

Baker, Crystal, Coastal Band of the Chumash Nation, letter dated March 29, 2013.

Banuelos, Raudel Joe Jr., Barbareño/Ventureño Band of Mission Indians, letter dated March 29, 2013.

Armenta, Vincent, Santa Ynez Band of Mission Indians, letter dated March 29, 2013.

Arredondo, Frank, letter dated March 29, 2013.

Cordero, Michael, Coastal Band of the Chumash Nation, letter dated March 29, 2013.

Cordero, Toni, Coastal Band of the Chumash Nation, letter dated March 29, 2013.

Folkes, Beverly Salazar, letter dated March 29, 2013.

Garcia, Janet, Chairperson, Coastal Band of the Chumash Nation, letter dated March 29, 2013.

Guzman-Folkes, Randy, letter dated March 29, 2013.

Miller, Stephen William, letter dated March 29, 2013.

Owl Clan, letter dated March 29, 2013.

Pappo, Kathleen, Barbareño/Ventureño Band of Mission Indians, letter dated March 29, 2013.

Parra, Charles, letter dated March 29, 2013.

Parra-Hernandez, Melissa, letter dated March 29, 2013.

Pulido, Carol, letter dated March 29, 2013.

Romero, Freddie, Santa Ynez Elders Council, letter dated March 29, 2013.

Salas, Ronnie, Fernandeno Tataviam Band of Mission Indians, letter dated March 29, 2013.

Singleton, Dave, Program Analyst, Native American Heritage Commission, Sacred Lands File Check letter dated March 27, 2013.

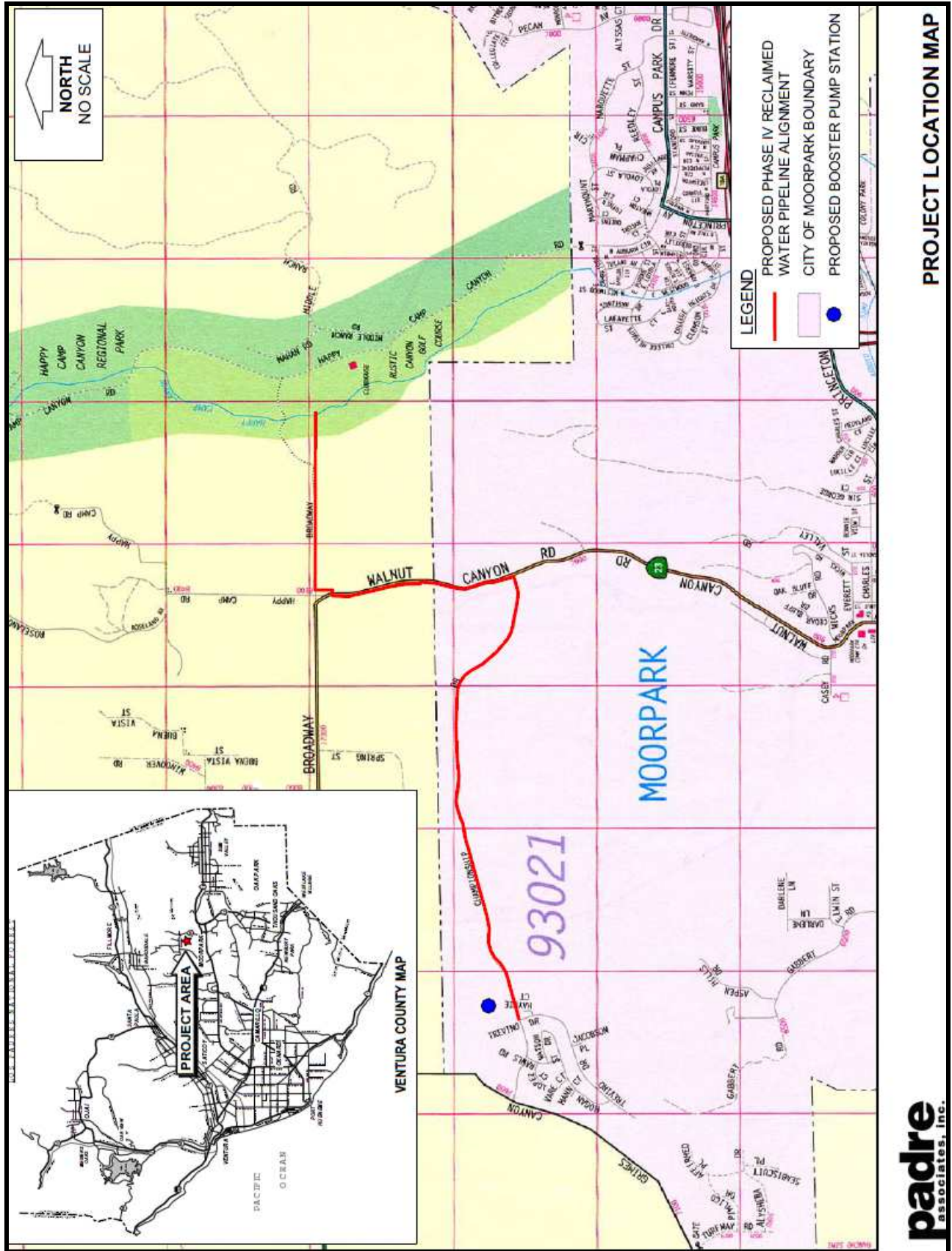
Tumamait, Julie, Barbareño/Ventureño Band of Mission Indians, letter dated March 29, 2013.

