

Calleguas Municipal Water District



Final Subsequent Environmental Impact Report

Calleguas Regional Salinity Management Pipeline Phases 3 and 4

Ventura County • September 2024



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Final Subsequent Environmental Impact Report

Executive Summary

This document is a Subsequent Environmental Impact Report (SEIR) analyzing the environmental effects of the proposed Calleguas Regional Salinity Management Pipeline (CRSMP), Phases 3 & 4 (proposed project). This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Project Applicant

Calleguas Municipal Water District
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Lead Agency Contact Person

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Project Background

For decades, local agencies and regulators have been working to address increasing salinity levels in the Calleguas Creek Watershed. The CRSMP was designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The purpose of the CRSMP is to facilitate the utilization of additional water sources by providing a mechanism to efficiently dispose of the concentrate generated during treatment. The CRSMP currently extends approximately 22 miles from its upstream end in Somis, in unincorporated Ventura County, to its downstream terminus at the ocean outfall in Port Hueneme.

Project Description

The proposed project would extend the CRSMP approximately 14.4 miles inland to connect to additional dischargers. This SEIR has been prepared to examine the potential environmental effects of the proposed project. The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

Project Location

The proposed pipeline alignment would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of Camarillo to the western boundary of Simi Valley. The alignment would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County.

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

The pipeline alignment would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently used for agricultural production. Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment during construction activities. Regional access would be provided by State Route 118, State Route 23, State Route 34, and U.S. 101.

Project Characteristics

The proposed project would install approximately 14.4 miles of underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials. Phases 3 and 4 would connect additional dischargers to the CRSMP. Discharges from these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the ocean outfall. Effluent would be subject to existing National Pollutant Discharge Elimination System (NPDES) constituent limits at the outfall.

Phases 3 and 4 of the CRSMP would typically be installed in 20- to 40-foot sections. The majority of the pipeline would be installed via conventional open-cut trench construction methods. The maximum depth of excavation typically would be 8 feet. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts. Where the pipeline would need to cross below an existing utility or drainage channel, the depths may be greater than 8 feet and would depend on the characteristics of the utility or channel.

Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal at an appropriately licensed landfill. Storage of materials and equipment would be dependent upon the location of the contractor and subcontractors. If the contractors are local, they may store equipment and materials in their own yards.

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be trucked off-site for reuse for dust control and irrigation.

CONSTRUCTION SCHEDULE

Construction would mostly be limited to normal construction hours between 7:00 am and 4:30 pm, Monday through Friday. Weekend work, as well as evening and nighttime work between the hours of 4:30 pm and 7:00 am, may be required to install the trenchless portions of the pipelines. In areas where traffic conditions require non-traditional working hours, night and weekend work could also be necessary. Additionally, the tie-in connection to the CRSMP would require the shutdown of the CRSMP, consequently requiring work to be performed continuously until complete. Work hours would be finalized through the roadway encroachment permitting and design process.

Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. Due to uncertainties about the anticipated timing of dischargers, duration of permitting and design, and other considerations, there is currently no planned start date.

TRAFFIC CONTROLS

To minimize traffic impacts to the traveling public, trenchless construction methods would be used to cross busy intersections as well as Somis Road and Santa Rosa Road.

Save for a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

Calleguas would engage in community outreach to notify the public of anticipated lane closures. Notifications may include, but are not limited to, social media posts, mailers, and/or emails to interested parties. Calleguas would also coordinate directly with adjacent landowners whose driveways may be affected by construction activities.

BEST MANAGEMENT PRACTICES

During construction of the proposed project, Calleguas' construction contractor would implement best management practices (BMPs) in accordance with the project's Contract Documents. BMPs for the proposed project are anticipated to include measures for the protection of aesthetics, air quality, and noise control as listed below:

- **Protection of Air Quality.** Dust control would be conducted during ground-disturbing activities using an approved method such as water application, no substantial ground-disturbing activities would be conducted during periods of high winds, on-site construction vehicles would not travel at speeds greater than 15 miles per hour in unpaved areas, and trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard.
- **Noise Control.** Noise abatement measures would be implemented as needed including acoustical mufflers and engine shielding on construction equipment, limiting the number and duration of equipment idling, directing noise away from residences, and maintaining equipment in good condition without rattling or banging of parts.
- **Nighttime Construction Lighting.** In the event nighttime construction lighting is needed, the lighting would be directed downwards towards construction activities and would be shielded so as to minimize visibility from adjacent land uses.

Project Operation and Maintenance

Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. Valves on the appurtenances would be exercised roughly once per year and the pipeline alignment would be marked as needed in response to DigAlert (utility marking) requests.

The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands.

In the event any project component is compromised during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible; emergency response and repairs are part of Calleguas' normal operations to maintain system integrity and reliability and are not a new or increased activity associated with the project.

Project Objectives

The objectives for the proposed project are as follows:

- Enable both public and private water agencies to develop new water sources, which at the present time cannot be widely used due to poor quality;
- Manage the use of high salinity groundwater and treated municipal wastewater; and
- Dispose of brine produced by enhanced water treatment.

Alternatives

As required by the California Environmental Quality Act (CEQA), this SEIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, the proposed project was determined to be the environmentally superior alternative after the No Project Alternative.

- Alternative 1: No Project Alternative
- Alternative 2: Phase 3 Alternative Alignment
- Alternative 3: Phase 4 Alternative Alignment

Alternative 1 (No Project Alternative) assumes the proposed Phase 3 and Phase 4 alignments of the CRSMP would not be constructed. Current uses on the project alignment include public roadway ROW, and private agricultural land where the alignment would cross north of Upland Road. Under this alternative, there would be reduced impacts to biological resources, cultural resources, geology and soils, noise, transportation, and tribal cultural resources when compared to the proposed project. However, Alternative 1 would not fulfill the project objectives because the existing conditions would not provide brine conveyance and salinity management.

Alternative 2 (Phase 3 Alternative Alignment) would involve construction of the western portion of the Phase 3 alignment through Calleguas Creek and private agricultural property located north of Upland Road. The Alternative 2 pipeline alignment would be the same as the proposed project's alignment along Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Alternative 2 would result in increased impacts to biological resources, cultural resources, noise, and tribal cultural resources, and decreased impacts to transportation when compared to the proposed project. Overall, Alternative 2 would not eliminate any significant and unavoidable impacts of the proposed project, and would fulfill project objectives to the same extent as the proposed project. Alternative 2 would not be the environmentally superior alternative as it would increase impacts to biological resources, including special-status species, sensitive habitat, and jurisdictional features; increase impacts to cultural resources and tribal cultural resources; and increase noise levels at sensitive receptors at Upland Road.

Alternative 3 (Phase 4 Alternative Alignment) would involve construction of the central portion of the Phase 4 alignment to the west of Sunset Valley Road and south of Tierra Rejada Road, adjacent to Arroyo Santa Rosa and within agricultural dirt access roads. The Alternative 3 pipeline alignment would be the same as the proposed project's alignment along Upland Road, Santa Rosa Road, Moorpark Road, Read Road, and Tierra Rejada Road (in Simi Valley). Alternative 3 would result in increased impacts to biological resources and agricultural lands, and decreased impacts to noise and transportation when compared to the proposed project. Overall, Alternative 3 would not eliminate any significant and unavoidable impacts of the proposed project, and would fulfill project objectives

to the same extent as the proposed project. Alternative 3 would not be the environmentally superior alternative as it would increase impacts to biological resources and agricultural lands.

Environmentally Superior Alternative. The proposed project would be the environmentally superior alternative, as it would meet all project objectives, result in lesser impacts to agricultural lands, biological resources, cultural resources, and tribal cultural resources than Alternatives 2 and 3, and result in generally the same, or slightly greater, impacts to other environmental issue areas.

Refer to Section 6, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The SEIR scoping process did not identify any areas of known controversy for the proposed project. Responses to the Notice of Preparation of a Draft SEIR are summarized in Section 1, *Introduction*.

Issues to be Resolved

The proposed project may require permits from the City of Camarillo, City of Moorpark, City of Simi Valley, City of Thousand Oaks, County of Ventura, Ventura County Watershed Protection District, and/or the California Department of Transportation (Caltrans).

Issues Not Studied in Detail in the EIR

Table 1-2 in Section 1, *Introduction*, summarizes issues from the environmental checklist addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence showing significant impacts would occur to the following issue areas: Aesthetics, Agricultural Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology, Land Use and Planning, Mineral Resources, Population/Housing, Public Services, Recreation, Utilities and Service Systems, and Wildfire. Impacts to Biological Resources, Cultural Resources, Geology and Soils, Noise, Transportation, and Tribal Cultural Resources were found to be potentially significant and are addressed in this SEIR.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measure (s)	Residual Impact
Biological Resources		
<p>Impact BIO-1: The proposed project would potentially result in direct and indirect impacts to special-status plant and animal species. Following implementation of Mitigation Measures BIO-1 through BIO-3, and implementation of construction best management practices from the project’s SWPPP, impacts would be less than significant with mitigation incorporated.</p>	<p>MM BIO-1: Biological and Environmental Awareness Training (BEAT) Program. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist to assist workers in recognizing special status biological resources which may occur in the project area. The specifics of the BEAT Program shall include information about nesting birds and identification of special status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under the SWPPP. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project.</p> <p>All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist.</p> <p>The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program, if required for this project. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs will be explicitly addressed.</p> <p>MM BIO-2: General Best Management Practices for Biological Resources. To avoid and/or minimize potential direct and indirect impacts to special-status species and potentially jurisdictional waters and water quality, the following BMPs shall be implemented. The proposed project will be phased, and construction is anticipated to be conducted in a linear fashion along the alignment; thus, BMPs shall be implemented as necessary along the alignment ahead of or during anticipated construction.</p> <ul style="list-style-type: none"> ▪ No native vegetation with a diameter at breast height (DBH) of more than 4 inches shall be removed or damaged without approval by Calleguas. ▪ Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable. ▪ Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles. 	<p>Mitigation Measures BIO-1 and BIO-3 would require avoidance and minimization measures to reduce direct and indirect impacts to special status species from development of the project. As a result, implementation of Mitigation Measures BIO-1 and BIO-3 would reduce project impacts on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service to a less-than-significant level.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<ul style="list-style-type: none"> ▪ A speed limit of 15 miles per hour for construction vehicles shall be implemented on unpaved roads adjacent to native vegetation and potentially jurisdictional waters. ▪ All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site. ▪ No project construction, activities, and equipment staging shall occur within the bed or banks of Calleguas Creek. No vegetation shall be removed from the channel, bed, or banks of Calleguas Creek. ▪ Excavated material from trenching along any potentially jurisdictional feature shall be side cast away to prevent sediment deposition within the feature. ▪ All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality. ▪ All night-time lighting shall be shielded and downcast to avoid potential impacts to wildlife migration. ▪ No pets shall be allowed on the project site. ▪ If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas. ▪ While encounters with special-status species are not likely or anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction superintendent or biological monitor. The construction superintendent or biological monitor shall immediately notify Calleguas. ▪ Before starting or moving construction vehicles, especially after a few days of non-operation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area. 	
	<p>MM BIO-3: Protection of Nesting Birds.</p> <p>Project-related activities shall occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season and will impact potentially suitable nesting habitat (i.e., natural/ornamental habitats), then no more than three days prior to initiation of ground-disturbing activities (including, but not limited to vegetation removal, site preparation, grading, excavation, and trenching) within the project</p>	

Impact	Mitigation Measure (s)	Residual Impact
	<p>site, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-foot for potential raptor nesting habitat), where accessible and public. The proposed project will be phased, and construction is anticipated to be conducted in a linear fashion along the alignment; thus, pre-construction nesting bird surveys shall be completed as necessary along the alignment (i.e., rolling surveys) ahead of anticipated construction. Surveys shall be completed no more than seven days before anticipated construction activities.</p> <p>Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to Calleguas.</p> <p>If no nesting birds are observed during pre-construction surveys, no further actions are necessary. If nests are found, an appropriate avoidance buffer ranging in size from 25 to 300 feet for passerines, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable material and/or via a digital mapping medium. Modifications to the buffer size shall occur only in consultation with the qualified biologist. Active nests shall be monitored at a minimum of once per week while construction is occurring until it has been determined the young have fledged the nest. No ground disturbance or vegetation removal shall occur within this buffer until the qualified biologist confirms breeding/nesting has ended, and the young are no longer dependent on the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.</p> <p>If active nests of federally or state-listed species (e.g., least Bell’s vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas’ contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA Leq at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA Leq at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.</p>	

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact BIO-2: The project area contains critical habitat for one species and is adjacent to critical habitat for two species. The project area does not contain sensitive natural communities. Following implementation of Mitigation Measures BIO-1 and BIO-2 and BMPs from the project’s SWPPP, impacts to sensitive habitats would be less than significant.</p>	<p>MM BIO-1 and BIO-2</p>	<p>Mitigation Measures BIO-1 and BIO-2 would require avoidance and minimization measures to reduce impacts to critical habitat from development of the project. Following implementation of these mitigation measures, impacts would be less than significant.</p>
<p>Impact BIO-3: Potential jurisdictional features are located in the project area, and project construction may impact these features during excavation and pipeline installation. Implementation of Mitigation Measure BIO-1 and BIO-2 and BMPs from the project’s SWPPP would reduce impacts to a less-than-significant level.</p>	<p>MM BIO-1 and BIO-2</p>	<p>Mitigation Measures BIO-1 and BIO-2 would require avoidance and minimization measures to reduce impacts to jurisdictional features from development of the project. Following implementation of these mitigation measures, impacts would be less than significant.</p>
<p>Impact BIO-4: The project area is located within an Essential Connectivity Area; however, implementation of Mitigation Measure BIO-2 and BMPs from the project’s SWPPP would reduce impacts to wildlife movement through project lighting requirements. Impacts would be less than significant.</p>	<p>MM BIO-2</p>	<p>Mitigation Measure BIO-2 would require avoidance and minimization measures to reduce impacts to wildlife movement from development of the project. Following implementation of this mitigation measure, impacts would be less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact BIO-5: Project construction may impact protected trees adjacent to project alignment roadways. Implementation of Mitigation Measure BIO-4, if necessary, would reduce potential impacts to protected trees to a less-than-significant level.</p>	<p>MM BIO-4: Arborist Study.</p> <p>Based on final design, if project construction is anticipated to impact protected trees, then prior to construction, an Arborist Report shall be prepared to address tree protection measures during construction and mitigation requirements for those protected trees impacted by the project. The report shall be prepared by an arborist certified by the International Society of Arboriculture (ISA) or a related professional, such as a landscape architect, with qualifying education, knowledge, and experience. The report shall meet the specific content requirements for Arborist Reports as outlined in any applicable municipal code. The Arborist Report shall include, at minimum, the following:</p> <ul style="list-style-type: none"> ▪ An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health, and vigor rating. ▪ Representative photographs of each regulated tree which may be encroached upon. ▪ Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes. ▪ Requirements for protective tree fencing, and designated tree protection zones (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), and measures for addressing roots and limbs that are cut during trenching. ▪ Description of activities prohibited/permitted within the tree protection zone, encroachment boundaries. ▪ Description of any potential transplanting or replacement tree plantings. 	<p>Mitigation Measure BIO-4 would require the preparation of a Tree Protection Plan if Calleguas determines the project would substantially affect protected trees. Following implementation of this mitigation measure, impacts to biological resource policies or ordinances would be less than significant.</p>
Cultural Resources		
<p>Impact CUL-1: No resources were identified within the project site that qualify as a historical resource pursuant to Section 15064.5. Therefore, the project would have no impact to historical resources and no mitigation is required.</p>	<p>No mitigation required.</p>	<p>No impact would occur.</p>

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact CUL-2: Construction of the project has the potential to impact previously recorded and unknown archaeological resources. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM CUL-1: Cultural and Archaeological Resources Education (CARE) Program. An archaeologist shall be retained to conduct a Cultural and Archaeological Resources Education (CARE) Program training on archaeological sensitivity prior to the commencement of any ground-disturbing activities. This training shall occur under the direction of a qualified archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for archaeology (National Park Service 1983). The initial archaeological sensitivity training shall be given to all construction personnel, including, but not limited to, Calleguas personnel (including the assigned inspectors), contractors, and subcontractors, prior to their involvement in any ground-disturbing activities. Additional personnel who subsequently become involved in the project shall also receive the training prior to their involvement in any ground-disturbing activities. This can be accomplished by additional in-person training sessions, viewing a recording of the initial training session, or through the distribution of hardcopy or electronic training materials. The CARE Program shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, safety procedures when working with monitors, specific procedures to be followed in the event of an inadvertent discovery, proper protocol for treatment of cultural materials in the event of a find, and consequences in the event of non-compliance. As a result of Assembly Bill 52 consultation, the Fernandeano Tataviam Band of Mission Indians deferred the remainder of Phase 4 work to the Barbareño/Ventureño Band of Mission Indians. As such, a representative of the Barbareño/Ventureño Band of Mission Indians shall be invited to participate in the CARE Program for work occurring within Phase 3 and Phase 4 of the project. In the event the Barbareño/Ventureño Band of Mission Indians elects not to participate in the CARE Program within the Phase 4 alignment, the Fernandeano Tataviam Band of Mission Indians shall be contacted.</p> <p>MM CUL-2: Archaeological and Native American Monitoring. An archaeological monitor shall be retained to monitor all project-related ground disturbing activities that occur within the recorded boundaries of previously recorded archaeological resources CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them. Archaeological monitoring shall be performed under the direction of the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983). A Native American monitor representing the Barbareño/Ventureño Band of Mission Indians shall be retained to monitor project-related ground disturbing activities occurring within the recorded CA-VEN-71, CA-VEN-214, CA-VEN-339 and CA-VEN-1123 boundaries, which intersect portions of the Phase 3 and Phase 4 alignment, and a 50-foot buffer surrounding them. In the event the Barbareño/Ventureño Band of Mission Indians elects not to monitor within the Phase 4 alignment, the Fernandeano Tataviam Band of Mission Indians shall be contacted to provide Native American monitoring services. Previous testing within the previously recorded boundaries of CA-VEN-71, CA-VEN-214 and CA-VEN-339 identified sparse flaked stone and shell within</p>	<p>Mitigation Measures CUL-1 and CUL-2 would reduce impacts to previously recorded archaeological resources located within the project site to a less-than-significant level. With implementation of Mitigation Measure CUL-3, potential impacts to previously unknown archaeological resources during project construction would be reduced to a less than significant level.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<p>disturbed soils. Should any archaeological resources that are not consistent with previous findings be identified during monitoring, the archaeological and appropriate Native American monitor shall have the authority to halt work within 50 feet of the discovery and/or direct work to another area until the archaeological and appropriate Native American monitor, with input from the qualified archaeologist if necessary, have assessed the nature of the find and the location has been cleared for further construction activity. The discovery of archaeological materials consistent with previous findings shall not require work to be halted or redirected. If intact (i.e., previously undisturbed) archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the qualified archaeologist, and an appropriate Native American monitor if the resource is Native American in origin, shall determine if Phase II archaeological testing for CRHR eligibility is appropriate.</p> <p>If Phase II archaeological testing is completed and the resource is eligible for the CRHR and significant impacts to the resource cannot be avoided via redesign, the qualified archaeologist, in consultation with an appropriate Native American monitor if the resource is Native American in origin, shall prepare a data recovery plan tailored to the nature and characteristics of the resource, per the requirements of California Code of Regulations Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural materials related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and appropriate Native American monitor shall recover and document the scientifically consequential information which justifies the resource’s significance. Calleguas shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Code of Regulations Guidelines Section 15126.4(b)(3)(C).</p> <p>MM CUL-3: Unanticipated Discovery of Archaeological Resources.</p> <p>In the event archaeological resources are unexpectedly encountered during ground-disturbing activities outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them, in areas not observed by an archaeological monitor and appropriate Native American monitor, work within 50 feet of the find shall halt and a qualified archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist or by an archaeologist working under their direction to be Native American in origin, then an appropriate Native American monitor shall also be contacted to participate in the evaluation of the resource consistent with Mitigation Measure TCR-2. The qualified archaeologist and appropriate Native American monitor shall determine appropriate steps consistent with Mitigation Measure CR-2.</p>	

Impact	Mitigation Measure (s)	Residual Impact
<p>Impact CUL-3: Ground-disturbing activities associated with the project could result in damage to or destruction of human burials. Impacts would be less than significant with adherence to existing regulations.</p>	<p>No mitigation required.</p>	<p>Impacts would be less than significant.</p>
<p>Geology and Soils</p>		
<p>Impact GEO-1: The project will require excavations into previously undisturbed sediments with high paleontological sensitivity. Impacts to paleontological resources would be less than significant with mitigation incorporated.</p>	<p>MM GEO-1: Paleontological Resources Monitoring and Mitigation.</p> <p><i>Qualified Professional Paleontologist.</i> Prior to excavation, Calleguas shall retain a Qualified Professional Paleontologist, as defined by the Society for Vertebrate Paleontology (SVP) (2010). The Qualified Professional Paleontologist shall draft a Paleontological Resources Impact Mitigation Program to direct all mitigation measures related to paleontological resources.</p> <p><i>Paleontological Worker Environmental Awareness Program.</i> Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a Paleontological Resources Awareness Training (PRAT) for construction personnel and Calleguas inspectors (including soil materials specialists) regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction or Calleguas personnel.</p> <p><i>Paleontological Monitoring.</i> In areas mapped as high paleontological sensitivity (i.e., Quaternary old alluvium, Saugus Formation, Topanga Formation, and Sespe Formation), where Calleguas personnel determine construction activities will be disturbing previously undisturbed sediments (i.e., native sediments), full-time paleontological monitoring shall be conducted. Through coordination between the Qualified Professional Paleontologist, Calleguas, and construction personnel, the paleontological monitoring schedule shall be determined by considering published geologic maps, field observations, and the construction schedule, as directed by the Paleontological Resources Impact Mitigation Program. The Qualified Professional Paleontologist may recommend monitoring be reduced in frequency or ceased entirely based on field observations. For example, excavations that are determined to only affect disturbed (i.e., artificial fill) or low-sensitivity (i.e., Holocene-aged) sediments shall not be monitored even if these areas are mapped as high-sensitivity geologic units. Such decisions shall be subject to review and approval by Calleguas. Additionally, spot-checks shall be conducted for ground-disturbing activities that reach depths of 5 feet or greater in areas mapped as Holocene-aged sediments (i.e., Quaternary stream channels and Quaternary alluvium) to check for the presence of older, high-sensitivity sediments. If such sediments are observed, then full-time monitoring shall be conducted. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The Qualified Professional</p>	<p>Implementation of Mitigation Measure GEO-1 would reduce the potential impacts to paleontological resources to a less-than-significant level.</p>

Impact	Mitigation Measure (s)	Residual Impact
	<p>Paleontologist shall coordinate with the contractor and Calleguas personnel to determine the monitoring schedule and minimize unnecessary site visits.</p> <p>In the event of a fossil discovery, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined the fossil(s) is (are) scientifically significant, the following shall be completed:</p> <ul style="list-style-type: none"> ▪ Fossil Salvage. The paleontological monitor shall salvage (i.e., excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume. ▪ Fossil Preparation and Curation. Fossils shall be identified to the lowest (i.e., most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist. <p><i>Final Paleontological Mitigation Report.</i> Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to Calleguas and, if fossil curation occurs, the designated scientific institution.</p>	
<p>Noise</p> <p>Impact NOI-1: Construction noise would exceed thresholds during nighttime construction. Implementation of Mitigation Measure NOI-1 would reduce construction noise levels to the extent feasible; however, construction impacts would be significant and unavoidable. Operation of the project would result in negligible noise from the</p>	<p>MM NOI-1: Nighttime Construction Noise Reductions.</p> <p>Project construction occurring during the evening and nighttime hours of 7 p.m. to 7 a.m. shall implement a Night Operations Noise Impact Reduction Program composed of measures such as the following. Alternative methods achieving similar noise reductions could also be implemented.</p> <ul style="list-style-type: none"> ▪ Installation of temporary sound barriers/blankets of sufficient height to break the line of sight between construction equipment and nearby residences. The barriers may be at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. Alternately, if sound blankets are preferred, barriers may be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated Sound Transmission Class 32 or higher. 	<p>With implementation of Mitigation Measure NOI-1, the temporary noise barrier would block the line-of-sight between the equipment exhaust stacks and nearby receivers and would reduce construction noise. With this reduction, noise levels at the closest residences during evening and nighttime construction activities would reach up to 77</p>

Impact	Mitigation Measure (s)	Residual Impact
<p>underground pipeline and impacts would be less than significant.</p>	<ul style="list-style-type: none"> ▪ To the extent consistent with applicable safety regulations, operation of vehicles requiring use of back-up beepers may be avoided and/or the staging area may be arranged in a way that avoids the need for any reverse motions of large trucks. If these measures are not feasible, trucks operating with reverse motions alarms may be outfitted with SAE J994 Class D or equivalent alarms (ambient-adjusting, or “smart alarms” that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment), or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. ▪ Where nighttime operations are necessary and in the vicinity of nearby residences or other sensitive receivers, a sign shall be posted at the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of Calleguas and contractor authorized representatives that are assigned to respond in the event of a noise complaint. If the authorized contractor’s representative receives a complaint, that person shall investigate, take appropriate corrective action, and report the action to Calleguas. ▪ Where trenchless operations may be necessary during evening and nighttime hours, and where the operations are in the vicinity of sensitive receivers, key power units, including generators, shall be enclosed or acoustically packaged to reduce potential noise impacts. ▪ Upgraded silencers shall be placed on applicable engines. ▪ Quiet mode specifications for nighttime work that minimizes the use of crane and pipe handling operations and restricts materials deliveries to site. 	<p>dBA L_{eq}, which would still exceed the nighttime threshold of 45 dBA L_{eq} [1H]. Therefore, impacts from evening and nighttime construction noise with implementation of the Mitigation Measure NOI-1 would be significant and unavoidable.</p>
<p>Impact NOI-2: Project-related vibration would not result in excessive ground-borne vibration or noise. Impacts would be less than significant.</p>	<p>No mitigation required.</p>	<p>Impacts would be less than significant.</p>
<p>Transportation</p>		
<p>Impact TRA-1: Project construction would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Calleguas would obtain encroachment permits from applicable jurisdictions for construction work in public right-of-way. Impacts would be less than significant.</p>	<p>No mitigation required.</p>	<p>Impacts would be less than significant.</p>

Impact	Mitigation Measure (s)	Residual Impact
Tribal Cultural Resources		
<p>Impact TCR-1: No known tribal cultural resources have been identified within the project site. The proposed project may cause a substantial adverse change in the significance of a previously unknown or unidentified tribal cultural resource due to project construction activities. Mitigation Measure TCR-1 requires hand excavation and archaeological and Native American monitoring in designated culturally sensitive areas. Mitigation Measure TCR-2 requires the proper treatment of any previously unknown tribal cultural resources that may be unearthed during construction. Impacts would be less than significant with mitigation.</p>	<p>MM TCR-1 Hand Excavation Within Culturally Sensitive Areas. Project-related ground disturbing activities shall be completed by hand, with hand tools, in two locations of the Phase 3 alignment. Hand excavation shall occur within a 20-foot buffer surrounding the two locations (i.e., 10 linear feet on either side of the point locations for a total buffer of 20 feet). If no intact archaeological deposits or no intact or previously disturbed human remains are identified during hand excavation within the 20-foot buffer areas, hand excavation shall not be required outside the buffer areas and mechanical excavation methods can be employed. However, if intact archaeological deposits or intact or previously disturbed human remains are identified during mechanical excavation outside of the designated hand excavation areas, then mechanical excavation methods shall cease and hand excavation methods shall be re-employed until soils void of archaeological materials are encountered for a distance of 10 feet. An archaeological monitor and Native American monitor from the Barbareño/Ventureño Band of Mission Indians shall be retained to observe all hand and mechanical excavation activities within this area, consistent with Mitigation Measure CUL-2.</p> <p>In the event intact archaeological deposits are identified during hand or mechanical excavations, the procedures outlined in Mitigation Measures CUL-2 and CUL-3, as applicable, shall be followed. In the event human remains and/or associated grave goods are identified during hand or mechanical excavations, regardless of their context or condition, the State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98 shall be followed.</p> <p>MM TCR-2 Unanticipated Discovery of Tribal Cultural Resources. In the event cultural resources of Native American origin are identified during project construction outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 in areas not monitored by an archaeological monitor and Native American monitor, all ground-disturbing activities in the vicinity of the find shall be temporarily suspended or redirected until an archaeological monitor and/or qualified archaeologist has evaluated the nature and significance of the find and an appropriate Native American monitor is consulted. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is a TCR and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with appropriate tribal representative(s). The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archaeologist, if applicable, and the appropriate Native American tribal representative. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is not a TCR, then Mitigation Measure CUL-2 shall be followed.</p>	<p>Implementation of Mitigation Measures TCR-1 and TCR-2 would reduce impacts to TCRs to a less-than-significant level by requiring hand excavation and archaeological and Native American monitoring be conducted within designated culturally sensitive areas, and measures are in place for the proper treatment of TCRs that may be inadvertently unearthed during project construction.</p>

1 Introduction

This document is a Subsequent Environmental Impact Report (SEIR) for a proposed extension of the Calleguas Regional Salinity Management Pipeline (CRSMP) in Ventura County, California. The proposed CRSMP Phases 3 and 4 (hereafter referred to as the “proposed project” or “project”) would install Phase 3 and Phase 4 of the CRSMP, extending the CRSMP from the city of Camarillo to the city of Simi Valley. The proposed pipeline would be constructed along various roadways in the cities of Camarillo, Thousand Oaks, Moorpark, and Simi Valley, as well as in unincorporated Ventura County.