Tumamait, Patrick, letter dated March 29, 2013, telephone call April 5, 2013.

Tribal Administrator, Santa Ynez Band of Mission Indians, letter dated March 29, 2013.

Vigil, Chief Mark Steven, San Luis Obispo County Chumash Council, letter dated March 29, 2013.

# MWTP Reclaimed Water Distribution System Phase IV



**PROJECT LOCATION MAP**

**Exhibit 1**

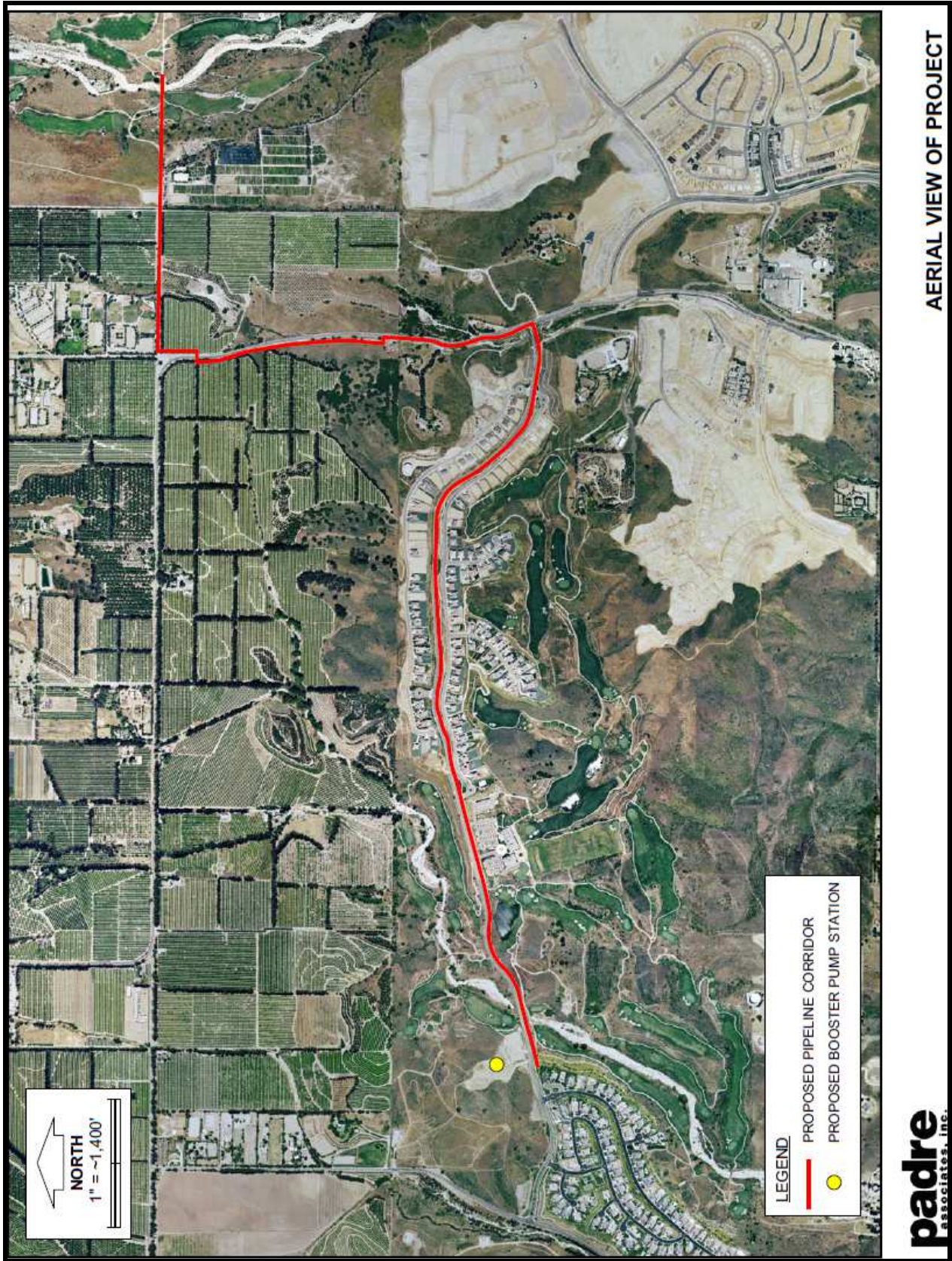


Exhibit 2

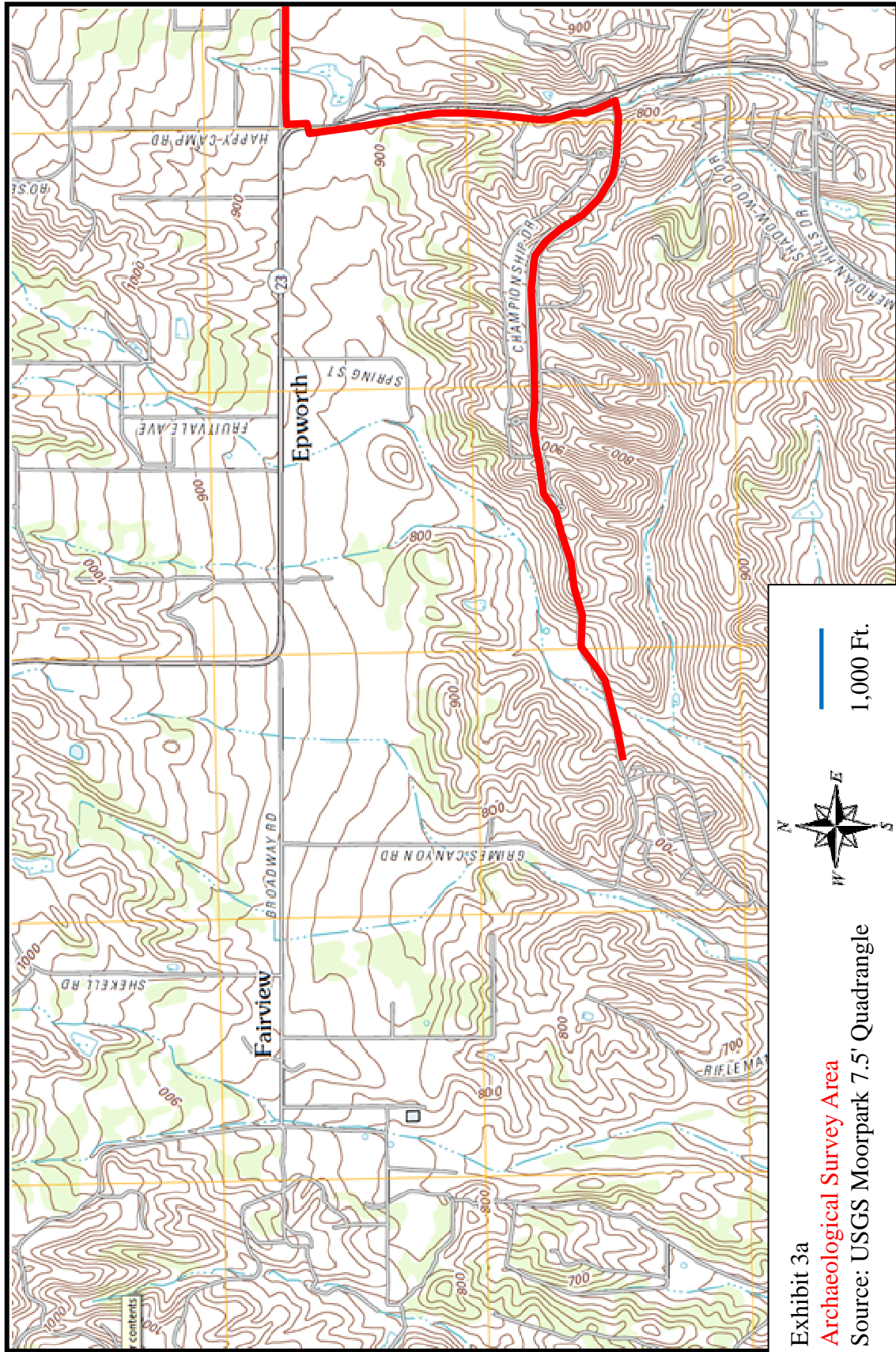


Exhibit 3a

Archaeological Survey Area

Source: USGS Moorpark 7.5' Quadrangle