The CRSMP was designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The purpose of the CRSMP is to facilitate the utilization of additional water sources by providing a mechanism to efficiently dispose of the concentrate generated during treatment. The CRSMP currently extends approximately 22 miles from its upstream end in Somis, in unincorporated Ventura County, to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP inland to connect to additional dischargers.

Calleguas Municipal Water District (Calleguas) is the lead agency for the proposed project. Several other local and state agencies would also have discretionary approval authority over the proposed project, as detailed further in Section 1.6, *Lead, Responsible, and Trustee Agencies*.

This section discusses (1) the project and SEIR background; (2) the legal basis for preparing a SEIR; (3) the scope and content of the SEIR; (4) the lead, responsible, and trustee agencies; (5) the environmental review process required under the California Environmental Quality Act (CEQA); and (6) the organization of the SEIR. The proposed project is described in detail in Section 2.0, *Project Description*.

1.1 Background and Project Overview

For decades, local agencies and regulators have been working to address increasing salinity levels in the Calleguas Creek Watershed. The Calleguas Regional Salinity Management Pipeline (CRSMP) was designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The CRSMP consists of a pipeline system to transport wastewater and brine concentrate generated within the watershed to an ocean outfall. The purpose of the CRSMP is to facilitate the utilization of surface water and groundwater sources in the Calleguas Creek Watershed by providing a mechanism to efficiently dispose of the concentrate generated during treatment of these water sources for potable use. The CRSMP has an existing National Pollutant Discharge Elimination System (NPDES) permit for ocean outfall discharges associated with the pipeline (NPDES CA0064521).

The CRSMP was assessed programmatically in a 2002 Final Program Environmental Impact Report (PEIR) which provided California Environmental Quality Act (CEQA) clearance for the overall CRSMP and project-specific clearance for Phase 1 of the CRSMP. It also discussed Phase 2 as a logical extension of Phase 1, with the acknowledgment that additional project-level CEQA review would be

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

required at the time of alignment development for Phase 2 and subsequent phases of the CRSMP. As stated in the 2002 PEIR (pages 1-2), future project-specific analyses would be required “...when assumptions become commitments and fundamental parameters such as the identity, volume and water quality of each potential pipeline contributor are fully identified, and the alignment of pipelines can be finalized.”

Table 1-1 below provides an overview of all CEQA documents prepared to date for the program-level CRSMP and for the project-specific alignments of individual CRSMP phases.

Table 1-1 Overview of Previous CEQA Analyses

Year	Document Type	Project Name	Project Overview
2002	Program Environmental Impact Report (PEIR) and Environmental Assessment (EA)	Calleguas Regional Salinity Management Pipeline	The CRSMP consists of a pipeline system to transport wastewater and brine concentrate to an existing ocean outfall at the Reliant Energy Ormond Beach Power Generation Station near Point Mugu. Wastewater is defined as tertiary-treated municipal wastewater, and brine is defined as the byproduct of reverse osmosis treatment (or equivalent) of groundwater or wastewater. This document was a joint PEIR and EA to provide compliance with the federal National Environmental Policy Act (NEPA) as well as CEQA. NEPA clearance was required because the project would receive federal funding support through the United States Bureau of Reclamation, also the federal lead agency.
2007	Subsequent EIR (SEIR) and EA to the 2002 PEIR/EA for the CRSMP	Hueneme Outfall Replacement Project	This project was to replace a previously decommissioned outfall in Port Hueneme for use in providing ocean discharge for the CRSMP instead of the Reliant Energy outfall at Ormond Beach as originally planned. This became necessary when the Los Angeles Regional Water Quality Control Board (RWQCB) determined the Reliant Energy outfall may have an insufficient dilution ratio, which limits the ability of the CRSMP to meet the discharge requirements of the Ocean Plan (SWRCB 2019). This document was a joint CEQA/NEPA (SEIR/EA) due to the federal funding previously described, as well as the federal permits required for the outfall. An EIR-level analysis was required for CEQA because the proposed replacement of a retired outfall could potentially result in significant impacts.
2008	Addendum to the 2007 SEIR/EA for the Hueneme Outfall Replacement Project	Phase 1E Outfall Control and Meter Vault	This addendum evaluated modifications to the Hueneme Outfall Replacement Project, including a modified location for the vault and ancillary facilities, to avoid construction impacts to recreation facilities and residents. This document was an Addendum to the joint SEIR/EA. An EIR-level analysis was not necessary because project modifications were minor and no new or substantially more severe significant impacts or mitigation measures were anticipated.

Year	Document Type	Project Name	Project Overview
2009	Initial Study and Mitigated Negative Declaration (IS-MND)	Phase 2 (Lower Reach) Pipeline Alignment Revision	This project provided a modified alignment for Phase 2 of the CRSMP based upon refined engineering and right-of-way review and included a new control tank to provide operational control of the modified portion of the pipeline. This document was an IS-MND to address potentially new or modified impacts associated with design modifications; an EIR-level analysis was not necessary because impacts did not have the potential to be significant and unavoidable.
2011	Addendum to the 2009 IS-MND	Phase 2A (Lower Reach) Pipeline Alignment	This project modified the planned location of approximately 1,800 feet of the Phase 2 alignment assessed in the 2009 IS-MND, with the 50- to 65-foot-wide disturbance corridor shifting approximately 75 feet to the east. This document was an Addendum to the 2009 IS-MND because the modifications were limited to the alignment assessed therein and no new or substantially more severe significant impacts or mitigation measures were anticipated.
2014	SEIR to the 2002 PEIR	Phase 2 (Upper Reach) Pipeline Alignment	This project relocated a portion of the Phase 2 (Upper Reach) alignment from that analyzed in the 2002 PEIR. The modified alignment was approximately 0.2 mile shorter and 2,500 feet east of the alignment analyzed in the 2002 PEIR. This modified alignment crossed agricultural land instead of being situated within public roadways; therefore, new potential impacts could occur. This document was an SEIR because the project addressed changes in design and baseline conditions not foreseen in the 2002 PEIR with the potential to result in significant environmental impacts.

The CRSMP currently extends approximately 22 miles from its upstream end in Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. Phases 3 and 4 of the CRSMP (“project” or “proposed project”) would extend the CRSMP inland to connect to additional dischargers. Any future phases of the CRSMP and new infrastructure needed to connect additional dischargers would be subject to separate CEQA review.

1.2 Environmental Impact Report Background

Calleguas distributed a Notice of Preparation (NOP) of the SEIR for a 30-day agency and public review period starting on February 21, 2023, and ending on March 23, 2023. In addition, Calleguas held an SEIR Scoping Meeting on March 2, 2023. The meeting, held from 6:00 PM to 7:00 PM, was aimed at providing information about the proposed project to members of public agencies, interested stakeholders and residents/community members. The meeting was held at the Santa Rosa Technology Magnet School. Calleguas received letters from nine agencies in response to the NOP during the public review period. The NOP is presented in Appendix A of this SEIR, along with the Initial Study prepared for the project. Scoping comment letters received are presented in Appendix B. Table 1-2 on the following page summarizes the content of the letters and where the issues raised are addressed in the SEIR.

Table 1-2 NOP Comments and SEIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Agency Comments		
Cody Campagne, Native American Heritage Commission	The commenter states the project is subject to the requirements and provisions under Assembly Bill (AB) 52 and recommends consultation with California Native American tribes traditionally and culturally affiliated with the project's area in order to avoid inadvertent discoveries of tribal cultural resources.	The project's methodology for Native American consultation is discussed in Section 4.6, <i>Tribal Cultural Resources</i> .
Miya Edmonson, California Department of Transportation (Caltrans)	The commenter provides suggested general resources for evaluating transportation impacts under CEQA, and a reminder that vehicle miles traveled (VMT) is the standard transportation analysis metric. The commenter requests potential impacts associated with construction-related traffic, project-related operational traffic on local and regional transportation facilities, vehicle miles traveled, site access/internal circulation, traffic hazards, and emergency access in the project area be discussed in the EIR.	Project impacts to traffic and the transportation system, including VMT, are discussed in Section 4.5, <i>Transportation</i> . Project impacts related to vehicle miles traveled, traffic hazards, and emergency access are discussed in Appendix A, Initial Study.
Erinn Wilson-Olgin, California Department of Fish and Wildlife (CDFW)	The commenter requests the EIR analyzes potential changes to marine resources, wildlife corridors and habitat connectivity, sensitive habitats and open space, and special-status plant and animal species. The commenter also notes the project alignment would cross several riparian areas and might require a Lake and Streambed Alteration Agreement, issued by CDFW. Finally, the commenter provides general comments regarding biological baselines; analysis of direct, indirect, and cumulative impacts; and mitigation measures to be included in the EIR.	Project impacts to biological resources are discussed in Section 4.1, <i>Biological Resources</i> . Section 4.1 also provides information regarding applicable permits for potential impacts to biological resources, as well as a list of mitigation measures, which would reduce the project's impacts to biological resources.
Nicole Collazo, Ventura County Air Pollution Control District (APCD)	The commenter requests the Initial Study incorporate the most recent air quality attainment plan (adopted in December 2022), as well as the most recent California Air Resources Board Scoping Plan (adopted in December 2022). The commenter requests the NOP be revised to consider the most recent air quality management plan and notes mitigation measures included in the Ventura County Air Quality Assessment Guidelines are limited and outdated. The commenter provides general methods for reducing air quality emissions.	The Final Initial Study has been revised so that the air quality analysis includes the Ventura County 2022 Air Quality Management Plan and the California Air Resources Board 2022 Scoping Plan. Additions to the Final Initial Study (Appendix A) are shown in <u>underlined</u> text and removals are shown in strikethrough .
Timothy Krone, County of Ventura Environmental Health Division	The commenter notes the project may handle, store, or transport hazardous materials. Hazardous materials or hazardous wastes above the reportable thresholds should be reported to the Environmental Health Division's Certified Unified Program Agency.	Project impacts regarding hazardous materials are discussed in Appendix A. The project would report hazardous materials use, if above the reportable threshold, to the Certified Unified Program Agency.

Commenter	Comment/Request	How and Where It Was Addressed
Dave Ward, County of Ventura Planning Division	The commenter lists several policies from the Ventura County General Plan that should be discussed within the biological resources analysis of the EIR. The commenter notes the EIR should identify if project impacts would extend beyond paved roads or dirt shoulders and could affect biological resources and, if so, provides several mitigation measures to reduce this impact.	Project impacts to biological resources are discussed in Section 4.1, <i>Biological Resources</i> . This section also contains a regulatory setting, which includes applicable County of Ventura General Plan policies.
Robert Zastrow, County of Ventura Public Works Agency—Roads and Transportation Department	The commenter notes a portion of the project alignment, on Moorpark Road, is listed in Ventura County’s 2022 to 2026 Multi-Year Pavement Plan. The commenter requests Calleguas contact the County regarding pavement treatment, to repair any damage done to County roads, to obtain an encroachment permit, and to provide a Traffic Management Plan.	Calleguas would obtain all necessary permits, including encroachment permits, prior to construction work. See Section 2, <i>Project Description</i> , for a list of potentially required approvals. Impacts to the existing circulation system are discussed in Section 4.5, <i>Transportation</i> .
Dawn Husted, County of Ventura Public Works Agency—Watershed Protection, Planning and Permits Department	The commenter states a Watercourse/Encroachment Permit from the Ventura County Watershed Protection District is required for the project.	Calleguas would obtain all necessary permits prior to project construction activities. See Section 2, <i>Project Description</i> , for a list of potentially required approvals.
Joseph Vacca, City of Camarillo Department of Community Development	<p>The commenter notes the City of Camarillo’s Guidelines for Thresholds of Significance should be used for project review in Camarillo, expresses concern for transportation and tie-in impacts at the North Pleasant Valley Desalter, roadway intersections, and along Upland Road, and requests Calleguas obtain an encroachment permit from the City.</p> <p>The commenter notes future discharges should not affect brine discharge service availability for the North Pleasant Valley Desalter.</p> <p>The commenter suggests an alternative pipeline alignment be considered that would reduce transportation impacts on Upland Road.</p>	<p>As the CEQA lead agency for the project, Calleguas is responsible for meeting its own responsibilities under CEQA (CEQA Guidelines Section 15020). This CEQA analysis relies on the Appendix G CEQA Guidelines, consistent with previous CEQA documentation developed for the CRSMP. Project impacts to transportation are discussed in Section 4.5, <i>Transportation</i>. Calleguas would obtain all necessary permits, including encroachment permits, prior to construction work.</p> <p>Calleguas would coordinate with the City of Camarillo to minimize impacts to the North Pleasant Valley Desalter to the extent practicable and consistent with existing agreements.</p> <p>In Section 6, <i>Alternatives</i>, Alternative 3 involves a pipeline alignment alternative that would reduce transportation impacts on Upland Road.</p>

1.3 Purpose and Legal Authority

The proposed project requires the discretionary approval of several state and local agencies as detailed in Section 1.6, *Lead, Responsible, and Trustee Agencies*; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this SEIR is to serve as an informational document that:

“...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

An SEIR is appropriate when “(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.”

This SEIR is intended to serve as an informational document for the public and Calleguas decision makers. The process would include public hearings to consider certification of a Final SEIR and approval of the proposed project.

1.4 Scope and Content

This SEIR addresses impacts identified by the Initial Study to be potentially significant. The following issues were found to include potentially significant impacts and have been studied in the SEIR:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Transportation and Traffic
- Tribal Cultural Resources

In preparing the SEIR, use was made of pertinent policies and guidelines from various local, regional, and state agencies; certified EIRs and adopted CEQA documents; and other background documents. A full reference list is contained in Section 7, *References and Preparers*.

The alternatives section of the SEIR (Section 6) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the “environmentally superior” alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative and two alternatives for the project alignment.

The level of detail utilized throughout this SEIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

“An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.”

1.5 Issues Not Studied in Detail in the SEIR

Table 1-3 summarizes issues from the environmental checklist addressed in the Initial Study (Appendix A). As indicated in the Initial Study, there is no substantial evidence showing significant impacts would occur in any of these issue areas.

Table 1-3 CEQA Thresholds Not Studied in the SEIR

Issue Area	Initial Study Findings
Aesthetics	<p>Project construction would temporarily impair scenic vistas available to travelers on Upland Road, Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road. Following construction activities, the project would not result in permanent aesthetic changes that would alter scenic vistas. Impacts to scenic vistas would be less than significant.</p> <hr/> <p>The project alignments are not located on a State Scenic Highway and are not visible from a state scenic highway. The project would have no impact regarding scenic resources visible from a state scenic highway.</p> <hr/> <p>The project would neither substantially degrade the existing visual character or quality of public views along the project alignments, nor conflict with applicable zoning of land uses along the alignments. Impacts would be less than significant.</p> <hr/> <p>The project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the vicinity of the project alignments. Impacts would be less than significant.</p>
Agricultural Resources	<p>The project would not convert mapped agricultural land to non-agricultural use. There would be no impact regarding the conversion of agricultural land.</p> <hr/> <p>The project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.</p> <hr/> <p>The project would not convert any forest land to non-forest use, nor would it conflict with existing zoning for such lands. There would be no impact to forests or timberland.</p> <hr/> <p>The project would not result in other changes to the existing environment that could result in conversion of agricultural land to non-agricultural use, or forest land to non-forest use. There would be no impact.</p>
Air Quality	<p>The project would not generate population, housing, or employment growth exceeding forecasts within the 2022 Ventura County Air Quality Management Plan and therefore would not conflict with or obstruct implementation of the applicable air quality plan. There would be no impact. The project would not exceed Ventura County Air Pollution Control District thresholds for criteria pollutants and would have a less than significant impact.</p> <hr/> <p>The project would not expose sensitive receptors to substantial pollutant concentrations and would not involve any new or additional stationary sources of air pollution emissions. Impacts involving exposure of sensitive receptors would be less than significant.</p> <hr/> <p>The project would not substantially increase the risk to public health for Valley Fever and would not generate objectional odors that affect a substantial number of people. Impacts involving other emissions, such as those leading to odors, would be less than significant.</p>

Calleguas Municipal Water District
Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

Issue Area	Initial Study Findings
Biological Resources	The project alignments are not within an area of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. There would be no impact regarding conflict with any such provisions.
Cultural Resources	The project would not physically demolish or alter the physical characteristics of historical resources within the project alignments. There would be no impact to historical resources.
Energy	<p>Project construction and operation would not involve the inefficient, wasteful, and unnecessary use of energy. There would be no impact regarding the unnecessary consumption of energy resources.</p> <p>The project would be consistent with respective Energy Action Plans within applicable jurisdictions, and would result in no impact to state or local energy efficiency plans.</p>
Geology and Soils	<p>The project would not alter the existing potential for the Simi-Santa Rosa fault zone to rupture and cause substantial adverse effects related to risk of loss, injury, or death. The project would not directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death, involving rupture of a known earthquake fault or seismic ground shaking. Impacts would be less than significant.</p> <p>The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Impacts would be less than significant.</p> <p>The project would not include habitable structures and would not expose people to loss, injury, or death involving landslides. The project would not involve activities that would burden or disturb potentially unstable geologic areas and would not have the potential to cause substantial adverse effects involving landslides. Impacts would be less than significant.</p> <p>The project would implement best management practices designed to control erosion and sedimentation and would restore ground surfaces to pre-project conditions. Impacts involving soil erosion or the loss of topsoil would be less than significant.</p> <p>The project would not compromise soil stability and would not create substantial direct or indirect risks to life or property beyond existing conditions. The project would have no impact involving unstable or expansive soils.</p> <p>The project would not include the use of septic tanks or alternative wastewater disposal systems and there would be no impact.</p>
Greenhouse Gas Emissions	The project would generate temporary construction emissions and minimal operational emissions and would ultimately be consistent with the California Air Resources Board’s 2022 Scoping Plan as it would support the Scoping Plan’s goal of developing more reliable water supplies. The project would not be in conflict with any applicable plans, policies, or regulations for the purpose of reducing greenhouse gas emissions. Impacts related to greenhouse gas emissions would be less than significant.
Hazards and Hazardous Materials	<p>The project would transport, use, and dispose of hazardous materials in accordance with applicable codes and regulations that minimize potential hazards. Project construction and operation would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.</p> <p>The project would dispose of hazardous materials in accordance with applicable codes and regulations, and would adhere to best management practices that include hazardous material response measures. Impacts regarding the accidental release of hazardous materials during project construction, as well as hazardous material emissions within 0.25 miles of an existing or proposed school, would be less than significant.</p> <p>There are no active hazardous material sites mapped along or in the vicinity of the project alignments. There are five closed Leaking Underground Storage Tank cleanup sites mapped within the project alignments on Santa Rosa Road and Tierra Rejada Road. All cleanup sites have a “Completed—Case Closed” status and site-specific mapping indicated the cleanup sites are not actually within project roadways. The project would not create a significant hazard to</p>

Issue Area	Initial Study Findings
	<p>the public or the environment due to listed cleanup sites and impacts would be less than significant.</p> <p>The project alignments are not located within an airport land use plan, or within two miles of a public or private airport. The project would have no impact related to safety hazards for people residing or working in the project area due to proximity to an airport.</p> <p>Project construction would involve preparation of traffic control plans and construction phasing would be implemented to maintain access to arterial roads and driveways. Project operation would not introduce new activities that would impede or interfere with emergency plans. The project would have a less than significant impact regarding emergency response or emergency evacuation plans.</p> <p>The project would comply with applicable fire regulations during construction activities and project operation would not pose a substantial risk of wildfire ignition. The project would not include housing or other structures which could accommodate occupants who could potentially be exposed to risk of loss, injury, or death involving wildland fires and impacts would be less than significant.</p>
Hydrology and Water Quality	<p>The project would implement best management practices as part of a Storm Water Pollution Prevention Plan, which would minimize or avoid potentially adverse impacts that could lead to water quality degradation. The project would not exceed the limitations in the existing National Pollutant Discharge Elimination System permit for the CRSMP and would not substantially degrade water quality at the outfall location. Impacts involving degradation of water quality standards or violation of waste discharge requirements would be less than significant.</p> <p>Construction of the project would not substantially interfere with groundwater recharge along the project alignments and the project would not introduce a new demand for groundwater supplies. The project would not impede sustainable groundwater management. Impacts involving groundwater supplies, groundwater recharge, and conflict with applicable groundwater management plans would be less than significant.</p> <p>The project would not change existing drainage patterns through alteration of the course of a stream or river or through addition of impervious surfaces. The project would not exceed the capacity of existing or planned stormwater drainage systems and would not provide substantial additional sources of polluted runoff. Impacts would be less than significant.</p> <p>The project would not change existing drainage patterns in a manner that would impede or redirect flood flows. There would be no impact.</p> <p>The project would implement spill response best management practices, which would provide a rapid cleanup of accidentally-released materials during a storm or flooding event. The project alignments would not be subject to potential inundation and would not risk release of pollutants due to inundation. Impacts would be less than significant.</p>
Land Use and Planning	<p>The project would not have the potential to physically divide an established community and no impact would occur.</p> <p>The project would extend the pre-existing CRSMP and, as a public utility project, is exempt from local building and zoning ordinances. The project would further General Plan goals and policies from respective jurisdictions along the project alignments that pertain to water supply reliability and wastewater infrastructure. The project would not conflict with land use plans, policies, or regulations, and no impact would occur.</p>
Mineral Resources	<p>The project would not involve mineral extraction or changes in land use that could affect the availability of mineral resources. The project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact to mineral resources would occur.</p>
Noise	<p>The project alignments are not located within an airport land use plan or within the vicinity of a private airstrip. There would be no impact involving substantial exposure of construction workers to airport noise.</p>

Calleguas Municipal Water District
Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

Issue Area	Initial Study Findings
Population and Housing	<p>The project would involve construction of an excess recycled water and brine disposal pipeline and would not generate direct growth. Impacts related to substantial unplanned population growth would be less than significant.</p> <hr/> <p>The project would not demolish existing housing, displace existing people, or necessitate the construction of replacement housing. No impact would occur.</p>
Public Services	<p>The project would not induce population growth and thus would not increase existing demands for public facilities. The project would not introduce features or facilities that require additional or unusual fire or police response and would not change existing demand for fire or police protection services. No impact to public services would occur.</p>
Recreation	<p>Project construction would result in short-term, temporary impacts to recreational users through introduction of construction dust and noise. However, these impacts would be limited to the construction period and would not substantially increase the use of other existing neighborhood and regional parks or other recreational facilities. Impacts involving the substantial deterioration of recreational facilities would be less than significant.</p> <hr/> <p>The project would not directly increase the use of existing parks or recreational facilities, would not include recreational facilities, and would not require the construction or expansion of recreational facilities. No impact would occur.</p>
Transportation	<p>VMT during project construction would be temporary and limited to the project construction period. Project operation would not substantially contribute to VMT along project roadways. Therefore, because VMT from construction would be temporary and limited to the active construction period, and operation and maintenance activities would be negligible, no impact associated with VMT would occur and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).</p> <hr/> <p>The project would not substantially increase hazards due to a geometric design feature or incompatible use. The project would implement traffic control plans, which would minimize the potential for construction-related traffic hazards. There would be a less than significant impact involving increased hazards on roadways.</p> <hr/> <p>Project construction would involve preparation of traffic control plans and construction phasing would be implemented to maintain access to arterial roads and driveways. Project operation would not introduce new activities that would result in inadequate emergency access. The project would have a less than significant impact regarding emergency access.</p>
Utilities and Service Systems	<p>The project would not require the relocation or construction of new or expanded water, wastewater, stormwater, electric power, natural gas, or telecommunications facilities and no impact would occur.</p> <hr/> <p>The project would extend the CRSMP to facilitate water supply projects that would improve local water supply reliability and reduce regional dependence on imported water supplies. The project would have a beneficial impact to water supplies and no adverse impact would occur.</p> <hr/> <p>The project would not introduce a new source of wastewater or a new demand for wastewater treatment. The project would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No impact would occur.</p> <hr/> <p>The project would be required to comply with all applicable laws and regulations related to solid waste generation, collection, and disposal. Solid waste generation during project construction would be short-term and temporary and would not substantially affect solid waste operations of receiving landfills. Project operation would not generate solid waste. Impacts involving solid waste generation and compliance with solid waste regulations would be less than significant.</p>

Issue Area	Initial Study Findings
Wildfire	<p>Portions of the project alignments are located within State and Local Responsibility Areas designated as Very High Fire Hazard Severity Zones. Neither construction nor operation of the project would impair or conflict with an adopted emergency response or evacuation plan and the project would not result in inadequate access for emergency response vehicles. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan and no impact would occur.</p> <hr/> <p>The project would comply with applicable Public Resources Code provisions and implement fire precautions during project construction. Project operation would be similar to existing conditions and would not introduce habitable structures or individuals to wildfire or pollutant concentrations from wildfires. Impacts involving exacerbated fire risks would be less than significant.</p> <hr/> <p>The project would not require roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk. The project would not expose people or structures to significant downslope or downstream flooding or landslide risks resulting from runoff or drainage changes. No impact would occur.</p>

1.6 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible, and trustee agencies. Calleguas is the lead agency for the project because it holds principal responsibility for approving the project. Per the California Code of Regulations (Title 14, Chapter 3, §15367), the lead agency is responsible for deciding whether an EIR or Negative Declaration is required for a proposed project. For this proposed project, it was determined an EIR is the appropriate level of CEQA documentation, due to the potential for significant environmental impacts to occur. Therefore, this EIR assesses the potential impacts of the project and identifies mitigation measures, as feasible, to reduce or minimize potential impacts.