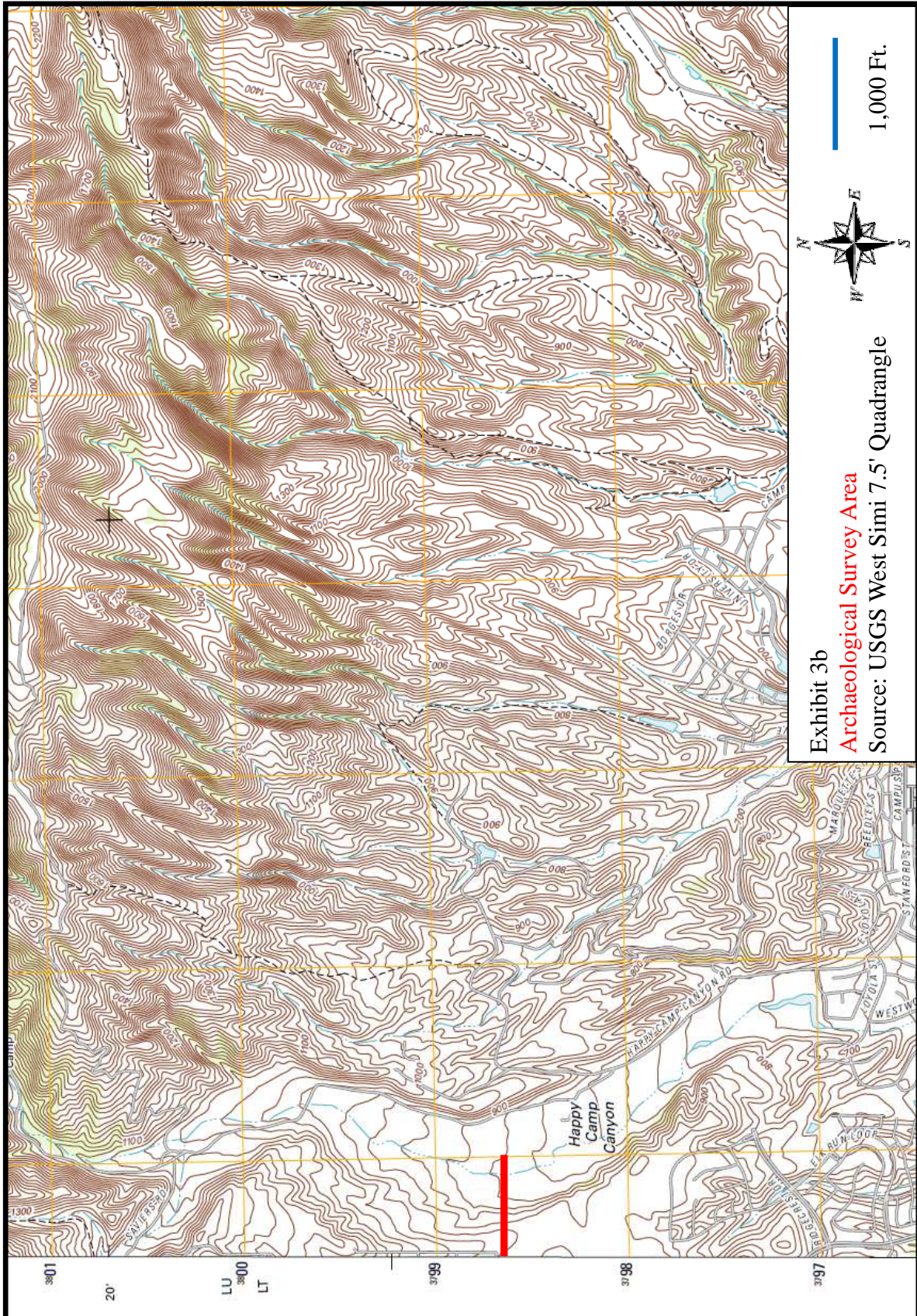


Exhibit 4

Native American Heritage Commission

Sacred Lands File Search

**NATIVE AMERICAN HERITAGE  
COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
www.nahc.ca.gov  
e-mail: ds\_nahc@pacbell.net

March 27, 2013

Ms. Mary Maki, M.A., RPA

**CONEJO ARCHAEOLOGICAL CONSULTANTS**

2321 Goldsmith Avenue  
Thousand Oaks, CA 91360

Sent by U.S. Mail

No. of Pages: 4

Re: Request for Sacred Lands File Search and Native American Contacts list for the  
**"Moorpark Wastewater Treatment Plan Reclaimed Water Distribution  
System Phase IV Project;"** located in Moorpark; Ventura County, California

Dear Ms. Maki:

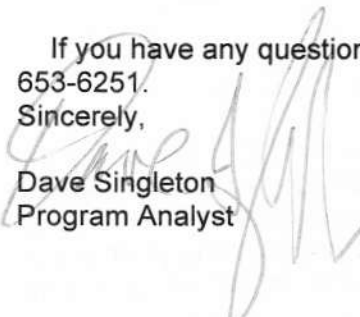
A record search of the NAHC Sacred Lands File failed to indicate the presence of Native American sacred places/site in the area you identified by the USGS coordinates, the Area of Potential Effect (APE). However, the absence of archaeological or cultural resources does not preclude their existence. Other data sources for Native American sacred places/sites should also be contacted. A Native American tribe or individual may be the only sources of presence of traditional cultural places or sites.

In the 1985 Appellate Court decision (170 Cal App 3<sup>rd</sup> 604), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Attached is a list of Native American tribes, individuals/organization who may have knowledge of cultural resources in or near the project area. As part of the consultation process, the NAHC recommends that local governments and project developers contact the tribal government to determine if any cultural places might be impacted by the proposed action. If a response is not received in two weeks of notification the NAHC requests that a follow telephone call be made to ensure that the project information has been received.

If you have any questions or need additional information, please contact me at (916) 653-6251.

Sincerely,

  
Dave Singleton  
Program Analyst

**Native American Contacts  
Ventura County  
March 27, 2013**

Beverly Salazar Folkes  
1931 Shadybrook Drive  
Thousand Oaks, CA 91362  
805 492-7255  
(805) 558-1154 - cell

Chumash  
Tataviam  
Ferrnandeño

Patrick Tumamait  
992 El Camino Corto  
Ojai, CA 93023  
(805) 640-0481  
(805) 216-1253 Cell

Chumash

Santa Ynez Band of Mission Indians  
Vincent Armenta, Chairperson

P.O. Box 517  
Santa Ynez, CA 93460  
varmenta@santaynezchumash.

(805) 688-7997  
(805) 686-9578 Fax

Chumash

San Luis Obispo County Chumash Council  
Chief Mark Steven Vigil

1030 Ritchie Road  
Grover Beach CA 93433

(805) 481-2461  
(805) 474-4729 - Fax

Chumash

Fernandeno Tataviam Band of Mission Indians  
Ronnie Salas, Cultural Preservation Department

1019 - 2nd Street, Suite #1  
San Fernando CA 91340  
rortega@tataviam-nsn.gov

(818) 837-0794 Office

(818) 837-0796 Fax

Fernandeno  
Tataviam

Owl Clan  
Qun-tan Shup  
48825 Sapaque Road  
Bradley, CA 93426  
mupaka@gmail.com

(805) 472-9536 phone/fax  
(805) 835-2382 - CELL

Chumash

Barbareno/Ventureno Band of Mission Indians  
Julie Lynn Tumamait-Stennslie, Chair

365 North Poli Ave  
Ojai, CA 93023  
jtumamait@sbcglobal.net

(805) 646-6214

Chumash

Stephen William Miller  
189 Cartagena  
Camarillo, CA 93010  
(805) 484-2439

Chumash

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Moorpark Wastewater Treatment Plant Reclaimed Water Distribution System Phase IV Project; located in Moorpark; Ventura County, California for which a Sacred Lands File search and Native American Contacts list were requested.