1.7 Environmental Review Process

The environmental impact review process, as required under CEQA, is summarized below. The steps are presented in sequential order.

1. **Notice of Preparation (NOP) and Initial Study.** After deciding an EIR is required, the lead agency (Calleguas) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts.
2. **Scoping Meeting.** CEQA requires a scoping meeting for projects of statewide, regional, or areawide significance. Although the project is not of statewide, regional, or areawide significance, Calleguas held an EIR Scoping Meeting on March 2, 2023. See Table 1-2 for a list of comments received during the scoping period.
3. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing, and significant and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.

4. **Notice of Completion (NOC) and Notice of Availability (NOA).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a NOA of a Draft EIR.
 - The **NOC** will include the address where hard copies of the Draft EIR are available for review and the review period during which comments will be received on the Draft EIR (CEQA Guidelines Section 15085). When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091[a]).
 - The **NOA** will include information regarding where hard copies of the Draft EIR are available for review as well as information on how to submit comments on the Draft EIR to the lead agency (Calleguas). The lead agency will provide the NOA of the Draft EIR at the same time as it sends the NOC to the State Clearinghouse. Notice must also be given to all organizations and individuals who have previously requested such notice. The lead agency will file the NOA with the County Clerk's office for 30 days (CEQA Guidelines Section 15087[d]) and send a copy of the NOA to the State Clearinghouse (Office of Planning and Research). The lead agency must solicit input from other agencies and the public and respond in writing to all comments received during the public review period (Public Resources Code Section 21091[d][2]). Notice will also be given by at least one of the following procedures:
 - Publication at least one time by the public agency in a newspaper of general circulation in the area affected by the proposed project
 - Posting of notices by the public agency on and off the site in the area where the project is to be located
 - Direct mailing to the owners and occupants of property contiguous to the parcel or parcels on which the project is located
5. **Final EIR.** A Final EIR must include: a) the Draft EIR (including minor revisions/errata to the Draft EIR); b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments. A Final EIR for the proposed project will be prepared following completion of the review period for the Draft EIR. Per CEQA Guidelines 15088(b), Calleguas's responses to written comments received on the Draft EIR will be provided to state/public agencies a minimum of 10 days prior to the certification of the EIR at the Calleguas Board of Directors meeting.
6. **Certification of Final EIR.** Prior to deciding on a proposed project, the lead agency must certify: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body and it reviewed and considered the information contained in the Final EIR prior to approving the project; and c) the Final EIR reflects the lead agency's independent judgement and analysis (CEQA Guidelines Section 15090).
7. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) approve the project despite its significant environmental impacts, if there is no feasible way to lessen or avoid the significant impact; c) approve the project despite its significant environmental impacts, if specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts (CEQA Guidelines Sections 15042 and 15043).
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should

be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.

9. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination (NOD).** The lead agency must file a NOD within five working days after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

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2 Project Description

2.1 Lead Agency Name and Address

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

2.2 Contact Person and Phone Number

Jennifer Lancaster, Manager of Water Resources
jlancaster@calleguas.com
805-579-7194

2.3 Project Location

The proposed pipeline alignment would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the city of Camarillo to the western boundary of the city of Simi Valley. The alignment would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County.

The pipeline alignment would mostly be located within the public right-of-way (ROW) within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment during construction activities. Regional access would be provided by State Route 118, State Route 23, State Route 34, and U.S. 101.

Figure 2-1 shows the regional location of the project site and Figure 2-2 shows the alignments of both phases of the proposed project.

2.4 Project Characteristics

The proposed project consists of Phases 3 and 4 of the CRSMP. The proposed project would install an underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials. An overview of the proposed project is provided in Table 2-1.

Figure 2-1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
 Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

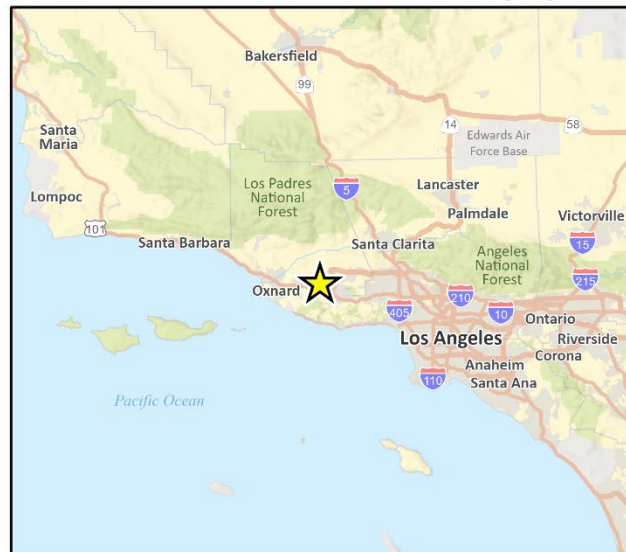
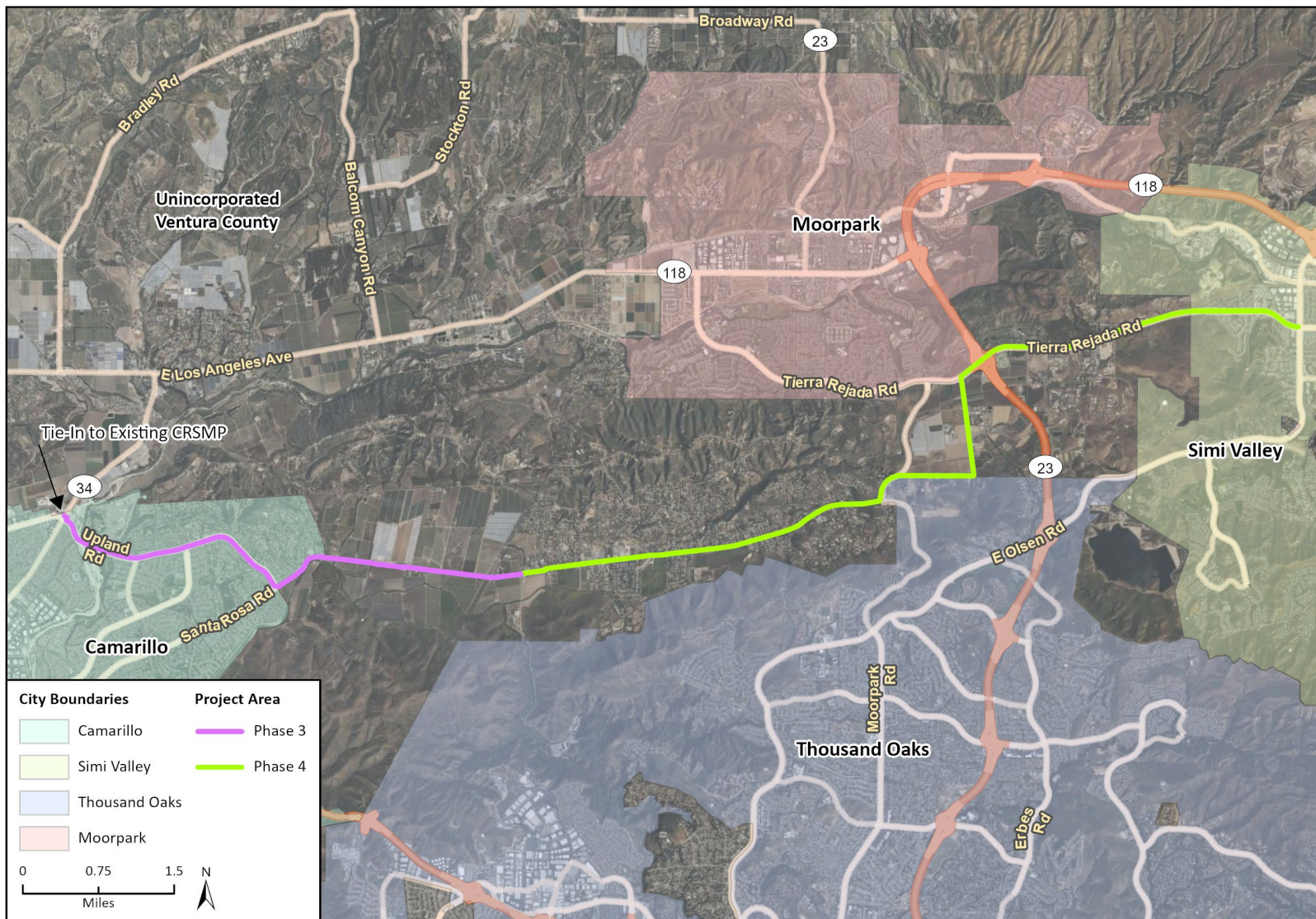


Figure 2-2 Project Site Location



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Additional data provided by the County of Ventura.

Proj. Regional, Phase 3 Locn
Fig 2.2 Project Location

Table 2-1 Proposed Project Overview

Feature	Phase 3	Phase 4
Length	5.1 miles (27,000 feet)	9.3 miles (49,000 feet)
Diameter	18 inches – 24 inches	12 inches – 24 inches
Alignment	Mostly within public ROW: <ul style="list-style-type: none"> ▪ Initiates at eastern end of existing CRSMP on west side of Somis Road, approximately 200 feet north of the Las Posas Road / Upland Road intersection in Somis ▪ East across Somis Road to the east side of the Union Pacific Railroad on private property¹ ▪ South to Upland Road just east of the intersection with Las Posas Road ▪ Easterly along Upland Road to the Upland Road bridge and across Calleguas Creek, continuing on Upland Road to Santa Rosa Road² ▪ Northeast along Santa Rosa Road, terminating just past Hill Canyon Road 	Entirely within public ROW: <ul style="list-style-type: none"> ▪ Initiates at end of Phase 3, near intersection of Santa Rosa Road and Hill Canyon Road ▪ Eastward along Santa Rosa Road to Moorpark Road ▪ North on Moorpark Road then east on Read Road to Sunset Valley Road ▪ North on Sunset Valley Road to Tierra Rejada Road ▪ East on Tierra Rejada Road to terminate at Madera Road
Easement requirements	Permanent easement 180 feet by 20 feet on the property located at the northeast corner of the intersection of Las Posas Road and Upland Road	n/a
Construction duration (approximate)	16 months	30 months

¹ The Federal Railroad Administration (FRA) requires pipeline crossings under railroads to comply with design specifications such as, but not limited to, the following: installation of crossing is conducted by boring or jacking, if practicable; crossing occurs at a right angle, or as close thereto as possible, and not less than 45 degrees; pipeline is not placed within a culvert or within 100 feet of a railway bridge or other structure.

² Crossing Calleguas Creek would be accomplished by installing the pipeline inside an existing vacant utility cell in the deck of the Upland Road bridge. Coordination with the owner of the bridge, the City of Camarillo, has been initiated, including completing a structural analysis of the bridge to confirm the bridge has sufficient load capacity to carry the pipeline under full flow.

Phases 3 and 4 would connect additional dischargers to the CRSMP. Phase 3 would include construction of a discharge station near the intersection of Santa Rosa Road and Hill Canyon Road in unincorporated Ventura County for a future CRSMP customer. This facility would consist of a flow meter located inside a subterranean vault, control cabinet, and associated appurtenances. Discharges from both Phases 3 and 4, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the ocean outfall. Effluent would be subject to existing NPDES constituent limits at the outfall. Prescribed sampling requirements in the NPDES permit necessitate weekly, monthly, quarterly, and semi-annual monitoring of effluent as well as monitoring of receiving water twice a year, monitoring of sediment every two years, and a biological monitoring study involving mussels that would occur once during the term of the permit. Additionally, while not required by the NPDES permit, Calleguas monitors the individual discharges quarterly for all effluent limit constituents except toxicity and radioactivity.

Isolation valves that can also be used as emergency shut off valves would be installed at locations where flows would enter the pipeline. Figure 2-3 and Figure 2-4 depict the alignment of Phase 3 of the proposed project. Figure 2-5 and Figure 2-6 depict the alignment of Phase 4 of the proposed project. The figures identify potential dischargers to the CRSMP, which are either currently existing, planned for development, or under consideration.

Figure 2-3 Phase 3 Pipeline Location, Western Portion



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EPS Proj., Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

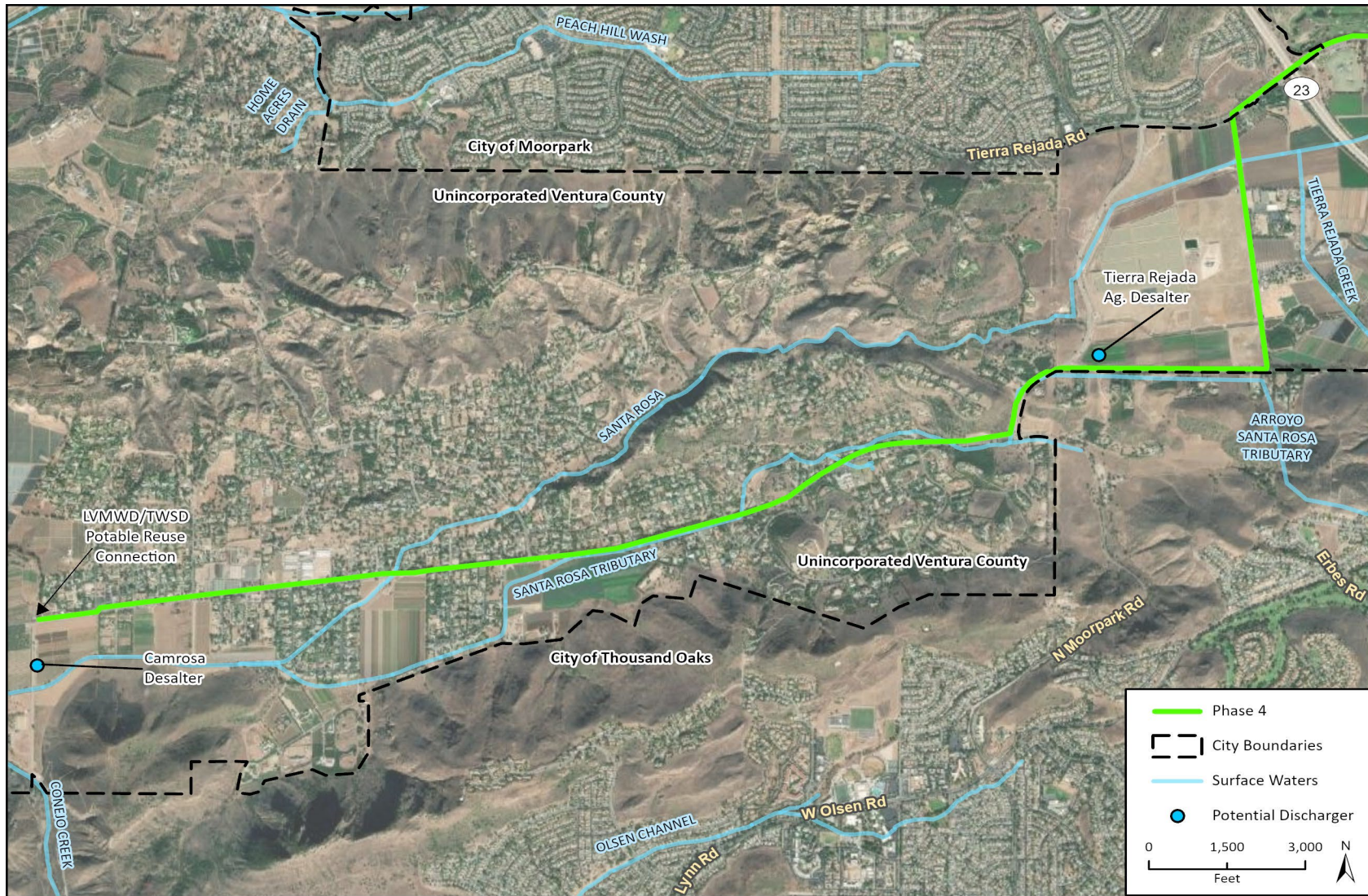
Figure 2-4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj. Regional, Phase 3 Locn
 Fig 2.4 Phase 3 Pt 2

Figure 2-5 Phase 4 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.5 Phase 4 pt 1

Figure 2-6 Phase 4 Pipeline Location, Eastern Portion



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Proj: Regional, Phase 3 Locn
 Fig 2.6 Phase 4 pt 2

2.5 Project Construction

The typical construction sequence for the proposed project would include the following pipeline installation activities:

- **Open-cut trench pipeline installation** typically consists of trench excavation (including saw cutting of pavement where applicable), pipe bedding stabilization, pipe installation, and backfill. The construction crew would typically operate a backhoe and/or excavator, compaction equipment (attachment on an excavator and hand-operated equipment), dump trucks for stockpiling of soils and delivery of backfill material, utility trucks (with truck-mounted or towed generator and hand tools), and water trucks/water buffalos. Where required by the jurisdictional agency to backfill with sand cement slurry, concrete trucks would deliver slurry to the project site.
- **Trenchless installation** typically consists of excavation of launching and receiving pits (including saw cutting of pavement where applicable), installation of shoring system and boring equipment, installation of steel casing and pipeline, removal of equipment, and backfill. This step typically includes the excavation and backfill of the pits using an excavator, dump truck, and potentially a second mini excavator inside the pits. The trenchless installation would be performed by operating a crane to lower and remove equipment and materials.
- **Paving and ground restoration** typically is performed at the completion of each segment of pipeline and then at the end of a project once all excavation and backfill operations have been completed.

The maximum depth of excavation typically would be 8 feet. Where the pipeline would need to cross below an existing utility or drainage channel, the depths may be greater and would depend on the characteristics of the utility or channel.

Based on an installation rate of 80 feet per day and a 4-foot-wide trench, the average amount of excess spoils requiring removal would be approximately 60 cubic yards per day and would require approximately 7 haul roundtrips per day. The average daily number of heavy-duty trucks hauling material to and from the construction site (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 haul roundtrips per day.

Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal at an appropriately licensed landfill. Storage of materials and equipment would be dependent upon the location of the contractor and subcontractors. If the contractors are local, they may store equipment and materials in their own yards.

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be used on-site or trucked off-site for reuse for dust control and irrigation.

The pipeline would cross Calleguas Creek inside an existing vacant utility cell in the deck of the Upland Road bridge. Construction work would be performed from the inside of the utility cell or at ground level on the Upland Road bridge. Pedestrian access to Calleguas Creek under the bridge may be required, but the project does not propose ground disturbance, vegetation removal, or operation of mechanical construction equipment within the Calleguas Creek bed or bank.

Construction Schedule

Construction would mostly be limited to normal construction hours between 7:00 am and 4:30 pm, Monday through Friday. Weekend work, as well as evening and nighttime work between the hours of 4:30 pm and 7:00 am, may be required to install the trenchless portions of the pipelines. In areas where traffic conditions require non-traditional working hours, night and weekend work could also be necessary. Additionally, the tie-in connection to the CRSMP would require the shutdown of the CRSMP, consequently requiring work to be performed continuously until complete. Work hours would be finalized through the roadway encroachment permitting and design process.

Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. Due to uncertainties about the anticipated timing of dischargers, duration of permitting and design, and other considerations, there is currently no planned start date.

Traffic Controls

To minimize traffic impacts to the traveling public, trenchless construction methods would be used to cross busy intersections as well as Somis Road and Santa Rosa Road.

Save for a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

Calleguas would engage in community outreach to notify the public of anticipated lane closures. Notifications may include, but are not limited to, social media posts, mailers, and/or emails to interested parties. Calleguas would also coordinate directly with adjacent landowners whose driveways may be affected by construction activities.

Best Management Practices

During construction of the proposed project, Calleguas' construction contractor would implement best management practices (BMPs) in accordance with the project's Contract Documents. BMPs for the proposed project are anticipated to include measures for the protection of aesthetics, air quality, and noise control are listed below:

- **Protection of Air Quality.** Dust control would be conducted during ground-disturbing activities using an approved method such as water application, no substantial ground-disturbing activities would be conducted during periods of high winds, on-site construction vehicles would not travel at speeds greater than 15 miles per hour in unpaved areas, and trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard.
- **Noise Control.** Noise abatement measures would be implemented as needed including acoustical mufflers and engine shielding on construction equipment, limiting the number and duration of equipment idling, directing noise away from residences, and maintaining equipment in good condition without rattling or banging of parts.
- **Nighttime Construction Lighting.** In the event nighttime construction lighting is needed, the lighting would be directed downwards towards construction activities and would be shielded so as to minimize visibility from adjacent land uses.

2.6 Project Operation and Maintenance

Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. Valves on the appurtenances would be exercised roughly once per year and the pipeline alignment would be marked as needed in response to DigAlert (utility marking) requests.

The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands.

In the event any project component is compromised during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible; emergency response and repairs are part of Calleguas' normal operations to maintain system integrity and reliability and are not a new or increased activity associated with the project.

2.7 Project Objectives

The following objectives are taken from the 2002 PEIR prepared for the CRSMP:

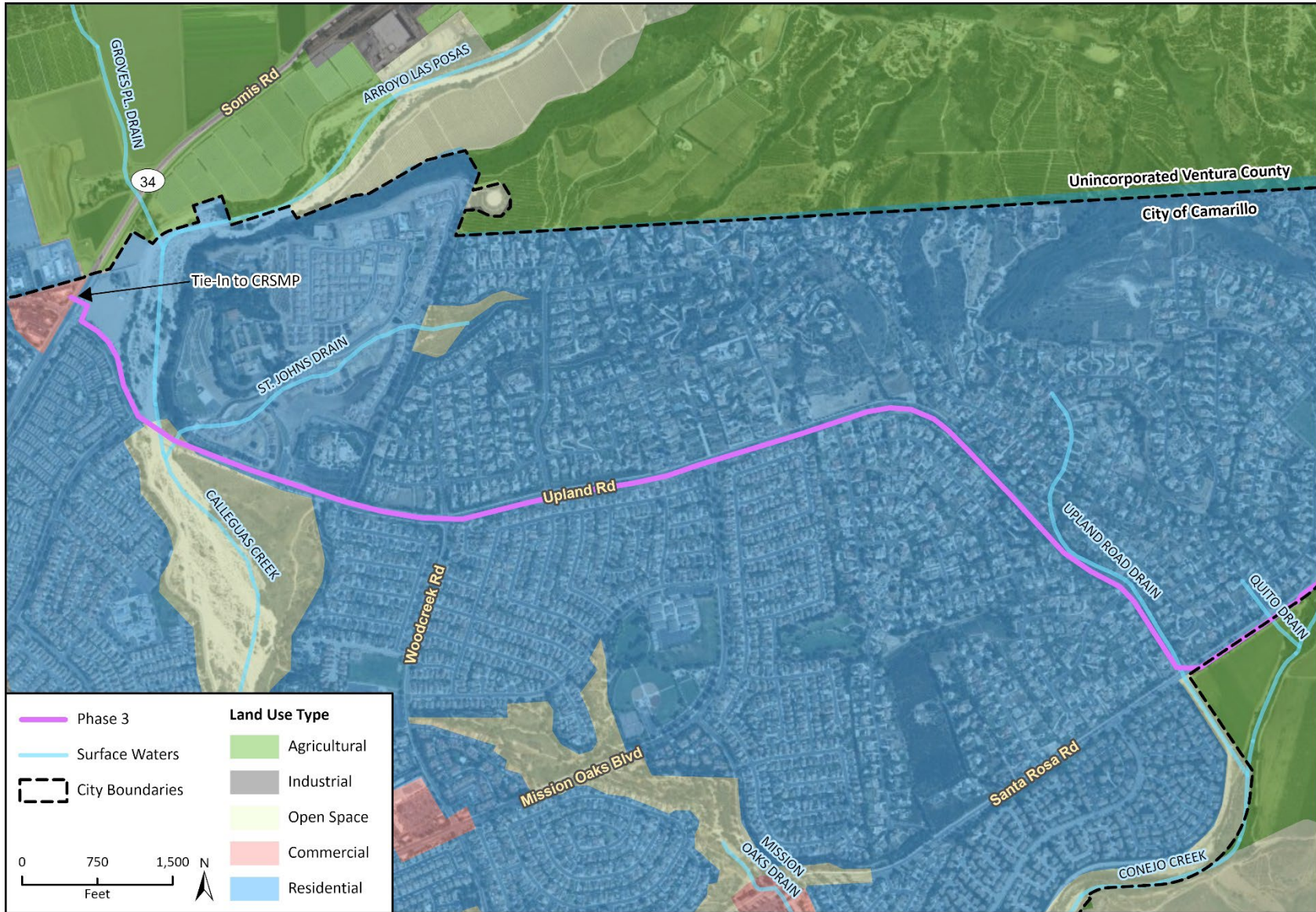
- Enable both public and private water agencies to develop new water sources, which at the present time cannot be widely used due to poor quality;
- Manage the use of high salinity groundwater and treated municipal wastewater; and
- Dispose of brine produced by enhanced water treatment.