**Native American Contacts  
Ventura County  
March 27, 2013**

Santa Ynez Tribal Elders Council  
Adelina Alva-Padilla, Chair Woman  
P.O. Box 365 Chumash  
Santa Ynez , CA 93460  
elders@santaynezchumash.org  
(805) 688-8446  
(805) 693-1768 FAX

Santa Ynez Band of Mission Indians  
Tribal Admin/Counsel Sam Cohen  
P.O. Box 517 Chumash  
Santa Ynez , CA 93460  
info@santaynezchumash.org  
(805) 688-7997  
(805) 686-9578 Fax

Randy Guzman - Folkes  
6471 Cornell Circle Chumash  
Moorpark , CA 93021  
Fernandeño  
ndnRandy@yahoo.com Tataviam  
(805) 905-1675 - cell Shoshone Paiute  
Yaqui

Carol A. Pulido  
165 Mountainview Street Chumash  
Oak View , CA 93022  
805-649-2743 (Home)

Coastal Band of the Chumash Nation  
Toni Cordero, Chairwoman  
P.O. Box 4464 Chumash  
Santa Barbara CA 93140  
cordero44@charter.net  
805-964-3447

Melissa M. Parra-Hernandez  
119 North Balsam Street Chumash  
Oxnard , CA 93030  
envyy36@yahoo.com  
805-983-7964  
(805) 248-8463 cell

Charles S. Parra  
P.O. Box 6612 Chumash  
Oxnard , CA 93031  
(805) 340-3134 (Cell)  
(805) 488-0481 (Home)

Frank Arredondo  
PO Box 161 Chumash  
Santa Barbara CA 93102  
ksen\_sku\_mu@yahoo.com  
805-617-6884  
805-893-1459  
ksen\_sku\_mu@yahoo.com

**This list is current only as of the date of this document.**

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**Native American Contacts  
Ventura County  
March 27, 2013**

Santa Ynez Tribal Elders Council  
Freddie Romero, Cultural Preservation ConsInt  
P.O. Box 365 Chumash  
Santa Ynez , CA 93460  
805-688-7997, Ext 37  
freddyromero1959@yahoo.  
com

Coastal Band of the Chumash Nation  
Crystal Baker  
P.O. Box 4464 Chumash  
Santa Barbara CA 93140  
805-689-9528

Barbareno/Ventureno Band of Mission Indians  
Kathleen Pappo  
2762 Vista Mesa Drive Chumash  
Rancho Pales Verdes CA 90275  
310-831-5295

Coastal Band of the Chumash Nation  
Michael Cordero  
5246 El Carro Lane Chumash  
Carpinteria , CA 93013  
805-684-8281

Barbareno/Ventureno Band of Mission Indians  
Raudel Joe Banuelos, Jr.  
331 Mira Flores Court Chumash  
Camarillo , CA 93012  
805-987-5314

Coastal Band of the Chumash Nation  
Janet Darlene Garcia  
P.O. Box 4464 Chumash  
Santa Barbara CA 93140  
805-689-9528