2.8 Surrounding Land Uses and Setting

The project alignment is bordered by a variety of land uses within Camarillo, Thousand Oaks, Moorpark, Simi Valley, and unincorporated Ventura County. Land use designations along the project alignment include City of Camarillo Rural Density, Low Density, Low-Medium Density, and Public designations along Upland Road (City of Camarillo 2022); County of Ventura Agriculture, Open Space, and Very Low-Density Residential designations along Santa Rosa Road (County of Ventura 2022); County of Ventura Open Space and City of Thousand Oaks Reserve Residential designations along Read Road (City of Thousand Oaks 2022); County of Ventura Open Space designation along Sunset Valley Road (County of Ventura 2022); and City of Moorpark Medium Density Residential, County of Ventura Open Space and City of Simi Valley Open Space, Medium Density Residential, Moderate Density Residential, Neighborhood Park, Mobile Home, Community Park, and General Commercial designations along Tierra Rejada Road (City of Moorpark 2020; City of Simi Valley 2021; County of Ventura 2022).

Figure 2-7 through Figure 2-10 depict surrounding land use designations along the proposed pipeline alignment.

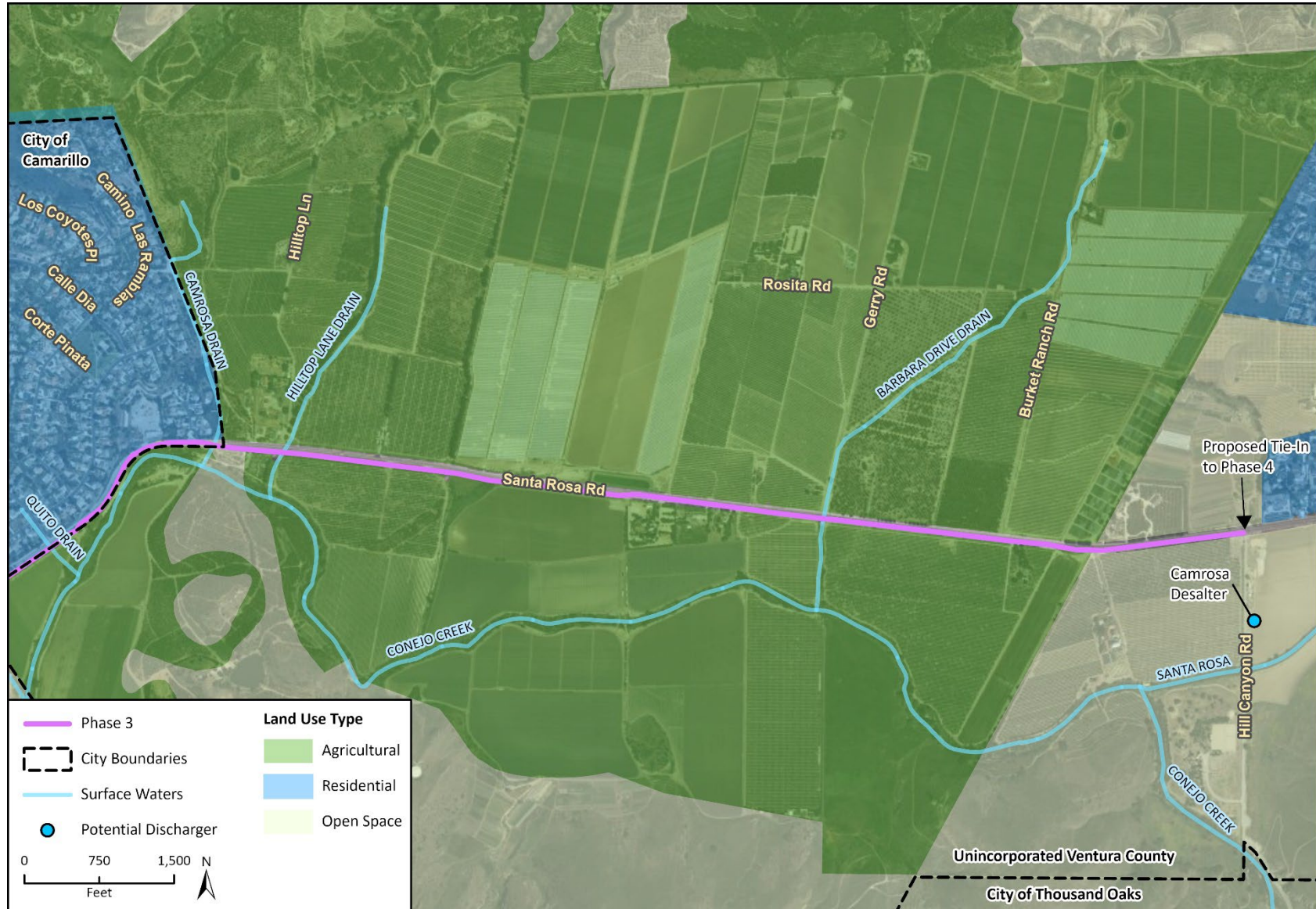
Figure 2-7 Phase 3 Pipeline, Western Portion, Surrounding Land Use Designations



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EPS Proj, Regional, Phase 3 Locn Fig.2.7 Phase 3 Pt 1 Zoning

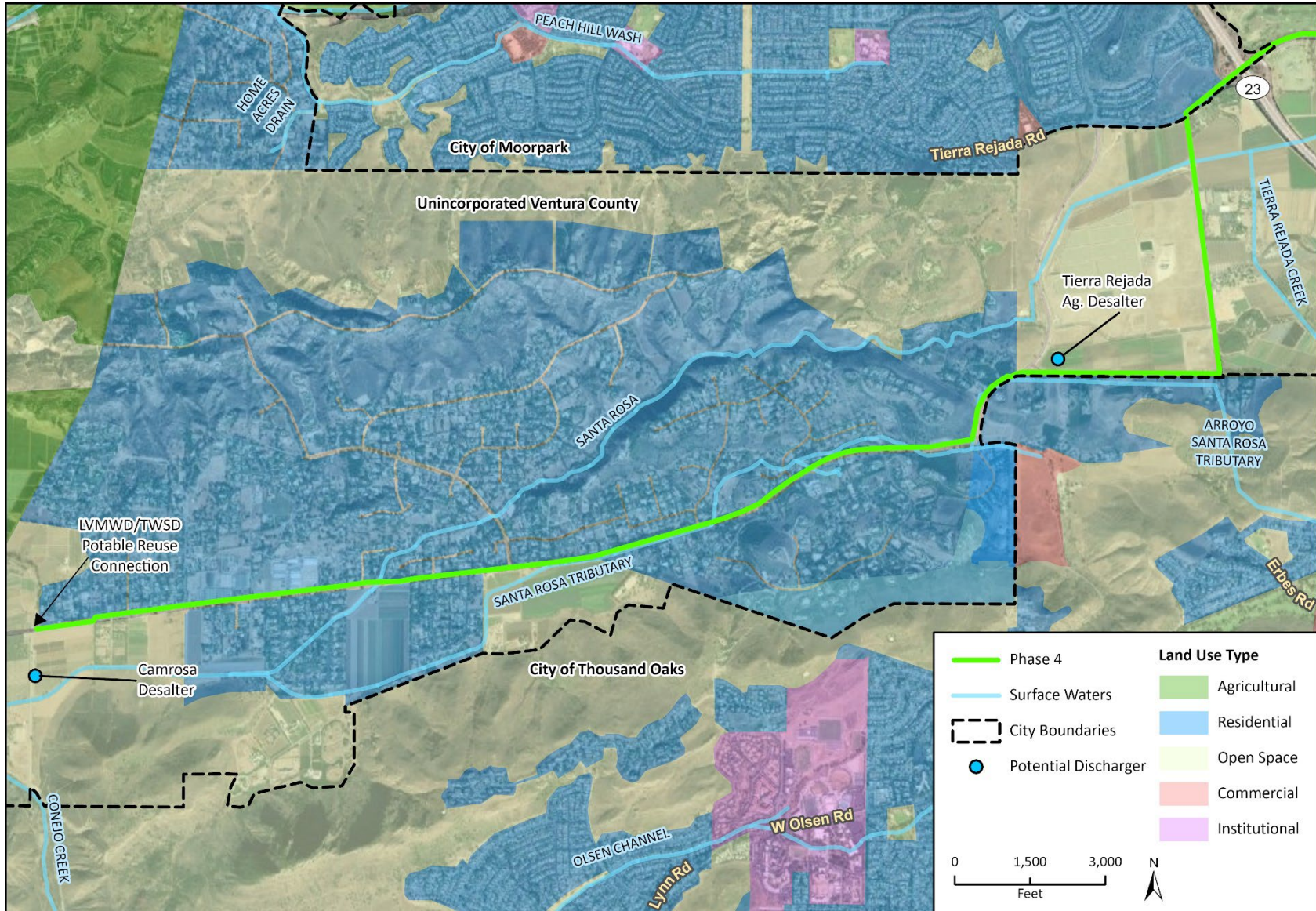
Figure 2-8 Phase 3 Pipeline, Eastern Portion, Surrounding Land Use Designations



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Fig 2.8 Phase 3 Pt 2 Zoning

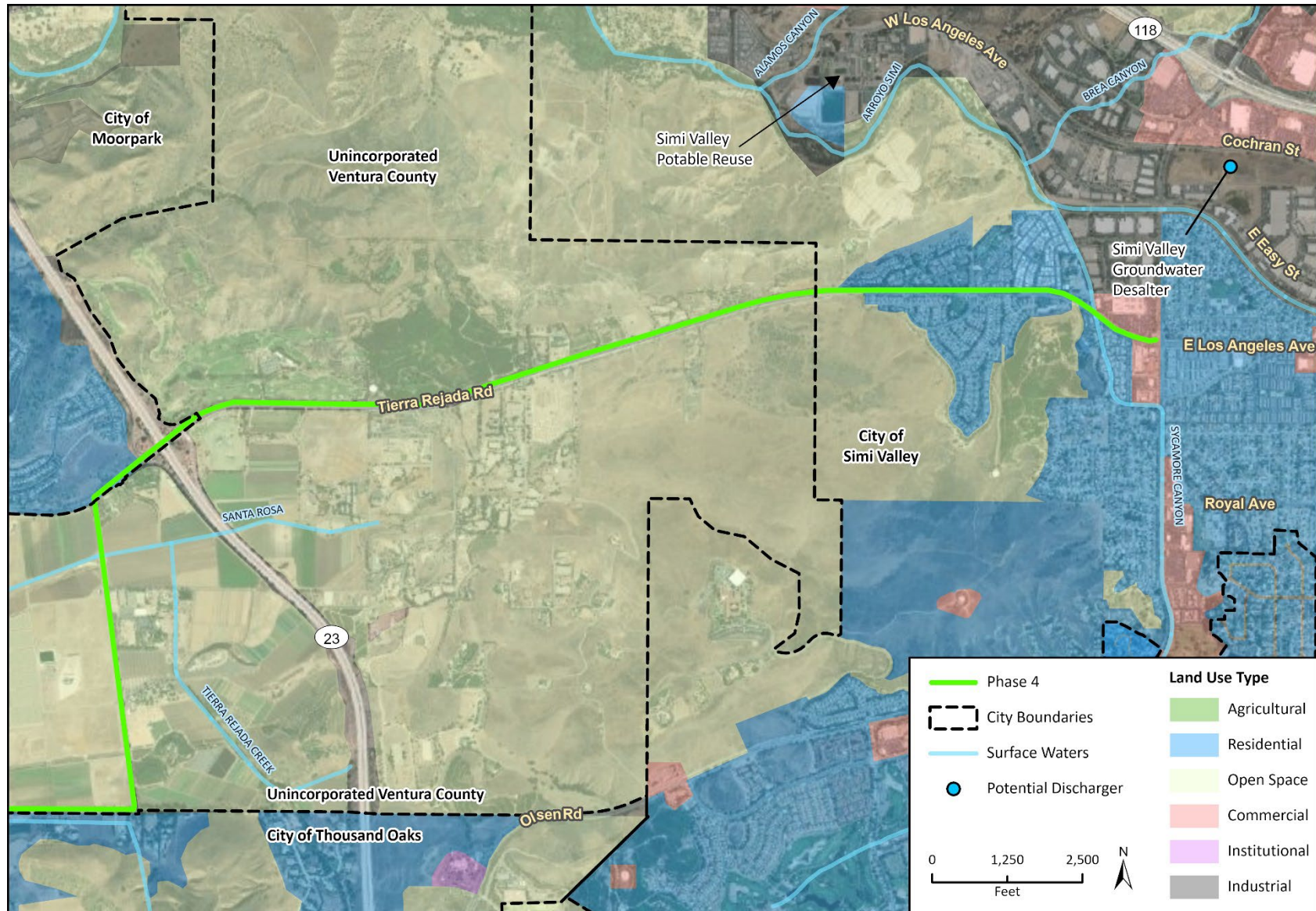
Figure 2-9 Phase 4 Pipeline, Western Portion, Surrounding Land Use Designations



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EPS Proj: Regional, Phase 3 Loc: Fig 2.9 Phase 4 pt 1 Zoning

Figure 2-10 Phase 4 Pipeline, Eastern Portion, Surrounding Land Use Designations



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EPS Proj, Regional, Phase 3 Locn
Fig 2.10 Phase 4 pt 2 Zoning

2.9 Required Approvals

The proposed project may require permits from the following agencies:

- City of Camarillo
- County of Ventura Transportation Department
- California Department of Transportation
- Ventura County Watershed Protection District
- City of Moorpark
- City of Simi Valley

3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project alignment is located in Ventura County and would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. The pipeline alignment would mostly be located within the public right-of-way (ROW) within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road in Camarillo, which is currently used for agricultural production. Figure 2-1 in Section 2, *Project Description*, shows the regional location of the project alignment. Figure 2-2 shows the location of the project alignment within a local context. Figures 2-3 through 2-6 provide closer views of the project alignment in relation to the surrounding neighborhood.

Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment. Regional access would be provided by State Route (SR) 118, SR 23, SR 34, and U.S. 101.

The Mediterranean climate of the region produces moderate temperatures year round, with generally warmer summers and cooler, wetter winters. Although air quality in the area has improved in recent years, Ventura County remains a nonattainment area for ozone. The project area is located approximately 11 miles inland, measured from the nearest segment of alignment on Santa Rosa Road to the coastline of the Pacific Ocean.

3.2 Project Site Setting

The pipeline alignment is mostly located within existing public roadway ROW and does not have a General Plan land use designation. One portion of the Phase 3 pipeline alignment would cross private property along Upland Road, which has a City of Camarillo land use designation of Agriculture (City of Camarillo 2022a).

The project alignment is bordered by a variety of land uses within Camarillo, Thousand Oaks, Moorpark, Simi Valley, and unincorporated Ventura County. Land use designations along the project alignment include City of Camarillo Rural Density, Low Density, Low-Medium Density, and Public designations along Upland Road (City of Camarillo 2022a); County of Ventura Agriculture, Open Space, and Very Low-Density Residential designations along Santa Rosa Road (County of Ventura 2022); County of Ventura Open Space and City of Thousand Oaks Reserve Residential designations along Read Road (City of Thousand Oaks 2022); County of Ventura Open Space designation along Sunset Valley Road (County of Ventura 2022); and City of Moorpark Medium Density Residential, County of Ventura Open Space and City of Simi Valley Open Space, Medium Density Residential, Moderate Density Residential, Neighborhood Park, Mobile Home, Community Park, and General

Commercial designations along Tierra Rejada Road (City of Moorpark 2020; City of Simi Valley 2021; County of Ventura 2022).

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

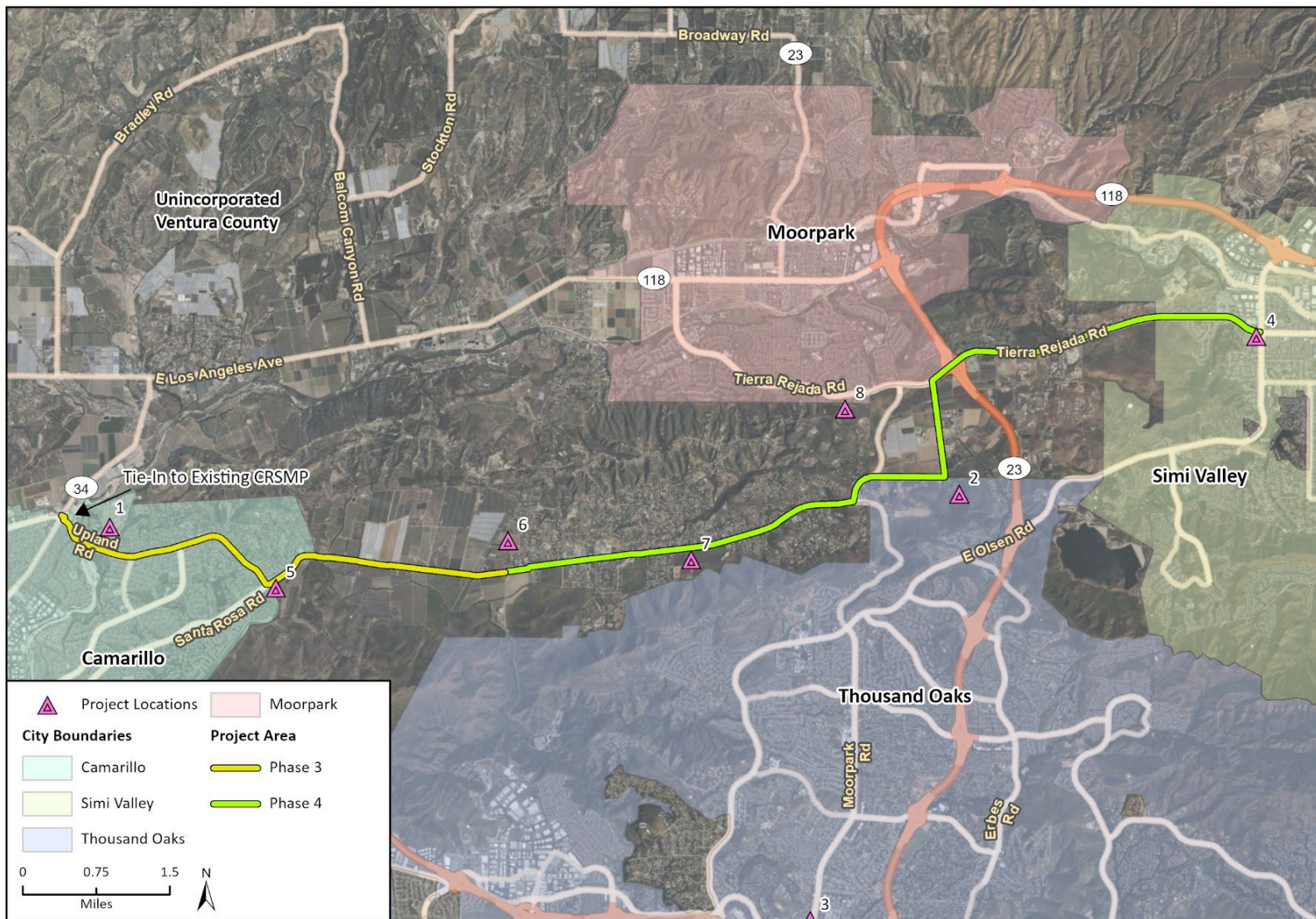
CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in the project area, including in Camarillo, Thousand Oaks, Moorpark, and Simi Valley, and unincorporated Ventura County, are listed in Table 3-1 and shown in the map in Figure 3-1.

In particular, the Upland Road residential project and Tierra Rejada Road utility project are either located in close proximity or along the same roadway as the project alignment and construction schedules may overlap. These projects are considered in the cumulative analyses in Section 4, *Environmental Impact Analysis*.

Table 3-1 Cumulative Projects List

Project No.	Project Location	Land Use	Planned/Pending Project Description
City of Camarillo¹			
1	APNs 163-0-017-275 and -185, located on a portion of the St. John's Seminary property at the northeast corner of Calleguas Creek and Upland Road	Residential	Construction of 281 senior housing units.
City of Thousand Oaks²			
2	APN 592-0-101-035, south side of Read Road	Residential	Construction of a new one-story, 2,000 square-foot single-family dwelling.
3	4031 N Moorpark Road	Utility	Wireless facility construction.
City of Simi Valley³			
4	52 Tierra Rejada Road	Utility	New wireless telecommunication facility in an existing commercial building.
County of Ventura⁴			
5	APN 163-0-160-475 on Santa Rosa Road	Utility	Installation of six antennas, a generator, and associated utility equipment on an existing faux rock cell site.
6	2345 East Yucca Drive	Agriculture	Application for a new 20-year agricultural contract.
7	8120 Santa Rosa Road	Agriculture	Deed Restriction to maintain the land in agricultural and farming use and one lot as personal equestrian property.
8	13723 Nightsky Drive	Residential	Planned Development Permit for a residential structure.
¹ City of Camarillo 2022b			
² City of Thousand Oaks 2023			
³ City of Simi Valley 2023			
⁴ County of Ventura 2023			

Figure 3-1 Cumulative Projects Map



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 Additional data provided by the County of Ventura.

EPS Proj., Regional, Phase 3 Loop
 Fig 3-1 Cumulative Projects Map

4 Environmental Impact Analysis

This section discusses the potential environmental effects of the CRSMP Phases 3 and 4 for the specific issue areas identified through the scoping process as having the potential to experience significant effects. A “significant effect” is defined by the *CEQA Guidelines* §15382 as:

... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by Calleguas and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsections describe each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

The Executive Summary of this SEIR summarizes all project impacts and mitigation measures.

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4.1 Biological Resources

This section describes existing conditions and regulatory setting for biological resources in the project area and assesses potential impacts on biological resources that could result from implementation of the proposed project. The analysis of biological resources within the project area is based on a review of relevant literature and the results of reconnaissance-level field surveys conducted for the project, which are summarized in the Biological Resources Assessment (BRA) prepared for the project (Rincon Consultants, Inc. 2023; Appendix C).

The project area in this section is defined as the proposed pipeline alignment, which occurs along Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road in Ventura County, and a 25-foot buffer on either side of each road.

4.1.1 Setting

4.1.1.1 Vegetation Communities and Land Cover

Six vegetation communities and four land cover types occur within the limits of the project area: arroyo willow-mulefat thickets, California buckwheat scrub, purple sage scrub, wild oats and annual brome grasslands, summer mustard fields, fountain grass swards, riverwash, ornamental, agricultural, and developed land. See Figure 4.1-1 through Figure 4.1-9 for maps of vegetation communities and land cover types within the project area. Refer to Appendix C for additional information regarding the project area's vegetation communities and land cover types, which are summarized below.

Arroyo Willow – Mulefat Thickets

Arroyo willow thickets are typically found along stream banks and benches, slope seeps, and stringers along drainages from sea level to 7,120 feet (2,170 meters) in elevation. This vegetation community is not classified as sensitive (Appendix C). In the project area, this vegetation community is characterized by the arroyo willow – mulefat thickets association, in which the variable shrub layer is dominated by arroyo willow (*Salix lasiolepis*) and mulefat (*Baccharis salicifolia*). Other species present include tree tobacco (*Nicotiana glauca*), giant reed (*Arundo donax*), prickly lettuce (*Lactuca serriola*) and castor bean (*Ricinus communis*). This vegetation community is present on the far west end of the project area, on the banks of Calleguas Creek.

California Buckwheat Scrub

California buckwheat scrub is typically found along upland sloped, intermittently flooded arroyos, channels, and washes, and rarely within flooded low-gradient deposits. It is found between sea level and 3,940 feet (1,200 meters) in elevation. This vegetation community is characterized by a continuous to intermittent shrub layer and a variable herbaceous layer, with California buckwheat (*Eriogonum fasciculatum*) contributing to at least 50 percent relative cover in the shrub layer. This vegetation community is not designated as a sensitive natural community by the California Department of Fish and Wildlife (CDFW) (Appendix C). In the project area, this community has an open shrub layer dominated by California buckwheat. Other widespread species include deerweed (*Acmispon glaber*), coastal prickly pear (*Opuntia littoralis*), and California sagebrush (*Artemisia californica*).