**This list is current only as of the date of this document.**

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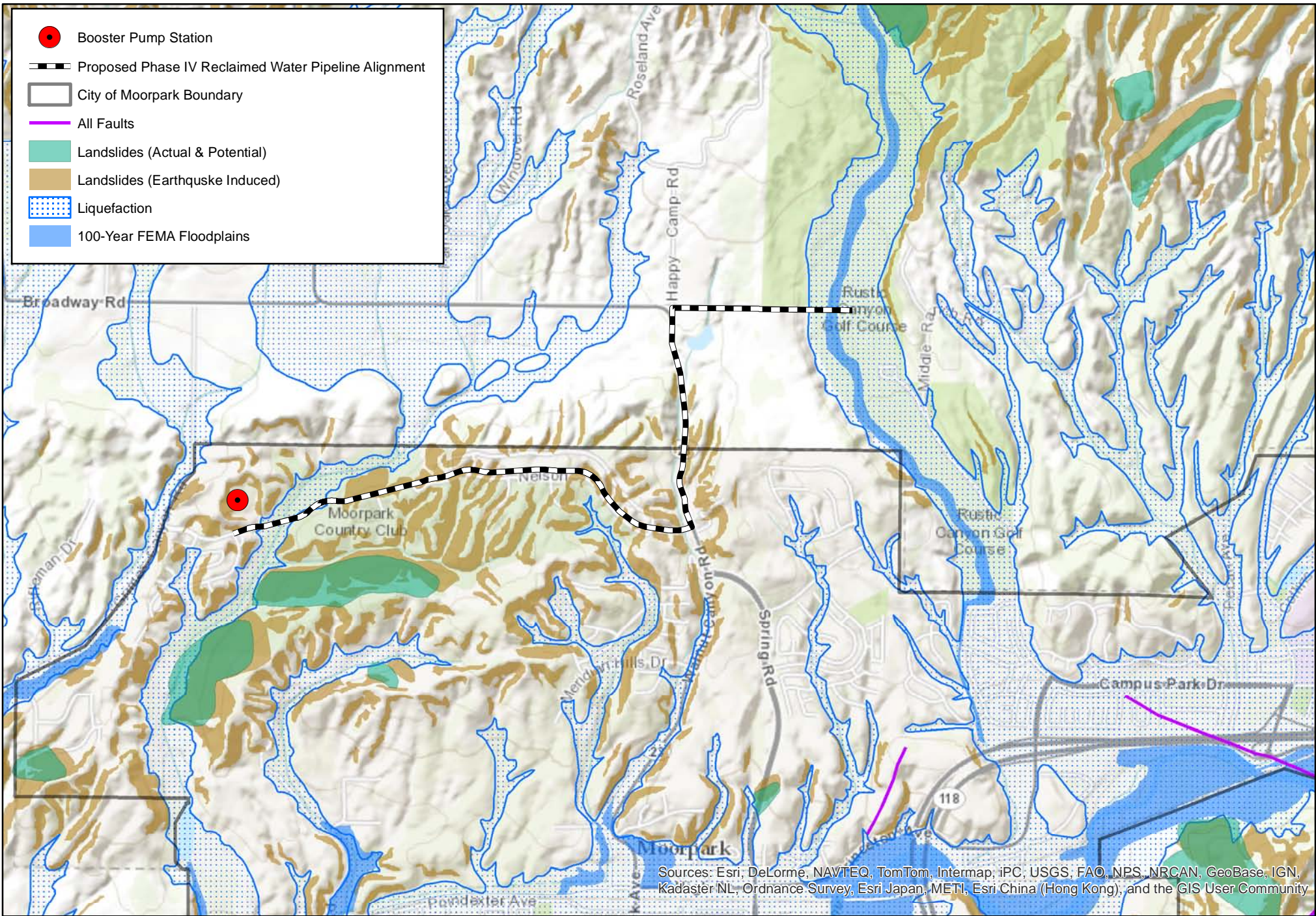
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## HAZARDS