Figure 4.1-1 Vegetation Communities in the Project Area (page 1 of 9)



Figure 4.1-2 Vegetation Communities in the Project Area (page 2 of 9)

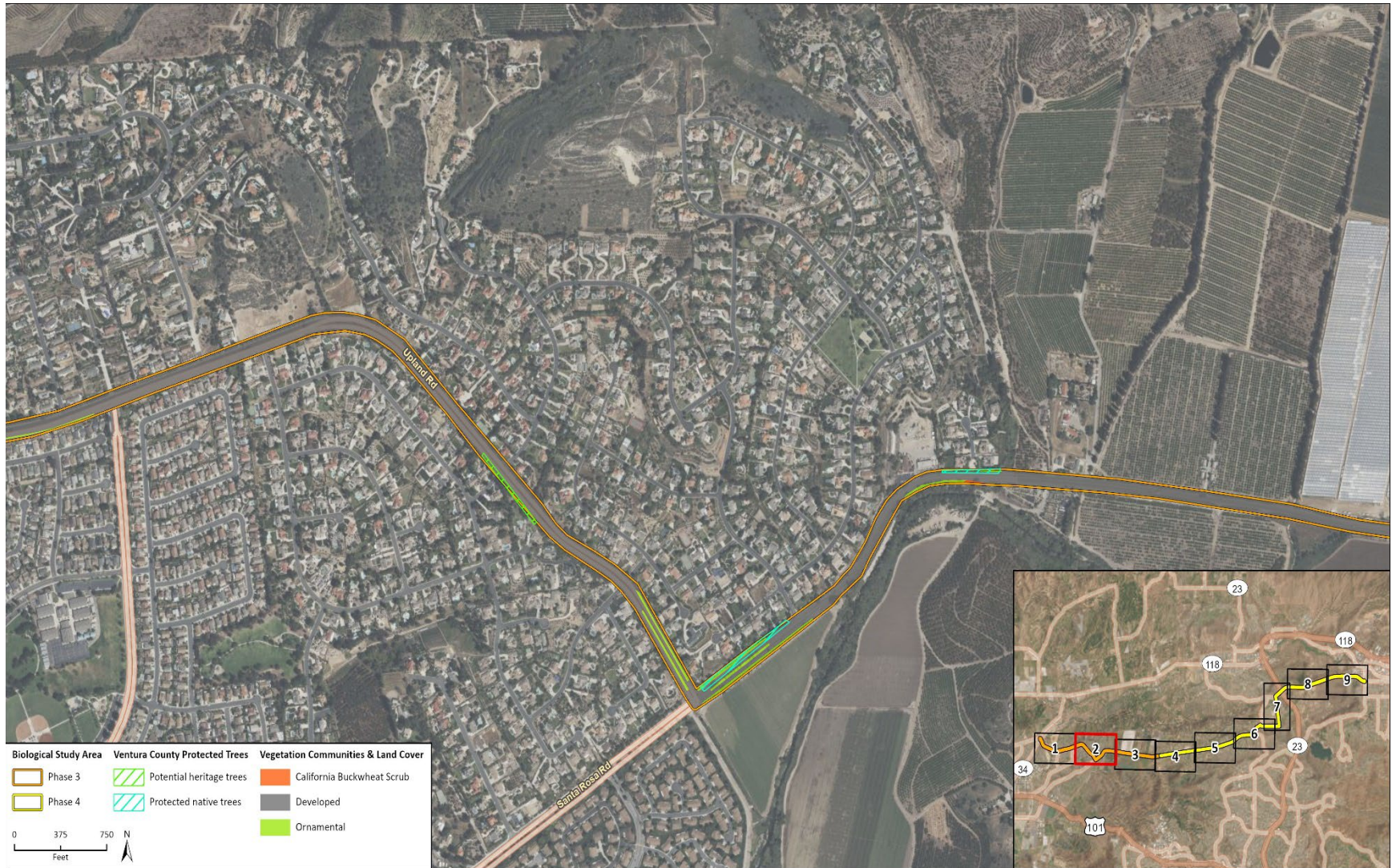


Figure 4.1-3 Vegetation Communities in the Project Area (page 3 of 9)

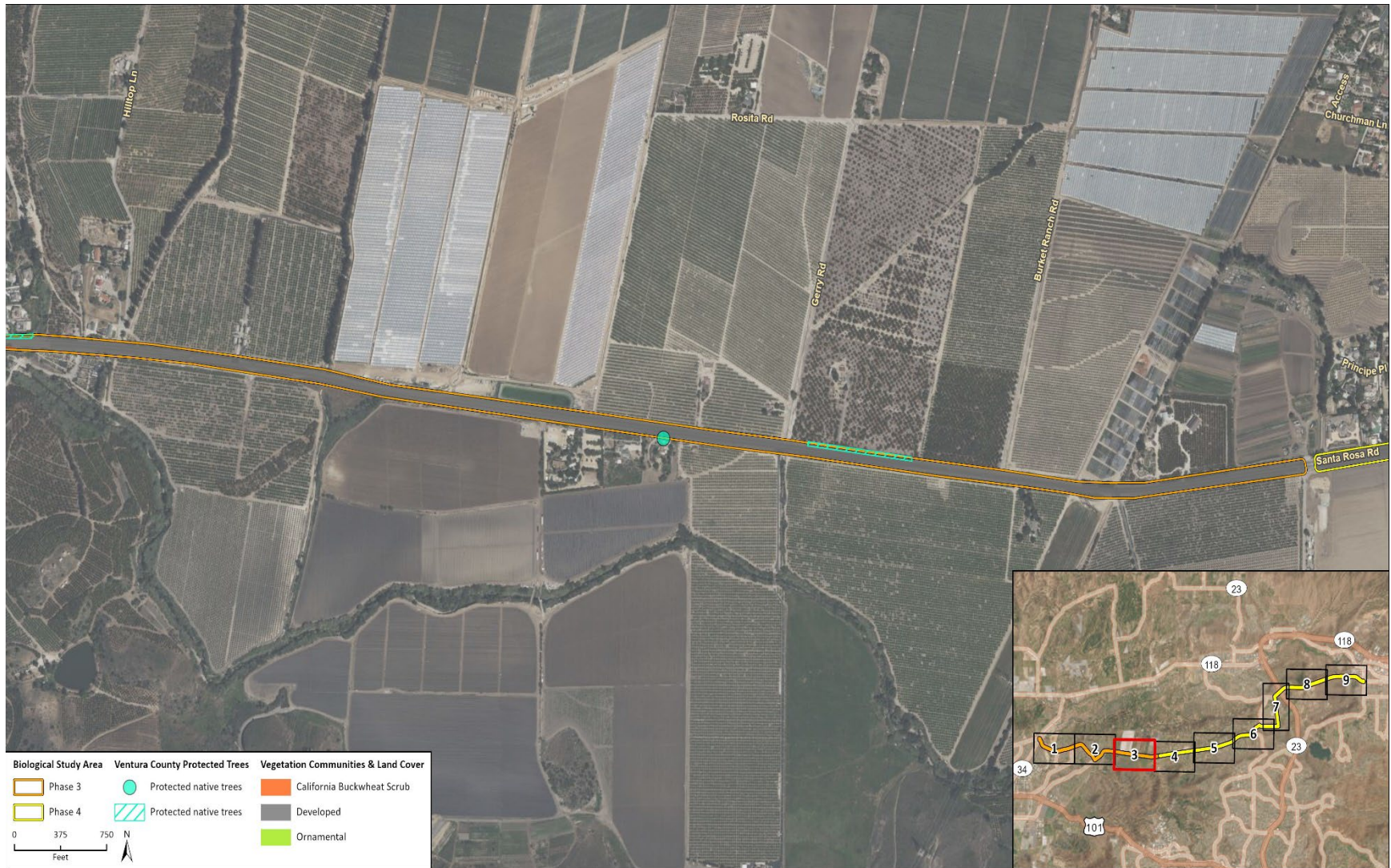


Figure 4.1-4 Vegetation Communities in the Project Area (page 4 of 9)



Figure 4.1-5 Vegetation Communities in the Project Area (page 5 of 9)



Figure 4.1-6 Vegetation Communities in the Project Area (page 6 of 9)

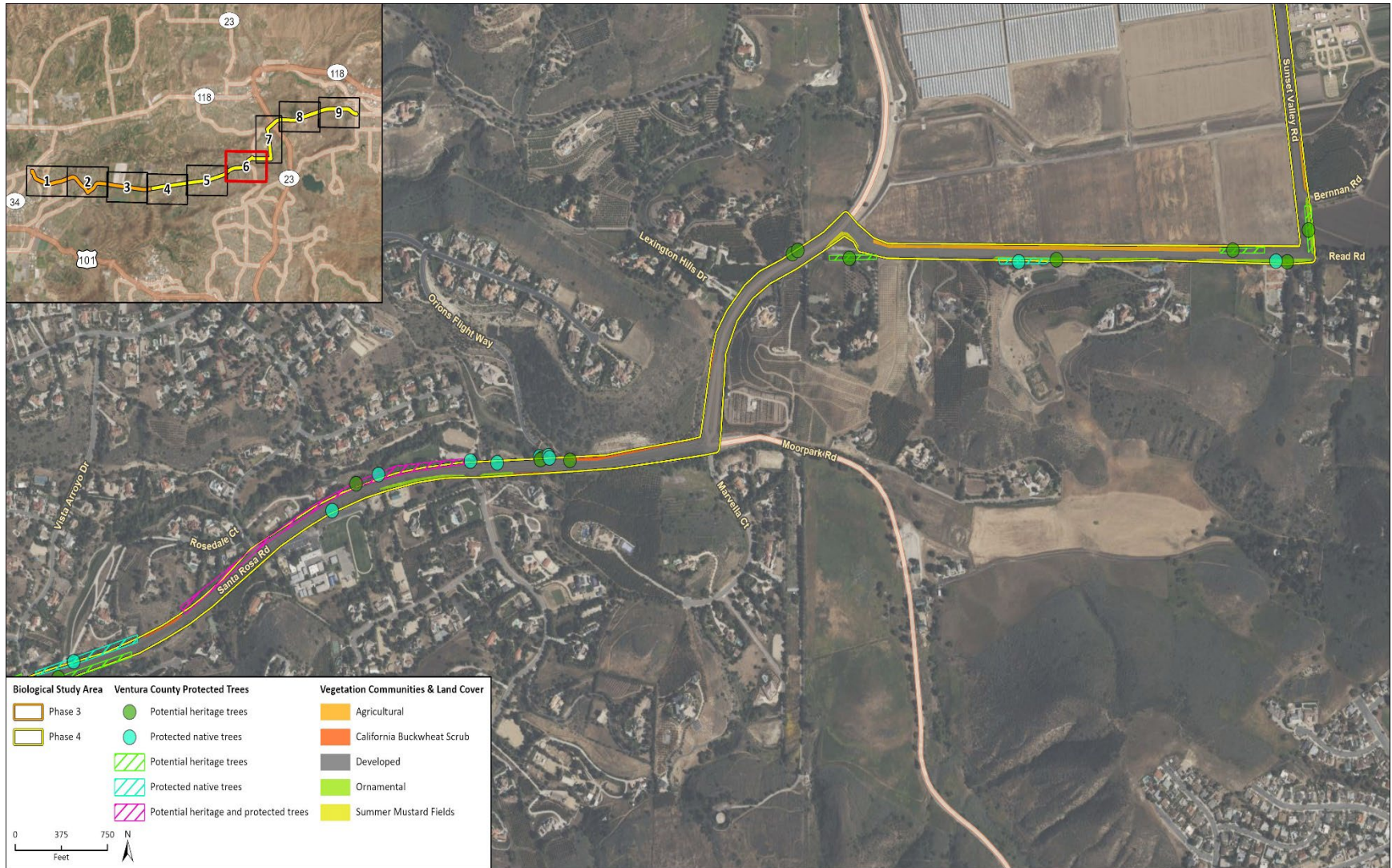


Figure 4.1-7 Vegetation Communities in the Project Area (page 7 of 9)



Figure 4.1-8 Vegetation Communities in the Project Area (page 8 of 9)

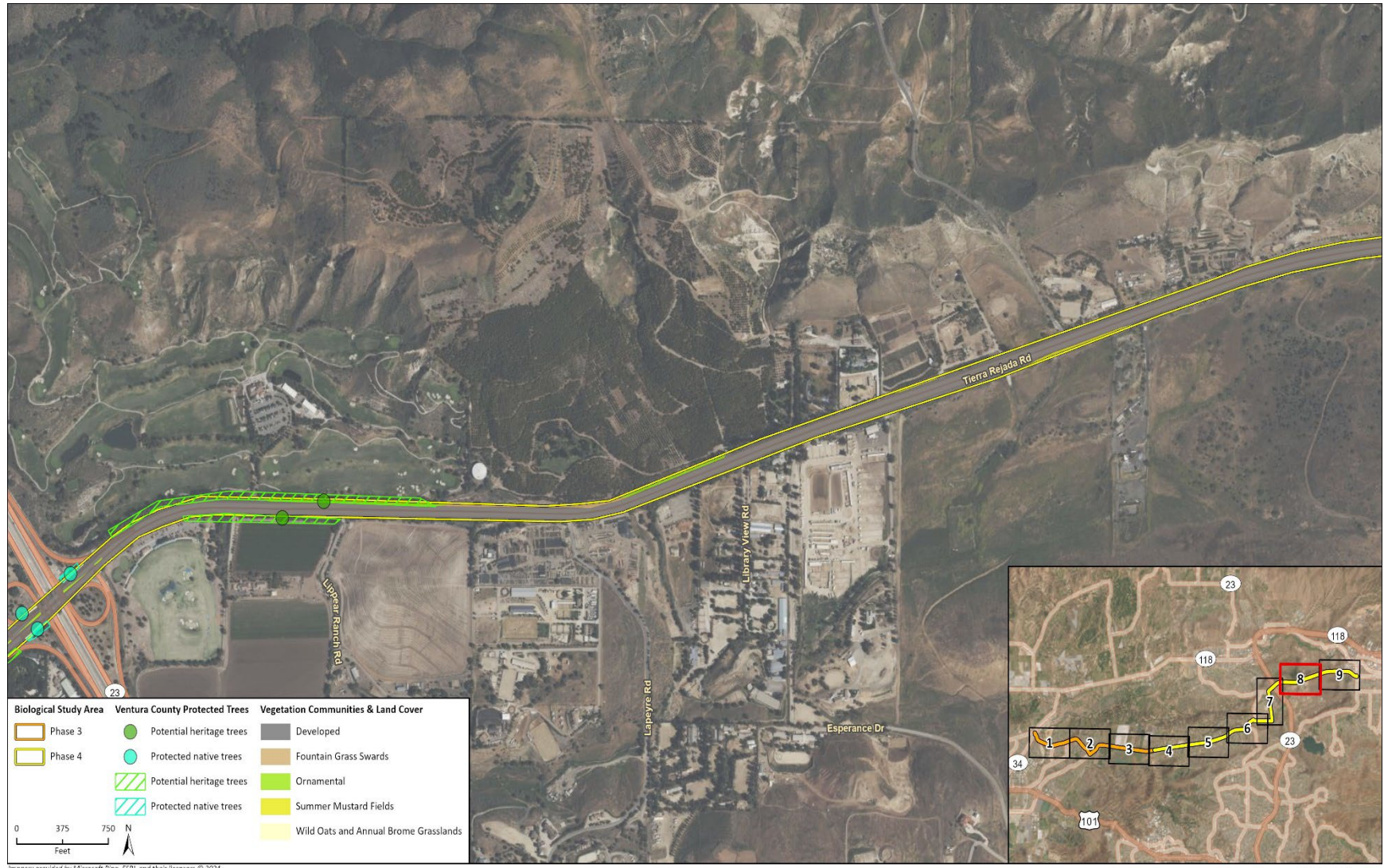
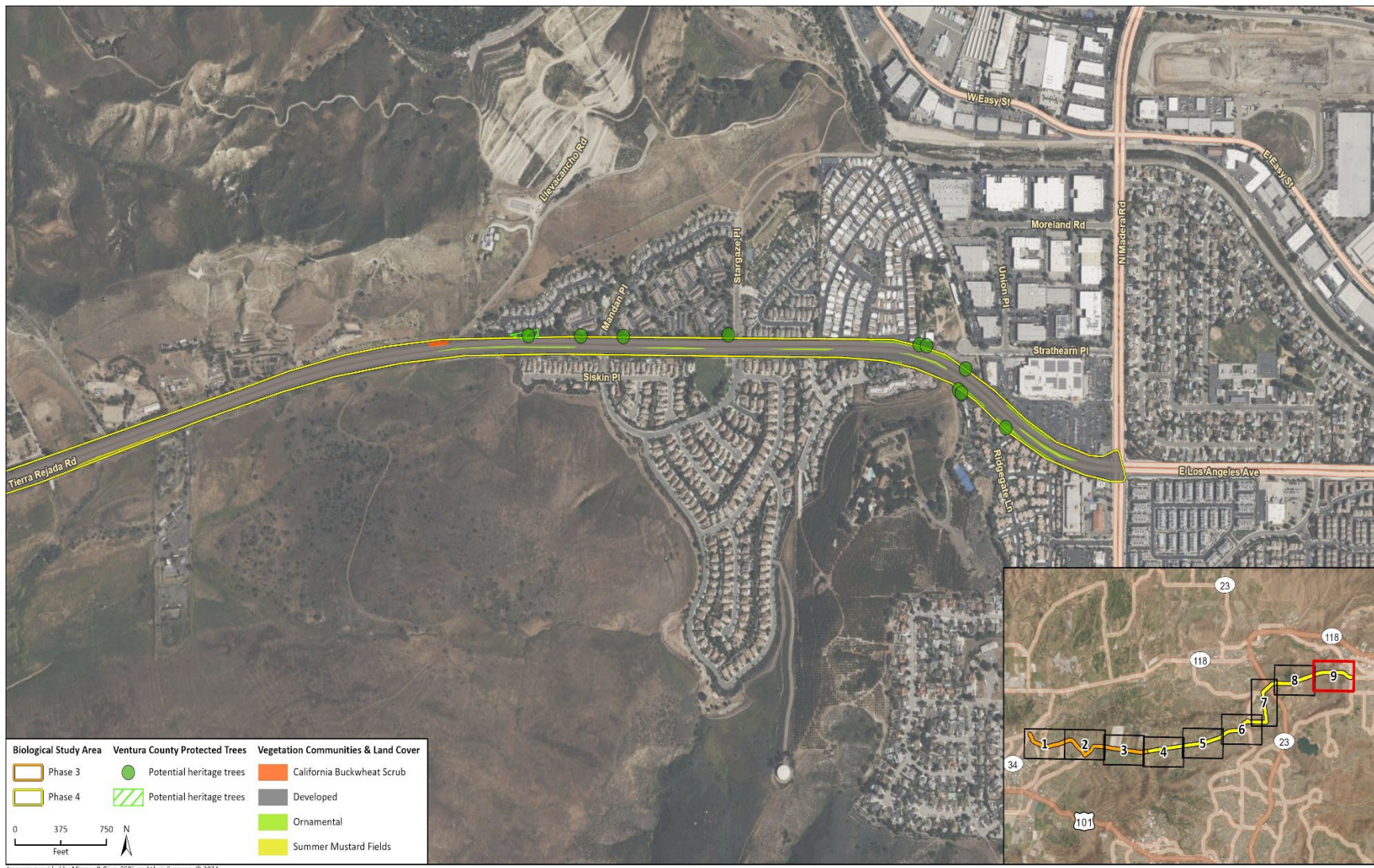


Figure 4.1-9 Vegetation Communities in the Project Area (page 9 of 9)



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EPS Proj. Regional, Phase 3, Loc 8
 Fig. X Vegetation Communities Map Series

The dense herbaceous layer is dominated by weeds including summer mustard (*Hirschfeldia incana*), fountain grass (*Pennisetum setaceum*), and fennel (*Foeniculum vulgare*). Patches of this community are found along the roadsides in the project area, primarily on hillsides.

Purple Sage Scrub

Purple sage scrub is typically found along steep slopes of variable aspect or on low-gradient deposits along streams with alluvial or colluvial soils between sea level and 3,937 feet (1,200 meters) in elevation. This vegetation community is characterized by an intermittent to continuous one- or two-tiered shrub canopy and a variable herbaceous layer, with purple sage (*Salvia leucophylla*) present at over 30 percent relative cover, and often codominant with California sagebrush in the shrub layer. This vegetation community is not a CDFW sensitive natural community (Appendix C). In the project area, this community is dominated by purple sage. Other shrubs present include coastal prickly pear and chaparral yucca (*Hesperoyucca whipplei*). The herbaceous layer is sparse and includes summer mustard and wild oats (*Avena* sp.). One patch of this community is found on a steep south-facing hillside north of Tierra Rejada Road.

Wild Oats and Annual Brome Grasslands

Wild oats and annual brome grasslands are found in all topographic settings in foothills, waste places, rangelands, and openings in woodlands at elevations of sea level to 7,215 feet (2,200 meters) in elevation. Wild oats, annual bromes (*Bromus* spp.), purple false brome (*Brachypodium distachyon*), fillaree (*Erodium* spp.), rattlesnake grass (*Briza* spp.) or cat's ear (*Hypochaeris* spp.) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover. The alliance is not a CDFW sensitive natural community. There are no sensitive associations of this community (Appendix C). In the project area, this community has a dense herbaceous layer dominated by wild oats, annual bromes, summer mustard, and Russian thistle (*Salsola tragus*). Scattered coast live oak (*Quercus agrifolia*) and ornamental trees and shrubs are present. Patches of this community are present throughout the project area on the road shoulders.

Summer Mustard Fields

Upland mustards are typically found in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places between sea level and 9,186 feet (2,800 meters) in elevation. This vegetation community is characterized by an open to continuous herbaceous layer. Black mustard (*Brassica nigra*), summer mustard, wild radish (*Raphanus sativus*), or other mustards occur with non-native plants at over 80 percent cover in the herbaceous layer. This vegetation community is not a CDFW sensitive natural community (Appendix C). In the project area, this community is characterized by the summer mustard fields association. The dense herbaceous layer is dominated by summer mustard. Other species include fennel, Russian thistle, and telegraph weed (*Heterotheca grandiflora*). Parts of this community in the project area were mowed during the field survey, and scattered ornamental trees and shrubs are present.

Fountain Grass Swards

Fountain grass swards are generally found on steep coastal cliffs, bluffs, road-cuts, coastal dunes, coastal scrub, or desert scrub types in areas with mild, frost-free winters. Elevations range between sea level and 330 feet (100 meters) in elevation. This community is characterized by an open to intermittent herbaceous layer. Fountain grasses (*Pennisetum* spp.) have at least 50 percent relative

cover in the herbaceous layer and non-native plants have over 90 percent relative cover in the herbaceous layer. Fountain grass swards are not a CDFW sensitive natural community (Appendix C). In the project area, this community is dominated by fountain grass. Other species present include summer mustard and scattered California buckwheat and ornamental trees. This community is found on roadside shoulders in the eastern portion of the project area.

Riverwash

This land cover type is located within the open, unvegetated or sparsely vegetated channel of Calleguas Creek in the western end of the project area along Upland Road. The substrate is comprised of gravel, cobble, and sand. Riverwash is a naturally dynamic habitat and may shift and change position within the drainage, depending on flood volumes and regularity.

Ornamental

Ornamental areas have been planted for the purpose of landscaping, generally with non-native species that require regular irrigation or other maintenance. Much of the project area is characterized by ornamental vegetation, primarily including street trees, shrubs, grass lawns, and plant nurseries. Occasionally native trees are included in this land cover type.

Agricultural

This land cover type includes active agricultural fields, orchards, fallow fields, and associated access roads. Common crops in the project area during the field survey include avocados, pumpkins, and tomatoes.

Developed

Developed areas consist of paved areas, roadways, and gravel or hardpacked dirt road shoulders with little to no vegetation. Buildings and scattered ornamental vegetation are included in this land cover type. This is the most abundant land cover type in the project area.

4.1.1.2 Soils

According to the Natural Resources Conservation Service Web Soil Survey, the project area includes 44 soil map units, with one soil type, riverwash, classified as a hydric soil (Appendix C). For a complete list of all soil units found within the project area, as well as the total acreage of each soil unit in the project area, please refer to Table 1 within Appendix C.

4.1.1.3 Special-Status Species

For the purpose of this analysis, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Services (USFWS) and National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (ESA); those listed or proposed for listing as Threatened or Endangered by the CDFW under the California Endangered Species Act (CESA); plants listed as rare by the CDFW under the Native Plant Protection Act; animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by the CDFW; and those species included on Ventura County Locally Important Species Lists. Those plants ranked as California Rare Plant Rank (CRPR) 1 or 2 are typically regarded as rare, Threatened, or Endangered under CEQA by lead agencies and were considered as such in this EIR. The CRPR utilizes the following code definitions:

- **List 1A** = Plants presumed extinct in California
- **List 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences are threatened or have a high degree and immediacy of threat)
- **List 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent of occurrences are threatened)
- **List 1B.3** = Rare or endangered in California and elsewhere but not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)
- **List 2** = Rare, threatened or endangered in California, but more common elsewhere

CRPR List 3 species are “review list,” and CRPR 4 species are considered “watch list” species. CRPR 3 and 4 species do not typically warrant analysis under CEQA except where they are part of a unique community, from the type locality, or designated as rare or significant by local governments, or where cumulative impacts could result in population-level effects.

Special-Status Plants

Special-status plants typically have specialized habitat requirements, including plant community types, soils, and elevational ranges. The CNDDDB and California Native Plant Society (CNPS) queries identified 24 special-status plants that have been previously recorded in either the four United States Geological Survey (USGS) 7.5-minute topographic quadrangles that the project area crosses or within five miles of the project area (Appendix C).

The project area consists primarily of landscaped areas and developed areas; however, some natural habitats are present and may be suitable for some special-status plants. Of the 24 special-status plants identified in the database queries, 22 are not expected to occur because habitat on and adjacent to the project area is unsuitable for the species (i.e., the area does not meet minimum habitat requirements). One southern California black walnut (*Juglans californica*) [CRPR 4.2] was documented within the project area; however, this plant is not typically evaluated as a special-status plant under CEQA. One plant—Lyon’s pentachaeta—was determined to have a moderate potential to occur in the project area, based on the published ranges of the plant, and the type, extent, and condition of habitat available within the project area. This plant is discussed further in the following subsection.

Lyon’s Pentachaeta

Lyon’s pentachaeta (*Pentachaeta lyonii*) is an annual herbaceous plant in the sunflower family (Asteraceae). It is listed as Endangered under both the ESA and CESA (Federally Endangered [FE] and California Endangered [CE]) and is a CRPR 1B.1 plant. This plant ranges between 6 to 48 centimeters in height, with small, linear leaves. Lyon’s pentachaeta is endemic to California, and its range is limited to coastal Ventura and Los Angeles Counties. This plant can be found in openings in coastal scrub, chaparral, and grasslands. It is often found at the edges between different habitats.

Federally designated critical habitat for Lyon’s pentachaeta is adjacent to a small portion of the project area north of Tierra Rejada Road and west of SR 23. This area is dominated by California buckwheat scrub and characterized by a dense to open shrub layer.

Special-Status Wildlife

Based on the database and literature review, 30 special-status wildlife are known or have the potential to occur in the vicinity of the project area (Appendix C). Of these, six have a moderate

potential to occur, ten have a low potential, and the remaining 14 special-status species are not expected to occur based on a lack of suitable habitat. No special-status wildlife were observed within the project area during the reconnaissance field survey (Appendix C).

Species with a low potential to occur are omitted from further discussion because these species are not expected to be present. The remaining six special-status species or other protected species with moderate potential to occur within the project area are discussed below.

Western Spadefoot Toad

The western spadefoot toad (*Spea hammondi*) is typically found in sandy washes and flood plains of the Central Valley and the central and southern coast ranges of California. It is proposed as Threatened under the ESA (FPT) and is a California Species of Special Concern (SSC). The species prefers open areas with sandy or gravelly soils and is found in a variety of habitats, including mixed woodlands, grasslands, sandy washes, foothills, and mountains. The species spends most of the year in underground burrows that they construct themselves, although some individuals may use small mammal burrows. Vernal pools or other temporary ponds are required for breeding and larval development (Appendix C).

Potentially suitable grassland habitat for the western spadefoot toad is present in the project area. However, these natural areas are limited and are adjacent to busy roadways. No vernal pools are present within the project area; however, several vernal pools are present within a mile of the project area. Multiple CNDDDB occurrences of western spadefoot toad are located within the quadrangles crossed by the project area, including one occurrence from 2013 located approximately 0.3 mile north of the project area. This species has a moderate potential to occur in the project area.

California Legless Lizard

California legless lizard (*Anniella* spp.) is found in the Coast Ranges from Contra Costa County to the Mexican border. California legless lizard is a California SSC that occurs in a variety of habitats, including sparsely vegetated areas of coastal dunes, valley-foothill grasslands, chaparral, and coastal scrub that contain sandy or loose organic soils with leaf litter and moist soils for burrowing. Areas disturbed by agriculture or other human uses are typically not suitable habitat for the species (Appendix C).

Potentially suitable natural areas for California legless lizard are present in the project area; however, these natural areas are limited, sparsely vegetated, and adjacent to roadways. Three CNDDDB occurrences of California legless lizards are located within the quadrangles crossed by the project area, including one from 2015 located approximately 3.8 miles south of the project area. This species has a moderate potential to occur in the project area.

Coastal Whiptail

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a California SSC found in deserts and semi-arid areas with sparse vegetation within Ventura, Los Angeles, Riverside, and San Diego Counties. The species is commonly found in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grasslands (Appendix C).

Potentially suitable natural areas for the coastal whiptail are present in the project area; however, these natural areas are limited, sparsely vegetated, and adjacent to roadways. Multiple CNDDDB occurrences of coastal whiptails are located within the surveyed quadrangles, including one from

1996 located approximately 0.8 mile north of the project area. This species has a moderate potential to occur in the project area.

Southern California Rufous-crowned Sparrow

The southern California rufous-crowned sparrow (*Aimophila ruficeps*) is a small songbird found in southern California coastal sage scrub and sparse mixed chaparral, typically in elevation ranges from 200 to 4,500 feet. It is a CDFW Watch List (WL) species that frequents relatively steep, often rocky hillsides with grass and forb patches. The species prefers south- or west-facing slopes with scattered scrub cover interspersed with grasses and forbs or rock outcrops. Their diet is not well known but includes grasses, forb seeds, and insects, depending on the season, locality, and availability (Appendix C).

Potentially suitable coastal sage scrub is present in the project area; however, these natural areas are limited and are adjacent to busy roadways. Three CNDDDB occurrences of southern California rufous-crowned sparrows are located in the quadrangles crossed by the project area, including one occurrence from 2017 located approximately 0.6 mile north of the project area. This species has a moderate potential to occur in the project area.

Coastal California Gnatcatcher

The coastal California gnatcatcher (*Polioptila californica californica*) is a non-migratory songbird found on the coastal slopes of southern California. The species is FT and a California SSC. It ranges from Ventura County south to northwest Baja California, Mexico and is strongly associated with coastal sage scrub habitat below 820 feet in coastal areas and between 820 and 1,640 feet in inland areas; however, not all types of coastal sage scrub communities are used or preferred. This species appears to be most abundant in areas dominated by California sagebrush and California buckwheat. The breeding season extends from late February through August with peaks nesting in mid-March to mid-May (Appendix C).

Potentially suitable coastal scrub and grasslands are present in the project area; however, these natural areas are limited and are adjacent to busy roadways. The eastern portion of the project area overlaps critical habitat for this species. Multiple CNDDDB occurrences of coastal California gnatcatcher are located within the quadrangles crossed by the project area, including two occurrences from 2012 adjacent to the project area. This species has a moderate potential to occur in the project area.

Least Bell's Vireo

The least Bell's vireo (*Vireo bellii pusillus*) is a FE and CE species and summer resident of southern California in riparian areas in the vicinity of water or in dry river bottoms below 2,000 feet. The least Bell's vireo arrives at breeding grounds mid to late March and leaves late September. Its nests are placed along margins of bushes or on twigs projecting into pathways, usually willow species. The species prefers dense shrubby understory (Appendix C).

Potentially suitable riparian habitat is present in the project area, in the arroyo willow – mulefat thickets along Calleguas Creek. Multiple CNDDDB occurrences of least Bell's vireo are located within the quadrangles crossed by the project area, including one historical occurrence from 1940 which overlaps the project area and one occurrence from 2017 located approximately 0.3 mile south of the project area in Conejo Creek. This species has a moderate potential to occur in the project area.

4.1.1.4 *Sensitive Natural Communities and Critical Habitats*

The CDFW California Natural Community List identifies sensitive natural communities throughout California, based in part on global and state rarity ranks. Natural communities having a rank of 1 to 3 are generally considered sensitive, though some communities with other ranks may also be considered sensitive. No CDFW-designated sensitive vegetation communities occur within the project area (Appendix C).

Federally-designated critical habitat for coastal California gnatcatcher overlaps the project area. The project area is also adjacent to critical habitat for Lyon's pentachaeta and Riverside fairy shrimp (*Streptocephalus woottoni*) (Appendix C).

Federally-designated critical habitat for coastal California gnatcatcher is present in the eastern portion of the project area, along Tierra Rejada Road between SR 23 and North Madera Road. Most of the area mapped as critical habitat within the project area consists of paved roadways, sidewalks, buildings, and ornamental plants, and is not suitable habitat for coastal California gnatcatcher. Natural areas consist primarily of summer mustard fields dominated by dense non-native herbaceous vegetation. One small patch of California buckwheat scrub is present in this area, and additional coastal scrub communities potentially suitable for coastal California gnatcatcher are present to the north and south of the project area (Appendix C).

Federally-designated critical habitat for both Lyon's pentachaeta and Riverside fairy shrimp is confined to the extent of a vernal pool located north of Tierra Rejada Road and west of SR 23. The vernal pool is located in a flat area that is uphill from Tierra Rejada Road and outside the project area. The nearby road shoulder within the project area is characterized by upland vegetation consisting of California buckwheat scrub and purple sage scrub (Appendix C).

4.1.1.5 *Wetlands and Drainages*

Several features within the project area may be subject to United States Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), CDFW, and/or Ventura County Watershed Protection District (VCWPD) jurisdiction. A summary of observed potentially jurisdictional features is presented in Table 2 of Appendix C, and illustrated in Figure 4.1-10. Please refer to Sub-Appendix B within Appendix C for representative photographs of these features.

Fifteen potentially jurisdictional features were mapped, including one natural streambed, six culverts, and eight roadside ditches. Four of these features are redline channels regulated by VCWPD (Calleguas Creek, Camrosa Drain, Santa Rosa, and Santa Rosa Tributary). Calleguas Creek has a natural streambed and is characterized by a sandy stream channel with a bridge crossing. Six features are only present in the project area as underground culverts. The aboveground portions of these features are outside the project area. Culverts range in type from corrugated metal pipe culverts to large concrete box culverts. The eight roadside ditches are located alongside roads in the project area, generally between the road shoulder and adjacent residential buildings or agricultural fields. These ditches may be concrete-lined or natural-bottomed.

Figure 4.1-10 Potential Jurisdictional Waters in the Project Area



4.1.1.6 *Wildlife Movement*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats in the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Portions of the project area along much of Tierra Rejada Road, Read Road, and Moorpark Road are located within an Essential Connectivity Area as described in the California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (Appendix C). This connectivity area connects the Santa Monica Mountains to the south and the Los Padres National Forest to the north. In addition, Calleguas Creek functions as a local route for wildlife movement. Calleguas Creek (or Arroyo Las Posas) extends from the Simi Hills to the northeast and empties into the Pacific Ocean at Mugu Lagoon. The creek connects highly diverse habitat types and provides a valuable movement and migration corridor for many types of wildlife, including terrestrial and semiaquatic species (Appendix C).

4.1.2 *Regulatory Setting*

Federal, state, and local authorities under a variety of statutes and guidelines share regulatory authority over biological resources. The primary authority under CEQA for general biological resources lies within the land use control and planning authority of local jurisdictions, which in this instance is a combination of the County of Ventura, the City of Camarillo, the City of Thousand Oaks, the City of Moorpark, and the City of Simi Valley. CDFW is both a trustee agency and responsible agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGC), which includes, but is not limited to, resources protected by the State of California under the CESA. The following subsections summarize the federal, state, and local regulations that form the regulatory basis for the impact analysis.

4.1.2.1 *Federal Regulations*

Federal Endangered Species Act

Under the federal ESA, authorization is required to “take” a listed species. Take is defined under federal ESA Section 3 as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Under federal regulation (50 Code of Federal Regulations Sections 17.3, 222.102), “harm” is further defined to include habitat modification or

degradation where it would be expected to result in death or injury to listed wildlife species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Critical habitat is a specific geographic area(s) that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. Federal ESA Section 7 outlines procedures for federal interagency cooperation to conserve federally listed species and designated critical habitat. The USFWS and NMFS share responsibility and regulatory authority for implementing the federal ESA (7 United States Code Section 136, 16 United States Code Section 1531 et seq.).

Federal ESA Section 7(a)(2) and its implementing regulations require federal agencies to consult with USFWS or NMFS to ensure they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat. For projects where federal action is not involved and take of a listed species may occur, the project proponent may seek to obtain an incidental take permit under federal ESA Section 10(a). Section 10(a) allows USFWS to permit the incidental take of listed species if such take is accompanied by a Habitat Conservation Plan that includes components to minimize and mitigate impacts associated with the take.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act authorizes the Secretary of the Interior to regulate the taking of migratory birds. The Act provides that it is unlawful, except as permitted by regulations, “to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, [...] any migratory bird, or any part, nest, or egg of any such bird” (16 United States Code Section 703[a]). In addition, the Bald and Golden Eagle Protection Act is the primary law protecting eagles, including individuals and their nests and eggs. The USFWS implements the Migratory Bird Treaty Act (16 United States Code Section 703-711).

Section 10 of the River and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure in or over any navigable water of the United States. Regulated activities include dredging or disposal of dredged materials, excavation, filling, re-channelization and construction of any structure or any other modification of a navigable water of the United States.

Clean Water Act

Under Section 404 of the Clean Water Act (CWA), the USACE, with oversight by the United States Environmental Protection Agency (USEPA), has authority to regulate activities that result in discharge of dredged or fill material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters. In achieving the goals of the CWA, the USACE seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any discharge of dredged or fill material into jurisdictional wetlands or other jurisdictional waters of the United States requires a Section 404 permit from the USACE prior to the start of work. In 2008, the USEPA and the USACE, through a joint rulemaking, expanded the CWA Section 404(b)(1) guidelines to include more comprehensive standards for compensatory mitigation. These standards include ensuring that unavoidable impacts subject to regulation under the CWA are mitigated through

replacement to promote no net loss of wetlands. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetlands is met by compensatory mitigation. In general, the type and location options for compensatory mitigation should comply with the hierarchy established by the USACE/USEPA 2008 Mitigation Rule (in descending order): (1) mitigation banks; (2) in-lieu fee programs; and (3) permittee-responsible compensatory mitigation. Also, in accordance with CWA Section 401, applicants for a Section 404 permit must obtain water quality certification from the appropriate RWQCB.

The USACE, RWQCB, and CDFW typically have jurisdiction over wetlands that exhibit three parameters: suitable wetland hydrology, hydric soils, and hydrophytic vegetation. The RWQCB also considers features with saturated, anaerobic-condition wetlands to be under its jurisdiction.

4.1.2.2 State Regulations

California Endangered Species Act

CESA (CFGF Section 2050 et seq.) prohibits take of state-listed threatened and endangered species without a CDFW incidental take permit. "Take" under CESA is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" and is therefore restricted to direct harm of a listed species. Take under CESA does not prohibit indirect harm by way of habitat modification (CFGF Section 86).

California Fish and Game Code sections 3503, 3503.5 and 3511

CFGF Sections 3503, 3503.5 and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds described under CFGF Section 3511 may not be taken or possessed except under specific permit. CFGF Section 3503.5 protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Native Plant Protection Act

The CDFW has authority to administer the Native Plant Protection Act (CFGF Section 1900 et seq.). The Act requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Native Plant Protection Act Section 1913(c), the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use to allow for salvage of the plant(s).

California Fish and Game Code Section 1600 et seq.

CFGF Section 1600 et seq. prohibits the substantial diversion or obstruction of the natural flow of, or substantial change to or use of any material from the bed, channel, or bank of any river, stream, or lake; or deposit or disposal of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake without prior notification to CDFW. In order for these activities to occur lawfully, the CDFW must receive written notification regarding the activity in the prescribed manner and may require a lake or streambed alteration agreement. Lakes, ponds, perennial and intermittent streams and associated riparian vegetation, when present, are subject to this regulation.

Porter-Cologne Water Quality Control Act

The State Water Resources Control Board and each of nine local RWQCBs has jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state pursuant to the Porter-Cologne Water Quality Control Act. The State Water Resources Control Board has issued general Waste Discharge Requirements regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the USACE to be Outside of Federal Jurisdiction). In the project area, the Los Angeles RWQCB implements this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to CWA Section 401 for waters subject to federal jurisdiction.

4.1.2.3 Local Regulations

Ventura County Tree Protection Ordinance

Ventura County regulations for protected trees outside the coastal zone apply in the unincorporated portion of the project area. In accordance with the County’s tree protection ordinance, protected trees include oaks and sycamores on private property that measure 9.5 inches in girth (circumference) or larger (generally measured 4.5 feet above ground), trees of any species that have “heritage” status because they measure 90 inches in girth or larger, and trees of any species with a historical designation (Appendix C).

Ventura County Initial Study Assessment Guidelines/ Initial Study Biological Assessment

The Initial Study Assessment Guidelines (ISAG) were prepared in accordance with the County of Ventura’s Administrative Supplement to State CEQA Guidelines. The Guidelines were originally adopted in 1992 by the directors of those County agencies/departments responsible for evaluating environmental issues and by the County’s Environmental Quality Advisory Committee. Discretionary projects that have the potential to impact biological resources require a biological survey and report as part of the application submittal to the County Planning Division. This report is called an Initial Study Biological Assessment (ISBA). Given Calleguas is the CEQA lead agency, there is no need to submit an ISBA; nevertheless, the Biological Resources Assessment, herein summarized and referred to as “Appendix C” has been prepared in accordance with the ISAG and ISBA requirements to identify the general parameters of “significant impacts” and determine whether any threshold criteria are exceeded by the project.

Ventura County General Plan

Applicable policies and actions put forth in the Conservation and Open Space Element of the Ventura County General Plan (County of Ventura 2020) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **Policy COS-1.1: Protection of Sensitive Biological Resources:** The County shall ensure that discretionary development that could potentially impact sensitive biological resources be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures that fully account for the impacted resource. When feasible, mitigation measures

should adhere to the following priority: avoid impacts, minimize impacts, and compensate for impacts. If the impacts cannot be reduced to a less-than-significant level, findings of overriding considerations must be made by the decision-making body.

- **Policy COS-1.4: Consideration of Impacts to Wildlife Movement:** When considering proposed discretionary development, County decision-makers shall consider the development's potential project-specific and cumulative impacts on the movement of wildlife at a range of spatial scales including local scales (e.g., hundreds of feet) and regional scales (e.g., tens of miles).
- **Policy COS-1.5: Development Within Habitat Connectivity and Wildlife Corridors:** Development within the Habitat Connectivity and Wildlife Corridors overlay zone and Critical Wildlife Passage Areas overlay zone shall be subject to the applicable provisions and standards of these overlay zones as set forth in the Non-Coastal Zoning Ordinance.
- **Policy COS-1.10: Evaluation of Potential Impacts of Discretionary Development on Wetlands:** The County shall require discretionary development that is proposed to be located within 300 feet of a wetland to be evaluated by a County-approved biologist for potential impacts on the wetland and its associated habitats pursuant to the applicable provisions of the County's Initial Study Assessment Guidelines.
- **Policy COS-1.11: Discretionary Development Sited Near Wetlands:** The County shall require discretionary development to be sited 100 feet from wetland habitats, except as provided below. The 100-foot setback may be increased or decreased based upon an evaluation and recommendation by a qualified biologist and approval by the decision making body based on factors that include, but may not be limited to, soil type, slope stability, drainage patterns, the potential for discharges that may impair water quality, presence or absence of endangered, threatened or rare plants or animals, direct and indirect effects to wildlife movement, and compatibility of the proposed development with use of the wetland habitat area by wildlife. Discretionary development that would have a significant impact on a wetland habitat shall be prohibited unless mitigation measures are approved that would reduce the impact to a less-than-significant level. Notwithstanding the foregoing, discretionary development that would have a significant impact on a wetland habitat on land within a designated Existing community may be approved in conjunction with the adoption of a statement of overriding considerations by the decision-making body.

City of Camarillo General Plan

Applicable policies and actions put forth in the Open Space Element of Camarillo's General Plan (City of Camarillo 2006) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **Policy 7:** Identify and protect natural watersheds, natural drainage beds and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.
- **Policy 10:** Encourage development in areas where services and facilities already exist and are underused. Promote efficient extension of utilities and services.

City of Camarillo Municipal Code

The following sections from the Camarillo Municipal Code would be applicable to the project:

- Municipal Code 13.04.630 – Removal and/or trimming of trees
- Municipal Code 13.12.060 – Maintenance and removal of trees and other plantings
- Municipal Code 13.12.070 – Protection of trees and other plantings

City of Thousand Oaks General Plan

Applicable policies and actions put forth in the Conservation Element of the General Plan (City of Thousand Oaks 2013) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **CO-21:** The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.
- **CO-23:** Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.
- **CO-30:** Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value.
- **CO-32:** The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (USFWS and CDFW), the CNPS, the County of Ventura and the City of Thousand Oaks.

City of Thousand Oaks Municipal Code

The following sections from the Thousand Oaks Municipal Code would be applicable to the project:

- Municipal Code Section 9-4.42 – Oak Tree Preservation and Protection
- Municipal Code Section 9-4.43 – Landmark Tree Preservation and Protection

City of Moorpark General Plan

Applicable policies and actions put forth in the Open Space Element of Moorpark's General Plan (City of Moorpark 1986) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **Policy 4.2:** Conserve and protect water quality supplies through cooperative efforts with the Ventura County Water Conservation Plan and any future regional water quality and water supply plans and programs that may be instrumental in reducing water quality-related problems.
- **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.

City of Moorpark Municipal Code

The following sections from the Moorpark Municipal Code would be applicable to the project:

- Municipal Code Chapter 12.12 – Historic Trees, Native Oak Trees and Mature Trees

City of Simi Valley General Plan

Applicable policies and actions put forth in the Natural Resources Element of Simi Valley’s General Plan (City of Simi Valley 2012) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **NR 2.1: Tree Preservation.** Encourage the preservation of trees and native vegetation in development projects. Require that new development utilize creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible.
- **NR 2.4: Habitat Connectivity.** Ensure that projects within areas identified as regional wildlife corridors are designed and constructed so as to preserve the ability of wildlife to travel through the region.
- **NR 2.6: Site Assessments.** Require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors. Ensure that individual projects incorporate measures to reduce impacts to special-status species, sensitive natural communities, and important wildlife areas and movement corridors according to Simi Valley’s environmental review process.

City of Simi Valley Municipal Code

The following sections from the Simi Valley Municipal Code would be applicable to the project:

- Municipal Code Chapter 9-38 – Tree Preservation, Cutting, and Removal

4.1.3 Impact Analysis

4.1.3.1 Methodology and Significance Thresholds

Methodology

Impacts from development of the project were assessed based on information provided in Section 2, *Project Description*. The survey methodologies used in the analysis of biological resources are detailed in the Biological Resources Assessment included as Appendix C.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, an impact related to biological resources would be significant if the proposed project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The Initial Study completed for the proposed project (Appendix A) determined that impacts involving Threshold 6 would be less than significant (See the Initial Study Environmental Checklist Section 4, Biological Resources [Appendix A]). Thus, the following analysis solely focuses on the remaining threshold questions.

4.1.3.2 *Project Impacts and Mitigation Measures*

Threshold 1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Impact BIO-1 The proposed project would potentially result in direct and indirect impacts to special-status plant and animal species. Following implementation of Mitigation Measures BIO-1 through BIO-3, and implementation of construction best management practices from the project's SWPPP, impacts would be less than significant with mitigation incorporated.

Special-Status Plants

As discussed in Section 4.1.1, the CNDDDB and CNPS queries identified 24 special-status plants that have been previously recorded in either the four USGS 7.5-minute topographic quadrangles crossed by the project area or within five miles of the project area. Of these, one species (Lyon's pentachaeta, FE, CE, CRPR 1BB.1) has a moderate potential to occur. The remaining 23 species are not expected to occur within the project area based on the lack of suitable habitat and the non-detection of special-status plants during field reconnaissance survey.

Lyon's pentachaeta has moderate potential to occur in the California buckwheat scrub community in the project area north of Tierra Rejada Road and west of SR 23, where the project area is adjacent to critical habitat for this species. The project would occur within the existing roadway at these locations, which is greater than 20 feet away from suitable habitat for pentachaeta. Similarly, the direct impacts to the existing southern California black walnut tree due to injury or mortality during project construction are not anticipated given it is greater than 20 feet from the proposed work area.

Implementation of the project would result in impacts to the developed and ornamental land cover types that do not provide suitable habitat for these special-status plants. Indirect impacts could

result from habitat modifications by the introduction of invasive plants from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills and dust during construction.

Implementation of Mitigation Measure BIO-1 is recommended to ensure all construction personnel are trained in identifying special-status plant species with potential to occur in the project area. Indirect impacts to potential habitat for Lyon's pentachaeta would also be avoided via implementation of Mitigation Measure BIO-2, which ensures adherence to general Best Management Practices (BMPs). In addition to general BMPs, the project would prepare and implement a stormwater pollution prevention plan (SWPPP) to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the CWA, which is necessary to receive National Pollution Discharge Elimination System (NPDES) permit coverage for stormwater discharges. Compliance with the project's SWPPP would avoid and/or minimize potential direct and indirect impacts to special-status species. With implementation of Measures BIO-1 and BIO-2 and the SWPPP, potential direct and indirect impacts to special-status plant species would be reduced to a less-than-significant level.

Special-Status Wildlife

As discussed in Section 4.1.1, the CNDDDB query identified 30 special-status wildlife that have been previously recorded either in the four USGS 7.5-minute topographic quadrangles crossed by the project area or within five miles of the project area. Of these, six have a moderate potential to occur and the remaining 24 special-status species are not expected to occur based on a lack of suitable habitat.

Marginally suitable habitat for western spadefoot toad (FPT, SSC), California legless lizard (SSC), and coastal whiptail (SSC) is limited to the natural habitats dominated by native shrubs (i.e., California buckwheat scrub, and purple sage scrub) on the margins of the project area. These areas are not anticipated to be directly impacted by project activities; thus, direct impacts to these species are not anticipated. If individuals are present during construction, potential indirect impacts could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes. Nonetheless, given the marginally suitable nature and limited amount of potential habitat adjacent to the project alignment, and the fact that project impacts would occur within existing developed areas subject to heavy traffic and ornamental landscaping, potential project impacts would not cause the regional populations of these species to drop below self-sustaining levels. Implementation of Mitigation Measure BIO-1 is required to ensure all construction personnel are trained in identifying special-status wildlife with potential to occur in the project area. Additionally, implementation of BMPs from the project's SWPPP would reduce indirect impacts by ensuring construction activities do not substantially disturb special-status species or degrade habitat of special-status species. With implementation of Mitigation Measure BIO-1 and adherence to the project's SWPPP, potential impacts to western spadefoot toad, California legless lizard, and coastal whiptail would be less than significant.

Marginally suitable habitat for southern California rufous-crowned sparrow (WL) and coastal California gnatcatcher (FT, SSC) is limited to the California buckwheat scrub and purple sage scrub habitats on the margins of the project area. The Phase 4 alignment would traverse past several areas documented by the CNDDDB to support coastal California gnatcatcher. As described, the project would avoid direct impacts to natural communities and alliances/associations associated with coastal sage scrub vegetation.

In addition, marginally suitable arroyo willow – mulefat thicket habitat for least Bell’s vireo (FE, CE) occurs within Calleguas Creek. Phase 3 of the alignment within Camarillo along Santa Rosa Road passes near Arroyo Conejo Creek where populations of least Bell’s vireo have been documented according to the CNDDDB. As described, the project would avoid direct impacts to natural communities and alliances/associations associated with riparian vegetation.

These areas are not anticipated to be directly impacted by this project. However, impacts to special-status and nesting birds could occur if present in ornamental vegetation and street trees. If individuals are present during construction, potential impacts could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes, or cause nest failures. The loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503 and must be avoided. Therefore, in addition to BIO-1 and BIO-2 above, implementation of Measure BIO-3 is recommended to reduce potential impacts to special-status and nesting birds to a less-than-significant level.

Mitigation Measures

BIO-1 Biological and Environmental Awareness Training (BEAT) Program

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist to assist workers in recognizing special-status biological resources which may occur in the project area. The specifics of the BEAT Program shall include information about nesting birds and identification of special-status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under the SWPPP. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project.

All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist.

The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program, if required for this project. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs will be explicitly addressed.

BIO-2 General Best Management Practices for Biological Resources

To avoid and/or minimize potential direct and indirect impacts to special-status species and potentially jurisdictional waters and water quality, the following BMPs shall be implemented. The proposed project will be phased and construction is anticipated to be conducted in a linear fashion along the alignment; thus BMPs shall be implemented as necessary along the alignment ahead of or during anticipated construction.

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

- No native vegetation with a diameter at breast height (DBH) of more than 4 inches shall be removed or damaged without approval by Calleguas.
- Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable.
- Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles.
- A speed limit of 15 miles per hour for construction vehicles shall be implemented on unpaved roads adjacent to native vegetation and potentially jurisdictional waters.
- All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.
- No project construction, activities, and equipment staging shall occur within the bed or banks of Calleguas Creek. No vegetation shall be removed from the channel, bed, or banks of Calleguas Creek.
- Excavated material from trenching along any potentially jurisdictional feature shall be side cast away to prevent sediment deposition within the feature.
- All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.
- All night-time lighting shall be shielded and downcast to avoid potential impacts to wildlife migration.
- No pets shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- While encounters with special-status species are not likely or anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction superintendent or biological monitor. The construction superintendent or biological monitor shall immediately notify Calleguas.
- Before starting or moving construction vehicles, especially after a few days of non-operation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.

BIO-3 Protection of Nesting Birds

Project-related activities shall occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season and will impact potentially suitable nesting habitat (i.e., natural/ornamental habitats), then no more than three days prior to initiation of ground-disturbing activities (including, but not limited to vegetation removal, site preparation, grading, excavation, and trenching) within the project site, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-foot for potential raptor nesting habitat), where accessible and public. The proposed project will be phased and construction is anticipated to be

conducted in a linear fashion along the alignment; thus pre-construction nesting bird surveys shall be completed as necessary along the alignment (i.e., rolling surveys) ahead of anticipated construction. Surveys shall be completed no more than seven days before anticipated construction activities.

Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to Calleguas.

If no nesting birds are observed during pre-construction surveys, no further actions are necessary. If nests are found, an appropriate avoidance buffer ranging in size from 25 to 300 feet for passerines, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable material and/or via a digital mapping medium. Modifications to the buffer size shall occur only in consultation with the qualified biologist. Active nests shall be monitored at a minimum of once per week while construction is occurring until it has been determined the young have fledged the nest. No ground disturbance or vegetation removal shall occur within this buffer until the qualified biologist confirms breeding/nesting has ended, and the young are no longer dependent on the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.