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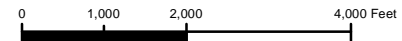
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Ventura County  
Resource Management Agency  
Information Systems Department  
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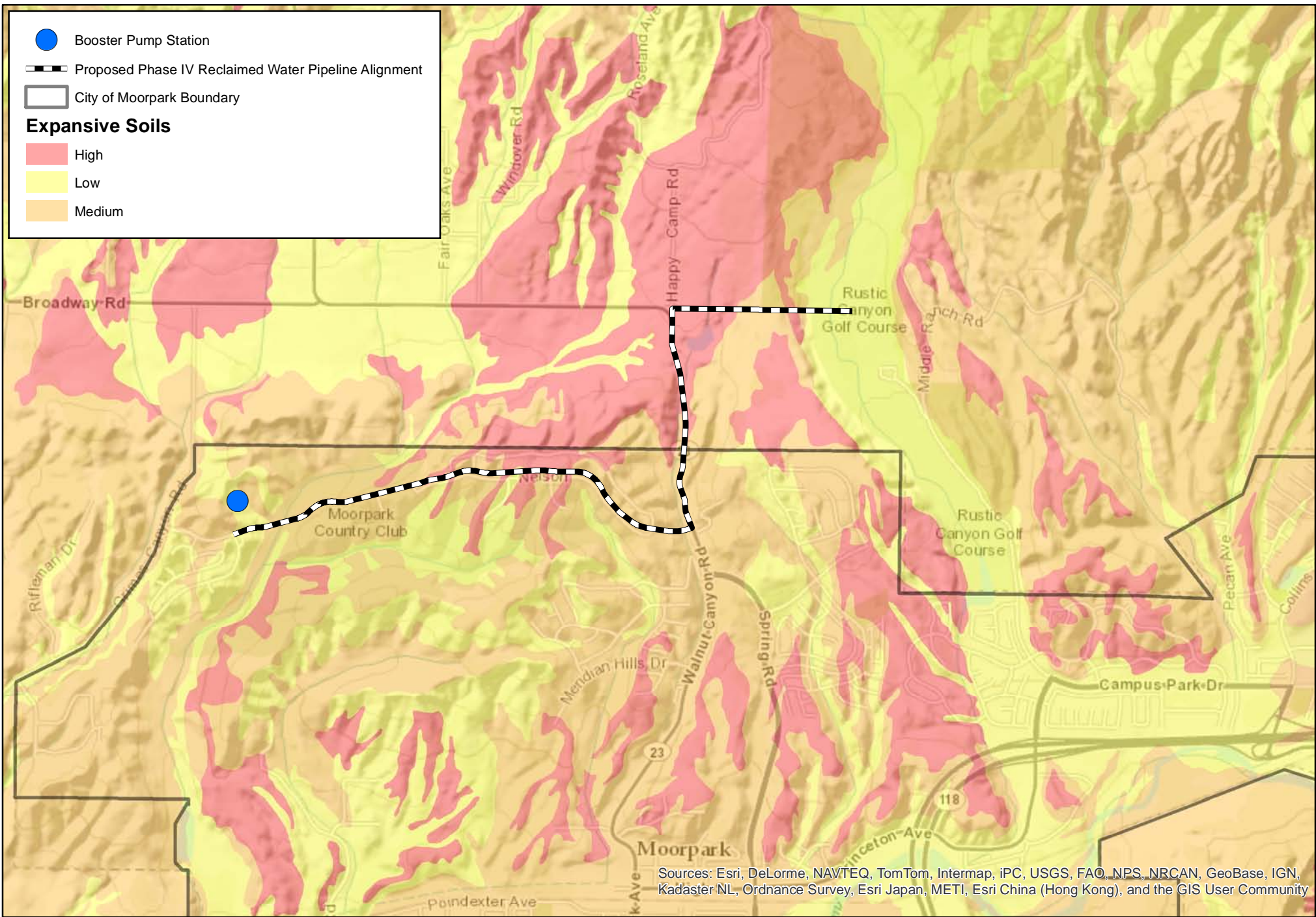


# Hazards



Disclaimer: this map was created by the Ventura County Resource Management Agency, Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein

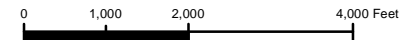




Ventura County  
Resource Management Agency  
Information Systems Department  
Map created on 04/03/2013



# Expansive Soils



Disclaimer: this map was created by the Ventura County Resource Management Agency, Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein



## **NOISE**

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Roadway Construction Noise Model (RCNM),\

Report date: 4/11/2013  
 Case Description: Pump Station Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Haynie Court Residence	Residential	50	45	43

Description	Impact Device	Usage(%)	Equipment		
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)
Crane	No	16		80.6	450
Backhoe	No	40		77.6	450
Dump Truck	No	40		76.5	450
Excavator	No	40		80.7	450
Vacuum Street Sweeper	No	10		81.6	450
Compactor (ground)	No	20		83.2	450

Equipment	Calculated (dBA)			Results		Noise Limits (dBA)	
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Evening Lmax
Crane	61.5	53.5	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A
Dump Truck	57.4	53.4	N/A	N/A	N/A	N/A	N/A
Excavator	61.6	57.6	N/A	N/A	N/A	N/A	N/A
Vacuum Street Sweeper	62.5	52.5	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	64.1	57.2	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>64.1</b>	<b>63</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.0

Report date: 4/11/2013  
 Case Description: Pump Station Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Haynie Court Residence	Residential	50	45	43

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	450	0
Backhoe	No	40		77.6	450	0
Dump Truck	No	40		76.5	450	0
Excavator	No	40		80.7	450	0
Vacuum Street Sweeper	No	10		81.6	450	0
Compactor (ground)	No	20		83.2	450	0

Equipment	Results						
	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	
Crane	61.5	53.5	N/A	N/A	N/A	N/A	
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	
Dump Truck	57.4	53.4	N/A	N/A	N/A	N/A	
Excavator	61.6	57.6	N/A	N/A	N/A	N/A	
Vacuum Street Sweeper	62.5	52.5	N/A	N/A	N/A	N/A	
Compactor (ground)	64.1	57.2	N/A	N/A	N/A	N/A	
<b>Total</b>	<b>64.1</b>	<b>63</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	

\*Calculated Lmax is the Loudest value.