If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA L_{eq} at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA L_{eq} at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.

Significance After Mitigation

Mitigation Measures BIO-1 through BIO-3 would require avoidance and minimization measures to reduce direct and indirect impacts to special-status species from development of the project. As a result, implementation of Mitigation Measures BIO-1 and BIO-3 would reduce project impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS to a less-than-significant level.

Threshold 2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Impact BIO-2 The project area contains critical habitat for one species and is adjacent to critical habitat for two species. The project area does not contain sensitive natural communities. Following implementation of Mitigation Measures BIO-1 and BIO-2 and BMPs from the project's SWPPP, impacts to sensitive habitats would be less than significant.

There are no CDFW-identified sensitive natural communities within the project area. Therefore, the project would not impact sensitive natural communities.

The project area does overlap with federally-designated critical habitat for coastal California gnatcatcher and is adjacent to federally-designated critical habitat for Lyon's pentachaeta and Riverside fairy shrimp.

Critical habitat for coastal California gnatcatcher is present in the eastern portion of the project area; however, the majority of the project area within the area mapped as critical habitat consists of developed areas and ornamental plants not suitable for coastal California gnatcatcher. One small patch of California sagebrush scrub is present in this area, and additional coastal scrub communities potentially suitable for coastal California gnatcatcher are present to the north and south of the project area.

Implementation of the project would result in impacts to the developed, disturbed, or ornamental land cover types. California sagebrush scrub is limited to hilly roadway shoulders approximately 15 to 20 feet from proposed construction areas, which are not anticipated to be affected by project activities. No direct impacts to natural areas that could potentially support coastal California gnatcatcher would occur. Further, implementation of BIO-1 and BIO-2 would reduce the potential for indirect impacts to adjacent habitat.

The designated critical habitat for Lyon's pentachaeta and Riverside fairy shrimp is defined by the extent of a vernal pool located uphill and outside the project area. The nearby road shoulder within the project area is characterized by upland vegetation consisting of California buckwheat scrub and purple sage scrub. If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water would be utilized on-site or trucked off-site for reuse for dust control and irrigation. Given that vernal pools are rain-fed ecosystems perched on a hard layer of soil (e.g., clay), they are not appreciably affected by fluctuations in groundwater levels. Thus, dewatering would not be expected to directly impact water levels within the vernal pool. In addition, implementation of Mitigation Measures BIO-1, BIO-2, and the project SWPPP would help assure direct and indirect impacts to critical habitat within the vernal pool are avoided.

The CRSMP has an existing NPDES permit for ocean outfall discharges via the Hueneme Outfall, located in the vicinity of Port Hueneme Beach, into the Pacific Ocean. The waters in this area support many resident and migratory fish, important marine plants such as eelgrass (*Zostera marina*), and special-status wildlife, such as seabirds, marine mammals, and sea turtles. Potential impacts to these marine resources are described in the 2002 Final PEIR which provided CEQA clearance for the overall CRSMP and project-specific clearance for Phase 1 of the CRSMP. Discharge from Phases 3 and 4 would be subject to the same NPDES discharge requirements as existing conditions.

Based on the analysis above, impacts to sensitive natural communities and critical habitat would be less than significant.

Mitigation Measures

Mitigation Measures BIO-1 and BIO-2 (see Impact BIO-1).

Significance After Mitigation

Mitigation Measures BIO-1 and BIO-2 would require avoidance and minimization measures to reduce impacts to critical habitat from development of the project. Following implementation of these mitigation measures, impacts would be less than significant.

Threshold 3: Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact BIO-3 Potential jurisdictional features are located in the project area, and project construction may impact these features during excavation and pipeline installation. Implementation of Mitigation Measures BIO-1 and BIO-2 and BMPs from the project's SWPPP would reduce impacts to a less-than-significant level.

The reconnaissance field survey identified 15 potentially jurisdictional features in the project area (Appendix C). Project construction would include a combination of open cut trench excavation and trenchless methods (e.g., boring and jacking). Using trenchless methods, impacts to jurisdictional features would be minimized or avoided. Adherence to Mitigation Measure BIO-1 and BMPs from the project's SWPPP would reduce potential direct and indirect impacts to a less-than-significant level by educating construction personnel on protective measures for jurisdictional features, and implementation of BMPs that would reduce the potential for impacts.

Mitigation Measures

Mitigation Measures BIO-1 and BIO-2 (see Impact BIO-1).

Significance After Mitigation

Mitigation Measures BIO-1 and BIO-2 would require avoidance and minimization measures to reduce impacts to jurisdictional features from development of the project. Following implementation of these mitigation measures, impacts would be less than significant.

Threshold 4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact BIO-4 The project area is located within an Essential Connectivity Area; however, implementation of Mitigation Measure BIO-2 and BMPs from the project's SWPPP would reduce impacts to wildlife movement through project lighting requirements. Impacts would be less than significant.

The project area is located within an Essential Connectivity Area that connects the Santa Monica Mountains to the south and the Los Padres National Forest to the north. However, the majority of

the project area located within the Essential Connectivity Area is characterized by paved roads, unvegetated road shoulders, and ornamental vegetation. Limited native vegetation is present, and direct impacts to these communities are not anticipated (Appendix C).

Calleguas Creek likely functions as a local route for wildlife movement. Pipe would be installed within existing utility conduit on the bridge over Calleguas Creek; therefore, no direct impacts would occur to this feature.

Project activities would not interfere with wildlife movement because the construction work areas would occur along existing roads and developed / disturbed areas, and the pipelines would be located below the soil surface following completion of the project. These temporary work areas would not exacerbate existing barriers to wildlife movement. Furthermore, project activities would mostly be avoided during dusk and dawn when wildlife movement and foraging is more likely. Therefore, direct impacts to wildlife movement are not anticipated to occur as a result of the project.

Potential indirect impacts to wildlife movement could occur through lighting of the project site temporarily during construction, which could deter wildlife migration at night. As such, implementation of Mitigation Measure BIO-2, including the provision for all lighting to be shielded and downcast, is recommended to reduce indirect impacts to wildlife movement to a less-than-significant level.

Mitigation Measures

Mitigation Measure BIO-2 (see Impact BIO-1).

Significance After Mitigation

Mitigation Measure BIO-2 would require avoidance and minimization measures to reduce impacts to wildlife movement from development of the project. Following implementation of this mitigation measure, impacts would be less than significant.

Threshold 5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact BIO-5 Project construction may impact protected trees adjacent to project alignment roadways. implementation of Mitigation Measure BIO-4, if necessary, would reduce potential impacts to protected trees to a less-than-significant level.

Resources protected by local policies and ordinances were evaluated pursuant to the Ventura County Standards for Initial Study Biological Assessments. Locally protected resources present in the project area include VCWPD redline channels and protected trees in unincorporated Ventura County, as well as in Camarillo, Thousand Oaks, Moorpark, and Simi Valley (Appendix C).

Trees meeting the County of Ventura and/or Cities of Camarillo, Moorpark, Simi Valley, or Thousand Oaks tree protection standards were observed throughout the project area. A large portion of the project alignment is located within developed public rights-of-way which are lined with protected trees (e.g., coast live oak, California sycamore, southern California black walnut). Potential impacts to protected trees may include, but are not limited to, construction equipment compacting soil around the trees, disturbance of the canopy and the root zone, and trenching in the root zone.

The project is not anticipated to include tree-altering activities, and a comprehensive arborist report is not required to fully survey and document all protected trees in the project area. Should project construction necessitate tree-altering activities, then an arborist-prepared study and Tree Protection Plan, as outlined under Mitigation Measure BIO-4, would be prepared to address the tree protection measures during construction and mitigation requirements if protected trees are impacted by the project. Based on the current project description and construction methodologies, the project would not conflict with any local policies or ordinances protecting biological resources.

Mitigation Measures

BIO-4 Arborist Report

Based on final design, if project construction is anticipated to impact protected trees, then prior to construction, an Arborist Report shall be prepared to address tree protection measures during construction and mitigation requirements for those protected trees impacted by the project. The report shall be prepared by an arborist certified by the International Society of Arboriculture (ISA) or a related professional, such as a landscape architect, with qualifying education, knowledge, and experience. The report shall meet the specific content requirements for Arborist Reports as outlined in any applicable municipal code. The Arborist Report shall include, at minimum, the following:

- An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating
- Representative photographs of each regulated tree which may be encroached upon
- Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes
- Requirements for protective tree fencing, and designated tree protection zones (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), and measures for addressing roots and limbs that are cut during trenching
- Description of activities prohibited/permitted within the tree protection zone, encroachment boundaries
- Description of any potential transplanting or replacement tree plantings.

Significance After Mitigation

Mitigation Measure BIO-4 would require the preparation of a Tree Protection Plan if Calleguas determines the project would substantially affect protected trees. Following implementation of this mitigation measure, impacts to biological resource policies or ordinances would be less than significant.

4.1.4 Cumulative Impacts

The geographic scope for cumulative biological resources impacts includes Camarillo, Thousand Oaks, Moorpark, Simi Valley, and portions of unincorporated Ventura County. This geographic scope is appropriate for biological resources because it encompasses the mosaic of representative land cover and habitat types (and associated biological resources) affected by the proposed project, including arroyo willow-mulefat thickets, California buckwheat scrub, purple sage scrub, wild oats

and annual brome grasslands, summer mustard fields, fountain grass swards, riverwash, ornamental, agricultural, and developed land.

Most of the cumulative development projects identified in Table 3-1 in Section 3, *Environmental Setting*, are small-scale residential or utility construction projects within developed areas of Ventura County. Most cumulative impacts to biological resources occur when a disproportionate number of development projects occur at once and regionally impact a local population of special-status species, riparian habitat, sensitive natural communities, wetlands, or other locally protected biological resources. In this case, since almost all of the cumulative development projects within and near the project area known at this time are discrete residential or utility developments, there would be no significant cumulative impact because cumulative development would mostly occur in developed areas where suitable habitat for special-status species, riparian habitat, sensitive natural communities, wetlands, and other biological resources are likely already limited or non-existent, and movement patterns for wildlife in this region have already been constrained by the placement of existing development and infrastructure. Therefore, the project would not have a substantial incremental contribution to any significant cumulative impacts on biological resources.

4.2 Cultural Resources

This section evaluates potential impacts to cultural resources resulting from the implementation of the project. The information presented in this section is informed by the *Calleguas Regional Salinity Management Pipeline Phases 3 & 4 Phase I Cultural Resources Assessment* (Johnson et al. 2023) (herein referred to as 2023 CRA) and the *Extended Phase I/Phase II Archaeological Investigation, Calleguas Regional Salinity Management Pipeline Phases 3 and 4* (Pfeiffer et al. 2024) (herein referred to as 2024 XPI/Phase II). The 2023 CRA and 2024 XPI/Phase II contain confidential cultural resources information and are, therefore, not available for public review. The findings of these reports are summarized in this section and the reports can be provided to qualified cultural resource specialists upon request.

4.2.1 Regulatory Setting

This regulatory framework section identifies the federal, state, and local laws, statutes, guidelines, and regulations that govern the identification and treatment of cultural resources as well as the analysis of potential impacts to cultural resources. The lead agency must consider the provisions and requirements of this regulatory framework when rendering decisions on projects that have the potential to affect cultural resources.

a. Federal Regulations

National Register of Historic Places

Although the project does not have a federal nexus, properties which are listed in or have been formally determined eligible for listing in the National Register of Historic Places (NRHP) are automatically listed in the California Register of Historical Resources (CRHR). The following is therefore presented to provide applicable regulatory context.

Authorized by Section 101 of the National Historic Preservation Act, the NRHP is the nation's official list of cultural resources worthy of preservation. The NRHP recognizes the quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects. Per 36 Code of Federal Regulations, Part 60.4, a property is eligible for listing in the NRHP if it meets one or more of the following criteria:

- Criterion A:** Is associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B:** Is associated with the lives of persons significant in our past
- Criterion C:** Embodies the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D:** Has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service (NPS) recognizes seven aspects or qualities that, considered

together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined as follows:

- Location:** The place where the historic property was constructed or the place where the historic event occurred
- Design:** The combination of elements that create the form, plan, space, structure, and style of a property
- Setting:** The physical environment of a historic property
- Materials:** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property
- Workmanship:** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
- Feeling:** A property's expression of the aesthetic or historic sense of a particular period of time
- Association:** The direct link between an important historic event or person and a historic property

Certain properties are generally considered ineligible for listing in the NRHP, including cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions, relocated structures, or commemorative properties. Additionally, a property must be at least 50 years of age to be eligible for listing in the NRHP. The NPS states that 50 years is the general estimate of the time needed to develop the necessary historical perspective to evaluate significance (NPS 1997:41). Properties which are less than 50 years must be determined to have "exceptional importance" to be considered eligible for NRHP listing.

b. State Regulations

California Environmental Quality Act

California Public Resources Code (PRC) Section 21804.1 requires lead agencies determine if a project could have a significant impact on historical or unique archaeological resources. As defined in PRC Section 21084.1, a historical resource is a resource listed in, or determined eligible for listing in, the CRHR, a resource included in a local register of historical resources or identified in a historical resources survey pursuant to PRC Section 5024.1(g); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant. PRC Section 21084.1 also states resources meeting the above criteria are presumed to be historically or cultural significant unless the preponderance of evidence demonstrates otherwise. Resources listed in the NRHP are automatically listed in the CRHR and are, therefore, historical resources under CEQA. Historical resources may include eligible built environment resources and archaeological resources of the precontact or historic periods.

CEQA Guidelines Section 15064.5I provides further guidance on the consideration of archaeological resources. If an archaeological resource does not qualify as a historical resource, it may meet the definition of a "unique archaeological resource" as identified in PRC Section 21083.2. PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: 1) it contains information needed to

answer important scientific research questions and that there is a demonstrable public interest in that information, 2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or 3) is directly associated with a scientifically recognized important pre-contact or historic period event or person.

If an archaeological resource does not qualify as a historical or unique archaeological resource, the impacts of a project on those resources would be less than significant and need not be considered further (CEQA Guidelines Section 15064.5[c][4]). CEQA Guidelines Section 15064.5 also provides guidance for addressing the potential presence of human remains, including those discovered during the implementation of a project.

According to CEQA, an impact that results in a substantial adverse change in the significance of a historical resource is considered a significant impact on the environment. A substantial adverse change could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR or a local register (CEQA Guidelines Section 15064.5[b][2][A]).

If it can be demonstrated a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a][b]). The CEQA Guidelines (Section 15064.5[b][4]) state that “the lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures” deemed prudent and feasible.

The requirements for mitigation measures under CEQA are outlined in CEQA Guidelines Section 15126.4(a)(1). In addition to being fully enforceable, mitigation measures must be completed within a defined time period and be roughly proportional to the impacts of the project. Generally, a project which is found to comply with the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (the Standards) is considered to be mitigated below a level of significance (CEQA Guidelines Section 15126.4 [b][1]). For historical resources of an archaeological nature, lead agencies should also seek to avoid damaging effects where feasible. Preservation in place is the preferred manner to mitigate impacts to archaeological sites; however, data recovery through excavation may be the only option in certain instances (CEQA Guidelines Section 15126.4[b][3]).

California Register of Historical Resources

The CRHR was established in 1992 and codified by PRC Section 5024.1 and Title 14 Section 4852. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code, 5024.1(a)). The criteria for eligibility for the CRHR are consistent with the NRHP criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1(b)). Unlike the NRHP, the CRHR does not have a defined age threshold for eligibility; rather, a resource may be eligible for the CRHR if it can be demonstrated sufficient time has passed to understand its historical or architectural significance (California Office of Historic Preservation 2011). Further, resources may

still be eligible for listing in the CRHR even if they do not retain sufficient integrity for NRHP eligibility (California Office of Historic Preservation 2011). Generally, the California Office of Historic Preservation recommends resources over 45 years of age be recorded and evaluated for historical resources eligibility (California Office of Historic Preservation 1995:2).

A property is eligible for listing in the CRHR if it meets one or more of the following criteria:

- Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
- Criterion 2:** Is associated with the lives of persons important to our past
- Criterion 3:** 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
- Criterion 4:** Has yielded, or may be likely to yield, information important in prehistory or history

California Assembly Bill 52 of 2014

As of July 1, 2015, Assembly Bill (AB) 52 was enacted and expands CEQA by defining a new resource category: “tribal cultural resources.” AB 52 establishes “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the CEQA lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) define tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and that meets at least one of the following criteria, as summarized in CEQA Guidelines Appendix G:

- 1) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)
- 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process with California Native American tribes that must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” California Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of the county in which the remains are discovered has determined if the remains are subject to the Coroner’s authority. If the human remains are of Native

American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

California Public Resources Code

PRC Section 5097.98, as amended by AB 2641, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities consider the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods. If no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the landowner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

PRC Section 5097.99 prohibits acquisition or possession of Native American artifacts or human remains taken from a Native American grave or cairn after January 1, 1984, except in accordance with an agreement reached with the NAHC.

PRC Section 5097.5 provides protection for tribal resources on public lands, where Section 5097.5(a) states, in part, that:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

California Penal Code

California Penal Code Section 622.5 provides the following: “Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor.”

c. Local Regulations

The Phase 3 and Phase 4 alignment includes portions throughout unincorporated Ventura County as well as the cities of Camarillo, Moorpark, Thousand Oaks, and Simi Valley. The following section provides a review of the cultural resources specific ordinances for those jurisdictions.

City of Camarillo Historic Preservation Ordinance

The Historic Preservation Chapter of the City of Camarillo Code of Ordinances (Ordinance No. 670 Section 1, 1989.), authorizes the Planning Commission Landmark Committee to designate local civic landmarks as having historical significance as approved by the City Council (Camarillo, City of 2022).

An eligible property may be nominated and designated as a landmark if it satisfies the procedures and criteria set forth below.

Criteria

A historic resource may be designated as a landmark if it meets one or more of the following criteria:

- 1) It is associated with persons or events significant in local, state, or national history; or
- 2) It reflects or exemplifies a particular period of national, state, or local history; or
- 3) It embodies the distinctive characteristics of a type, style, period of architecture, or method of construction.

City of Moorpark Historic Preservation Ordinance

The City of Moorpark Historic Preservation Chapter of its Municipal Code (Chapter 15.36) authorizes the Historical Preservation Committee to designate local civic landmarks as having historical significance as approved by the City Council (Moorpark, City of 2022). An eligible property may be nominated and designated as a landmark if it satisfies the procedures and criteria set forth below.

Criteria

A building, site, tree, or structure may be designated as a landmark if it is found that the proposed landmark meets one or more of the following criteria:

- 1) It is associated with persons or events significant in local, state, or national history;
- 2) It reflects or exemplifies a particular period of national, state, or local history;
- 3) It embodies the distinctive characteristics of a type, style, or period of architecture or of a method of construction;
- 4) It is strongly identified with a person or persons who significantly contributed to the culture, history, or development of the area;
- 5) It is one of the few remaining examples in the area possessing distinguishing characteristics of an architectural type of specimen;
- 6) It is a notable work of an architect or master builder whose individual work has significantly influenced the development of the area;
- 7) It embodies elements of architectural design, detail, materials, or craftsmanship that represents a significant architectural innovation;
- 8) It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community, or the area;
- 9) It has unique design or detailing;
- 10) It is a particularly good example of a period of style; or
- 11) It contributes to the historical or scenic heritage or historical or scenic properties of the area (to include, but not limited to landscaping, light standards, trees, curbing and signs).

City of Thousand Oaks Cultural Heritage Ordinance

The City of Thousand Oaks Cultural Heritage Ordinance (Ordinance Nos. 868-NS [1984], 1015-NS [1988], 1276-NS [1997], and 1420-NS [2003]) authorizes the Cultural Heritage Board to designate local civic landmarks and points of historic interest, as approved by the City Council, by the

procedures outlined in the ordinance An eligible property may be nominated and designated as a landmark or point of historic interest if it satisfies the requirements set forth below.

Landmark

“Landmark” shall mean any object, building, structure, site, area, place, or natural formation which has historic, architectural, archaeological, cultural or aesthetic significance to the City of Thousand Oaks, and:

- 1) Exemplifies or reflects special elements of the City’s social, aesthetic, engineering, architectural or natural history;
- 2) Is associated with events that have made a significant contribution to the broad patterns of the City’s cultural heritage;
- 3) Is associated with the lives of persons important to the City;
- 4) Has yielded or has the potential to yield information important to the prehistory or history of the City; or,
- 5) Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of a master, or possesses high artistic values.

Point of Historic Interest

“Point of Historic Interest” shall mean any object, building, structure, site, area, place, or natural formation which has historic, architectural, archaeological, cultural or aesthetic significance to the City of Thousand Oaks that:

- 1) No longer exists or was associated with historic events, important persons or embodied a distinctive character or architectural style;
- 2) Has been altered to the extent that the integrity of the original workmanship, materials or type has been substantially compromised; or,
- 3) Is a site of an historic event which has no distinguishable characteristics other than that an historic event occurred there and the site is not of sufficient historic significance to justify the establishment of a landmark.

City of Simi Valley Cultural Heritage Ordinance

The City of Simi Valley Cultural Heritage Ordinance (Ordinance No. 1150 Section 1, eff. November 12, 2009), authorizes the Cultural Heritage Board to designate local civic landmarks, Cultural Heritage sites, and historical resources as approved by the City Council (Simi Valley, City of 2022). An eligible property may be nominated and designated as a landmark, cultural heritage site, historic district, historical resource, point of historical interest, or a site of merit if it satisfies the procedures and criteria set forth below.

Cultural Heritage Site

Cultural Heritage Site shall mean any improvement, natural feature, site, or historic district that meets the legal requirements stipulated in this article to have it recommended by the Cultural Heritage Board of the City and subsequently designated by the Simi Valley City Council as a landmark, historic district, site of merit, or point of historical interest.

Historic District

Historic District shall mean any geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites which are unified by past events or aesthetically by plan or physical development.

Historical Resource

Historical Resource shall mean any historical, cultural, or natural feature which is or has been at one time contained within or situated on real property, including, but not limited to any:

- 1) Building, structure, ruins, or foundation;
- 2) Route or trail;
- 3) Site or place, for example, cave, oak grove, cemetery, burial ground, camp or village area, significant tree, or other plant life;
- 4) Natural configuration, traditional landscape horizon, or geographic or geological formation or feature; and
- 5) Traditional, historic, or legendary names of any of the objects set forth in subsections (1) through (4) of this subsection which are of:
 - I. Particular historic, cultural, scenic, or aesthetic significance to the City in which the broad cultural, political, economic, and/or social history of the nation, State, or community is reflected or exemplified;
 - II. Or which are identified with historic personages or with important events in the main currents of national, State, or local history;
 - III. Or which show evidence of the habitation, activity, or culture of prehistoric man;
 - IV. Or which embody the distinguishing characteristics of an architectural-type specimen inherently valuable for a study of a period, style, or method of construction;
 - V. Or which present a work of a master builder, designer, artist, or architect whose individual genius influenced his age; or
 - VI. Or which are imbued with traditional or legendary lore.

Landmark

Landmark shall mean any historical resource which receives official designation by the City Council as provided in Simi Valley Municipal Code (Section 2-3.508) of this article or which has been so declared under the provisions of Article 5 of Chapter 3 Division 1 of the Ventura County Ordinance Code.

Point of Historical Interest

Points of Historical Interest shall mean any real property that:

- 1) Is the site of a building, structure, or object which no longer exists but was associated with historic events or important person or embodied a distinctive character or architectural style; or
- 2) Contains an object which has historic significance but has been altered to the extent that the integrity of the original workmanship, materials, or style has been substantially compromised;
or,

- 3) Is the site of an historic event which has no distinguishable characteristics other than that an historic event occurred there, and the site is not of sufficient historic significance to justify the establishment of an historic landmark.

Sites of Merit

Site of Merit shall mean sites of historical, architectural, community, or aesthetic merit which have not been designated as landmarks, historic districts, or points of historical interest, but which are deserving of special recognition.

Ventura County Cultural Heritage Ordinance

The Ventura County Cultural Heritage Ordinance codes (Ordinance Nos. 2737 [1973], 3974 [1991], and 4225 [2000]) authorize the Ventura County Cultural Heritage Board to designate local sites of Cultural Heritage significance, as approved by the Board of Supervisors, by the procedures outlined in the ordinances. An eligible Cultural Heritage site may become designated as a landmark, site of merit, point of interest, or district if it satisfies the requirements set forth below (Ordinance No. 4225 (2000), Section 1365-5 Definition and Designation Criteria for Cultural Heritage Sites).

Landmark

Landmarks satisfy any one of the following criteria:

- 1) It exemplifies or reflects special elements of the County's social, aesthetic, engineering, architectural, or natural history;
- 2) It is associated with events that have made a significant contribution to the broad patterns of Ventura County or its cities, regional history, or the cultural heritage of California or the United States;
- 3) It is associated with the lives of persons important to Ventura County or its cities, California, or national history;
- 4) It has yielded, or has the potential to yield, information important to the prehistory or history of Ventura County or its cities, California or the nation; or
- 5) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.

Sites of Merit

Sites of Merit satisfy all of the following criteria:

- 1) Sites of historical, architectural, community, or aesthetic merit which have not been designated as landmarks or points of interest, but which are deserving of special recognition; and
- 2) County approved surveyed sites with a National Register status code of 5 or above.

Points of Interest

Points of Interest satisfy any one of the following criteria:

- 1) That is the site of a building, structure, or object that no longer exists, but was associated with historic events, important persons, or embodied a distinctive character or architectural style;
- 2) That it has historical significance, but has been altered to the extent that the integrity of the original workmanship, materials, or style has been substantially compromised; or

- 3) That the site of a historic event which has no distinguishable characteristics other than that of a historic event occurred at that site, and the site is not of sufficient historical significance to justify the establishment of a landmark.

District

A District satisfies all of the following:

- 1) Possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development;
- 2) Has precisely mapped and defined exterior boundaries, which requires a description of what lies immediately on the edge of the district to allow rational exclusion of adjoining areas;
- 3) Has at least one of the criteria for significance of Section 1365-5.a.1-5 (Landmarks); and
- 4) Complies with the criteria for integrity contained in Section 1365-5.a.6 (Landmark Integrity).

Additional Designation Standards

Section 1365-6 of the Ventura County Cultural Heritage Ordinance outlines additional designation standards, which, in addition to meeting the criteria for Section 1365-5 et seq., must be met before a site becomes a designated Cultural Heritage Site:

- a) It shall have historic, aesthetic, or special character or interest for the general public, and not be limited in interest to a special group of persons;
- b) Its designation shall not require the expenditure by the County of Ventura of any amount of money not commensurate with the value of the object to be preserved; and
- c) Its designation shall not infringe upon the rights of a private owner thereof to make any and all reasonable uses thereof which are not in conflict with the purposes of this Article.

4.2.1 Cultural Resources Setting

a. Indigenous History

The project site is located in what is generally described as the Northern Bight archaeological region, one of eight organizational divisions of California designated by Jones and Klar (2007). The California Bight is bounded by the southern California coastline and encompasses the previously designated Southern Coast archaeological region described by Moratto (1984). The Northern Bight archaeological region primarily includes the counties of Santa Barbara, Ventura, and portions of Los Angeles, extending from the coastline at Vandenberg Air Force Base inland to the Cuyama River Valley and south to the Santa Monica Mountains and the Los Angeles Basin. Following Glassow et al. (2007), the pre-contact cultural chronology for the Northern Bight is generally divided into six periods: Paleo-Indian (ca. 10,000 – 7000 before common era [BCE]), Millingstone (7000 – 5000 BCE), Early (5000 BCE – 2000 BCE), Middle (2000 BCE – 1 common era [CE]), Middle-Late Transition (1 – 1000 CE), and Late (1000 CE – Historic Contact). These periods are discussed in further detail below.

Paleo-Indian Period (ca. 10,000 – 7000 BCE)

The Paleo-Indian Period defines the earliest human occupation of the Northern Bight and describes the cultural trends and subsistence strategies of pre-contact populations from approximately 10,000 to 7000 BCE (Glassow et al. 2007). The Paleo-Indian Period in North America is largely recognized by projectile points associated with extinct large mammal remains, such as mammoth, bison, and dire

wolves in the Southwest and Plains regions (Erlandson et al. 2007; Huckell 1996). These projectile points have been classified as the Clovis style, which exhibit a lanceolate shape with a flute initiated from the base that extends as far as the midline (Justice 2002).

The earliest accepted dates for human occupation in California were recovered from archaeological sites on two of the Northern Channel Islands, located off the southern coast of Santa Barbara County. Over 90 paleocoastal sites dating between 13,000 to 8,200 years before present (BP) have been documented in the Northern Channel Islands (McLaren et al. 2019). Archaeological deposits from the Daisy Cave site on San Miguel Island establish the presence of people in this area approximately 10,000 BP (Erlandson 1991; Erlandson et al. 2007). The Arlington Springs site (CA-SRI-173) on Santa Rosa Island has an approximately 11,000 BP calibrated radiocarbon date derived from human remains and rodent bones recovered from within the same deposits (Erlandson et al. 2007; Glassow et al. 2007; Johnson et al. 2002). Shell middens identified on the mainland of California have yielded dates from 8000 to 7000 BCE (Erlandson et al. 2007).

Recent data from Paleo-Indian shell middens, lithic scatters, and quarry workshops on the Channel Islands indicate that the area supported substantial human populations during later Paleocoastal times (McLaren et al. 2019). Data from the last 20 years also suggests that the economy was a diverse mixture of hunting, fishing, and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones and Ferneau 2002; Erlandson et al. 2007). Shellfish in particular were heavily relied on, with varying intensities of reliance on fish, marine mammals, seabirds, and waterfowl (McLaren et al. 2019). Archaeological deposits at the Daisy Cave site yielded an assemblage of “the oldest known fishhooks in the Americas” (Erlandson et al. 2007: 57). Shell middens identified on the mainland of California have yielded dates from 8000 to 7000 BCE (Erlandson et al. 2007).

Assemblages on the Channel Islands include chipped stone bifaces, cores and flake tools, ground stone artifacts, bone gorges, *Olivella* shell beads, woven sea grass cordage, and red ochre. While no fluted points have been found on the Channel Islands, a few have been found along California’s mainland coast (McLaren et al. 2019). One fluted projectile point fragment was recovered from site CA-SBA-1951 on the Santa Barbara Channel coastal plain (Erlandson 1994:44; Erlandson et al. 1987).

Millingstone Period (7000 – 5000 BCE)

Originally identified in 1929, the Millingstone Period, as described by Wallace (1955, 1978), is characterized by an ecological adaptation to collecting plant resources, such as seeds and nuts, suggested by the appearance and abundance of well-made milling (ground stone) implements, particularly in archaeological sites along the coast of California. It is generally accepted that human occupation of California during the Paleo-Indian Period originated from small, dispersed occupations. Archaeological sites dating to the Millingstone Period, however, indicate a population increase (Glassow et al. 2007).

Wallace (1955, 1978) and Warren (1968) identify ground stone implements including millingstones (e.g., metates, milling slabs) and hand stones (e.g., manos, mullers). Millingstones occur in high frequencies for the first time in the archaeological record of the Central Coast region and become even more prevalent near the end of the Millingstone Period. The Millingstone Period is named for the predominance of milling implements generally associated with the horizontal motion of grinding small seeds and nuts (Glassow et al. 2007). Excavations at the Tank Site (CA-LAN-1) in Topanga Canyon from 1947 to 1948 (Treganza and Bierman 1958) confirmed the presence of a significant number of milling implements that correspond with the Millingstone Period.

Flaked stone assemblages, which include crude core and cobble-core tools, flake tools, large side-notched projectile points, and pitted stones (Glassow et al. 2007; Jones et al. 2007), and shell middens in coastal sites suggest that people during this period practiced a mixed food procurement strategy. Faunal remains identified at Millingstone sites point to broad-spectrum hunting and gathering of shellfish, fish, birds, and mammals, though large faunal assemblages are uncommon. This mixed food procurement strategy demonstrates adaptation to regional and local environments.

Along the Central Coast, Millingstone Period sites are most common on terraces and knolls, typically set back from the current coastline (Erlandson 1994:46). However, sites dating to this period have been identified in various settings, including rocky coasts, estuaries, and nearshore interior valleys (Glassow et al. 2007). The larger sites usually contain extensive midden deposits, possible subterranean house pits, and cemeteries. Most of these sites probably reflect intermittent use over many years of local cultural habitation and resource exploitation.

Early Period (5000 BCE – 2000 BCE)

The Early Period of the Northern Bight is marked by a lower frequency of radiocarbon dated archaeological sites as well as changes in artifact forms. Differences in artifact forms, particularly in ground stone implements, likely represent changes in subsistence (Glassow et al. 2007). The material culture recovered from Early Period sites within the Central Coast region provides evidence for continued exploitation of inland plant and coastal marine resources as well as the incorporation of “newly important food resources” found in specific habitats (Glassow et al. 2007:197). In addition to the use of metates and manos, pre-contact populations began to use mortars and pestles, such as those recovered from the Sweetwater Mesa (CA-LAN-267) and Aerophysics (CA-SBA-53) sites (Glassow et al. 2007).

Artifact assemblages recovered from Early Period sites also include bipointed bone gorge hooks used for fishing, *Olivella* beads, bone tools, and pendants made from talc schist. Square abalone shell (*Haliotis* spp.) beads have been found in Monterey Bay (Jones and Waugh 1997:122). The frequency of projectile points in Early Period assemblages also increased, while the style began to change from lanceolate forms to side-notched forms (Glassow et al. 2007). The projectile point trend was apparent at numerous sites along the California coast as well as a few inland sites (e.g., CA-SBA-210 and CA-SBA-530). In many cases, manifestations of this trend are associated with the establishment of new and larger settlements, such as at the Aerophysics site (Glassow et al. 2007; Jones et al. 2007).

Middle Period (2000 BCE – 1 CE)

The remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coast during the Middle Period, suggesting a pronounced trend toward greater adaptation to regional or local resources as well as the development of socioeconomic and political complexity in pre-contact populations (Glassow et al. 2007). Shell fishhooks were introduced, and projectile points changed from side-notched dart points to contracting stem styles.

Flaked stone tools used for hunting and processing—such as large side-notched, stemmed, lanceolate or leaf-shaped projectile points, large knives, edge modified flakes, and drill-like implements—occurred in archaeological deposits in higher frequencies and are more morphologically diversified during the Middle Period. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Circular fishhooks that date from between 1000 and 500 BCE, compound bone fishhooks that date

between CE 300 and 900, notched stone sinkers, and the tule reed or balsa raft, indicative of major developments in maritime technology, became common during this period (Arnold 1995; Glassow et al. 2007; Jones and Klar 2005:466; King 1990:87–88).

Populations continued to follow a seasonal settlement pattern until the end of the Middle Period; large, permanently occupied settlements with formal architecture, particularly in coastal areas, appear to have been the norm by the end of the Middle Period (Glassow et al. 2007). Pre-contact populations began to bury the deceased in formal cemeteries with artifacts that may represent changes in ideology and the development of ritual practices (Glassow et al. 2007).

Middle-Late Transition Period (1 CE – 1000 CE)

The Middle-Late Transition Period is marked by major changes in settlement patterns, diet, and interregional exchange. Pre-contact populations continued to occupy more permanent settlements, with the continued use of formal cemeteries and the burial of goods with the deceased. The manufacture of the plank canoe, or tomol, allowed pre-contact populations to catch larger fish that occupied deeper sea waters (Glassow et al. 2007). Following the introduction of the plank canoe, groups began to use harpoons. The plank canoe appears to have influenced “commerce between the mainland coast and the Channel Islands” (Glassow et al. 2007:204). Middle-Late Transition Period sites indicate that populations replaced atlatl (dart) technologies with the bow and arrow, which required smaller projectile points. Projectile points diagnostic of both the Middle and Late periods are found within the Central Coast region (Jones and Ferneau 2002:217). These projectile points include large, contracting-stemmed types typical of the Middle Period, as well as small, leaf-shaped Late Period projectile points, which likely reflect the introduction of the bow and arrow.

Late Period (1000 CE – Historic Contact)

Late Period sites are distinguished by small, finely worked projectile points and temporally diagnostic shell beads. Although shell beads were typical of coastal sites, trade brought many of these maritime artifacts to inland locations, especially during the latter part of the Late Period. Small, finely worked projectile points are typically associated with bow and arrow technology, which is believed to have been introduced to the area by the Takic migration from the deserts into southern California. Common artifacts identified at Late Period sites include bifacial bead drills, bedrock mortars, hopper mortars, lipped and cupped *Olivella* shell beads, and steatite disk beads. The presence of beads and bead drills suggest that low-level bead production was widespread throughout the Central Coast region (Glassow et al. 2007). Unlike the large Middle Period shell middens, Late Period sites are more frequently single-component deposits with evidence for only one period of occupation or use. There are also more inland sites, with fewer and less visible sites along the Pacific shore during the Late Period.

b. Post-Contact Setting

Post-Contact history for California is generally divided into three periods: Spanish Period (1769–1822), Mexican Period (1822–1848), and American Period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins in 1769 with the establishment of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican-American War, signals the beginning of the American Period when California became a territory of the United States.

Spanish Period (1769 – 1822)

Spanish explorers made sailing expeditions along the coast of California between the mid-1500s and mid-1700s. Juan Rodríguez Cabrillo in 1542 led the first European expedition to observe what was known by the Spanish as Alta (upper) California. For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). The Spanish crown laid claim to Alta California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

Construction of missions and associated presidios was a major emphasis during the Spanish Period in California to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns; just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles).

Spain began making land grants in 1784, typically to retiring soldiers, although the grantees were only permitted to inhabit and work the land. The land titles technically remained property of the Spanish king (Livingston 1914).

Mexican Period (1822 – 1848)

Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos.

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period (1848 – Present)

The United States went to war with Mexico in 1846. During the first year of the war, John C. Fremont traveled from Monterey to Los Angeles with reinforcements for Commodore Stockton and evaded Californian soldiers in Santa Barbara's Gaviota Pass by taking the route over the San Marcos grade instead (Kyle 2002). The war ended in 1848 with the Treaty of Guadalupe Hidalgo, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as United States territories (Waugh 2003). Horticulture and

livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The discovery of gold in the northern part of the state led to the Gold Rush beginning in 1848 and, with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom.

A severe drought in the 1860s decimated cattle herds and drastically affected rancheros' source of income. In addition, property boundaries that were loosely established during the Mexican era led to disputes with new incoming settlers, problems with squatters, and lawsuits. Rancheros often were encumbered by debt and the cost of legal fees to defend their property. As a result, much of the rancho lands were sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

c. Local History

Camarillo Local History

The land on which the city of Camarillo was developed was part of a 10,000-acre land grant called Rancho Calleguas, granted to José Pedro Ruiz by the Mexican government in 1837. Juan Camarillo, Sr. purchased the rancho from Ruiz's descendants and others in 1875. After Juan Camarillo's death, the rancho passed to his widow and sons, with the eldest, Adolfo Camarillo, taking over ranch operations. In 1892, Adolfo built the Camarillo House, approximately 2.7 kilometers (1.7 miles) from the project site (Camarillo, City of 2020). Adolfo Camarillo was a generous citizen, donating land for a high school, park, and rights-of-way for the railroad and widening of the highway. Rancho Calleguas and other area ranchos that had once been dependent on raising livestock such as cattle and sheep eventually gave way in the 1870s to other agricultural development, such as the planting of vegetables, nuts, and orchards (Camarillo Ranch Foundation 2018a; San Buenaventura Research Associates 2014).

Camarillo was named as such in approximately 1899 after Adolfo Camarillo granted a right-of-way to the Southern Pacific Railroad (SPRR) to lay tracks on his property and establish a station, prompting this to be named after the Camarillo family (Camarillo Ranch Foundation 2018b). The settlement had previously been known as Pleasant Valley. Following the arrival of the railroad, the town developed slowly, serving the many farmers in the surrounding area. In 1910, William T. Fulton laid out the town site which included the railroad depot, a church site, and residential parcels. Area ranchers purchased land near the railroad depot and along Ventura Boulevard, which they developed and leased to merchants.

Juan Camarillo also commissioned prominent architect Albert C. Martin to design a family chapel, Saint Mary Magdalen. Sited on a knoll overlooking Ventura Boulevard, it was completed in 1914. More than twenty members of the Camarillo family are buried in the family crypt beneath the church. The chapel was given to the Archdiocese of Los Angeles to use as a parish church in 1940. Subsequently, a rectory was built in 1948 and a grade school in 1954 (Slawson 1993; St. Mary Magdalen Church 2023 [sic]). The church building was made a Ventura County Historical Landmark in 1972 (Ventura County Cultural Heritage Board 2016).

Camarillo remained a relatively small, rural community serving local farmers until circa the 1950s. Development increased substantially after the completion of U.S. Highway 101 through the community in 1954. Dramatic population growth and an improved means of transportation resulted in many local farmers selling their land for residential development (Triem 1985).

Camarillo grew to approximately 10,000 residents by the time it was formally incorporated in 1964. Annexations between 1965 and 1978 enlarged the city from approximately 12 square miles to 17 square miles (White 1978). Today, the city encompasses nearly 20 square miles and boasts a population of over 66,000 residents (City of Camarillo, n.d.).

Moorpark Local History

In 1795, Governor Diego de Borica of Alta California issued the Rancho Simi land grant, including what is now the city of Moorpark, to Santiago Pico and Luis Peña (Moorpark Chamber of Commerce 2018). Robert W. Poindexter, a Los Angeles-based attorney and officer of the Simi Land and Water Company came into possession of what became Moorpark's original town site in 1897. In the late nineteenth century, the SPRR announced plans to reroute its Coast Line route through what is now Moorpark, setting off a land boom in the area. As a result of the ensuing frenzy, Moorpark was established in 1900. That year, the town's application for a post office was approved, and Poindexter surveyed the original town site, laid out the streets, and planted pepper trees in what became downtown Moorpark. By 1904, the Santa Susanna tunnels were completed, and the town enjoyed regular rail service, a fact that encouraged new settlement in the area. A Methodist church and a one-room schoolhouse were moved into Moorpark from nearby communities (Moorpark Historical Society 2020; Moorpark, City of n.d.).

Through much of the twentieth century, Moorpark grew around a predominantly agricultural economy. Early enterprises typically involved the dry farming of such crops as apricots, black-eyed beans, hay, and lima beans. Apricots were so important to local farm production that the community was, for a time, known as the "apricot capital of the world" (Moorpark Historical Society 2020). In the 1920s, the community built its first high school (Moorpark Union High School) on Casey Road and replaced its original elementary school with Flory Street School. In 1939, the high school was damaged by an earthquake and was replaced with a new campus at the same location (Moorpark, City of n.d.).

The community faced significant changes in the years following World War II. Poultry ranching emerged as an important facet of the local economy in the years immediately following the war (Moorpark Historical Society 2020). By the late 1960s, however, farms south of the railroad were redeveloped with residential subdivisions. In 1963, the Ventura County Community College District established Moorpark College at what is now the east end of the city, and the campus was developed soon thereafter (Moorpark College 2020). Residential development continued at a steady pace during the 1970s but exploded in the 1980s, when large suburban tracts were constructed in areas previously used for agriculture (Moorpark Historical Society 2020). The city was incorporated in 1983, and saw its population expand rapidly from 4,000 in 1980 to 25,000 in 1990. Moorpark's current population is 34,000 (Moorpark Historical Society 2020).

Thousand Oaks Local History

The city of Thousand Oaks is situated on the land of the former Rancho El Conejo. Soldiers from the Santa Barbara Spanish presidio were granted grazing rights on the rancho as early as 1803. In 1822, the 48,674-acre rancho was granted to José de la Guerra y Noriega, a former captain of the Santa Barbara Spanish presidio (Storke 1891).

After the property title was settled in 1874, the majority of the rancho came to be owned by three men: John Edwards, Howard W. Mills, and Egbert W. Newbury. The city of Thousand Oaks began as a small settlement and stagecoach stop along the route from Los Angeles to San Francisco (Thousand Oaks, City of n.d.). In 1910, Harold and Edwin Janss, of the Janss Investment Company,

purchased approximately 6,000 acres from the estate of John Edwards; eventually the Company's property holdings totaled 10,000 acres (Triem 1985; D'Amore 2004). The Janss Investment Company was responsible for the development of nearly 90,000 acres throughout southern California, with Thousand Oaks being one of its last major undertakings (Martin 1989).

In 1927, Louis Goebel established Goebel's Lion Farm on Thousand Oaks Boulevard with six lions he purchased from Universal Studios. It was here that Goebel trained his lions and housed animals such as elephants, tigers, giraffes, hippos, and chimpanzees (Conejo Valley Guide 2017). In 1956, James Ruman and Sid Rogel of 20th Century Fox purchased the farm, and it became known as Jungleland, where scenes from films such as *Birth of a Nation*, *Tarzan*, and *The Adventures of Robin Hood* were filmed (Thousand Oaks, City of n.d.).

By 1961, the community consisted of two shopping centers, an industrial park, schools, churches, and a four-year liberal arts college, California Lutheran University. The community voted to incorporate in 1964 and chose the name Thousand Oaks to honor the area's many oak trees. Professional, scientific, and technical services, as well as manufacturing, have become the largest industries in the city (DataUSA, n.d.). The population now exceeds 124,000 residents and has grown to cover 56 square miles (Thousand Oaks, City of n.d.; United States Census Bureau 2023).

Simi Valley Local History

The city of Simi Valley was established on the lands of the Rancho Tapo land grant. When California was admitted to the Union in 1850, the project site was part of Santa Barbara County. Urban settlements centered on earlier Spanish settlements such as Santa Barbara, San Buenaventura, and Pueblo de Los Angeles. In 1851, the United States Congress empowered the Board of Land Commissioners to determine the legitimacy of extant grants and to establish the boundaries of open and public lands in California. Most grants, including Rancho Simi, were confirmed to the original patentee. Sometime prior to 1865, about 14,000 acres of Rancho Simi were transferred and became known as Tapo Ranch (Mason 1883). From 1876 through 1912, there was increased Americanization, the result of increased trade between southern California and the rest of the United States due to the expanding railroad system. Subsequent drought conditions throughout Southern California were responsible for the death of cattle and resulting bankruptcies during which time many ranches were dissolved or underwent subdivision.

The coming of the railroad promised prosperity to communities along the route through enlarged markets, increased population, and a rise in real estate values (Bean 1968). A real estate boom followed on the heels of the railroad's new access to Ventura in 1887 (Dames and Moore 1988). Between 1907 and 1910, the SPRR bored through the Santa Susana Pass to create the present route (Southern Pacific Company 1955; Hofsammer 1986). The final route was completed, and service began March 20, 1904, when southbound trains from Santa Barbara were routed through Oxnard and Burbank to Los Angeles (Southern Pacific Company 1955). After World War II groundwater supplies were scarce and agricultural land was sold for development. Calleguas was formed in 1953 to develop supplemental wholesale water supplies to support the growing population. In 1960, Calleguas joined Metropolitan Water District of Southern California and began providing imported water to southeastern Ventura County. As a result, the population of Simi Valley surged from approximately 3,000 in 1950 to approximately 61,000 in 1970 (Lozano 1991).

Ventura County Local History

In 1873, Ventura County was created out of Santa Barbara County, comprising over 1,000,000 acres of land (Gidney et al. 1917). After its creation, hundreds of people moved to the area, and development, such as the construction of a new schoolhouse and county courthouse, began to take shape. The construction of a wharf was the first large-scale infrastructure improvement undertaken in the city and county of Ventura. Construction began in 1872 and was completed the following year (January 1, 1873), spurring economic growth throughout the county. At the time of its construction, the wharf in Ventura was the longest wooden wharf in California (Ventura, City of n.d.). Its presence not only increased the region's general accessibility but, perhaps more importantly, provided much needed shipping options for the county's already established and growing agricultural economy, as well as the lumber and oil industries (Historic Resources Group 2007; Triem 1982; *Ventura County Star* 2015).

Following the turn of the century, oil was discovered along the county's coastal hills and large oil fields were constructed by local residents and national oil companies (Historic Resources Group 2007). A significant strike by Shell Oil in 1921 ushered in exponential growth in the county and expansive residential development took place. This development occurred throughout the county but particularly surrounding the oil fields as housing for oil workers was desperately needed. While growth slowed during the Depression and leading up to World War II, the postwar period ushered in tremendous growth throughout the county. The postwar period's greater reliance on the automobile further spurred developments. In September 1962, U.S. Highway 101 was constructed, roughly trending north-south along the ocean and east-west connecting Ventura County to the Los Angeles area. State Routes 33 and 126 were constructed in the same decade, providing access to the agricultural fields to the northwest and eastern portions of the county (Historic Resources Group 2007).

4.2.2 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, the proposed project could have a potentially significant impact if it were to result in one or more of the following:

1. Cause a substantial adverse change in the significance of a historical resources pursuant to Section 15064.5
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5
3. Disturb any human remains, including those interred outside of dedicated cemeteries

According to the CEQA Guidelines§ 15126.4(b)(3), public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered for a project involving such an archaeological site:

- A. Preservation in place (avoidance) is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.

- B. Preservation in place may be accomplished by, but is not limited to, the following:
 - 1. Planning construction to avoid archaeological sites.
 - 2. Incorporation of sites within parks, greenspace, or other open space.
 - 3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
 - 4. Deeding the site into a permanent conservation easement.
- C. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 of the Health and Safety Code.
- D. Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented and that the studies are deposited with the California Historical Resources Regional Information Center.

Methodology

The analysis in this section is based on the 2023 CRA and 2024 XPI/Phase II (Johnson et al. 2023; Pfeiffer et al. 2024). The 2023 CRA included a cultural resources records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search conducted by the NAHC, archival and background research, and an archaeological pedestrian and windshield survey. The 2024 XPI/Phase II included an Extended Phase I (XPI)/Phase II archaeological investigation, preparation of updated Department of Parks and Recreation Series 523 forms, and consideration of the historical significance of archaeological resources identified within the project site under CEQA.

Cultural Resources Records Search

On October 25, 2022, Rincon conducted a cultural resources records search of the CHRIS at the South Central Coastal Information Center. The CHRIS records search identified 51 previously recorded cultural resources within a 0.5-mile search radius of the project site. Of these, four previously recorded prehistoric archaeological resources (CA-VEN-71, CA-VEN-214, CA-VEN-339 and CA-VEN-1123) were identified within the project site. Portions of CA-VEN-71, CA-VEN-214, and CA-VEN-339 were located within the Phase 3 alignment and a portion of CA-VEN-1123 was located within the Phase 4 alignment. Due to the sensitive nature of the Native American resources identified within the project site, further description will not be provided here. A review was also conducted of the NRHP, CRHR, the California Historical Landmarks list, the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File, and the Archaeological Determination of Eligibility List.

Native American Heritage Commission Sacred Lands File

An SLF search and AB 52 Native American contact list request was submitted to the NAHC on September 26, 2022. The NAHC responded October 17, 2022, stating the results of the SLF search were negative for sacred lands in the vicinity of the project site.

Archival and Background Research

Archival and background research was conducted to ascertain the development history of the project site and to inform if any built environment resources over 45 years old were present within the project site that may be considered historical resources under CEQA. A variety of primary and secondary source materials, including, but not limited to, historical maps, aerial photographs, and written histories of the area, were reviewed. Historical topographic maps and aerial photographs did not identify any built environment resources within the project site. Further, the project site has been heavily disturbed from roadway construction and maintenance and surrounding urban development and agricultural activities.

Archaeological Field Survey

Due to extensive ground disturbances associated with development, road construction, and utility installation, the natural topography of the project site had been substantially modified. As a result, large portions of the project site were located in paved areas with no ground surface visibility. Therefore, Rincon conducted an archaeological field survey, consisting of both a pedestrian survey and a windshield survey, on November 21, 2022. The survey did not result in the identification of archaeological materials associated with the previously recorded resources identified by the CHRIS search; however, the lack of surface evidence of archaeological materials does not preclude their subsurface existence and portions of the project alignment are considered highly sensitive for archaeological resources. Therefore, an XPI investigation was necessary to determine if subsurface archaeological deposits associated with CA-VEN-71, CA-VEN-214, CA-VEN-339, or CA-VEN-1123 were present within the Phases 3 and/or 4 alignments.

Extended Phase I Investigation

An XPI investigation was conducted from April 5 through 7, 2023, within the portion of the project's Phase 4 alignment within the previously recorded boundaries of CA-VEN-1123, and from April 10 through 13, 2023, within the portions of the project's Phase 3 alignment within the previously recorded boundaries of CA-VEN-71, CA-VEN-214, and CA-VEN-339. Native American monitoring during the XPI investigation was conducted by Adam Fregozo of the Fernandeño Tataviam Band of Mission Indians within the Phase 4 alignment and by Rick Barrios of the Barbareño/Ventureño Band of Mission Indians within the Phase 3 alignment.

The prehistoric artifacts and ecofacts recovered during XPI testing consisted of low-density marine shell and faunal bone fragments and one fused shale tertiary flake and are largely related to resource processing and subsistence activities. One marine shell fragment was recovered from previously disturbed soils within CA-VEN-214. Given the northernmost boundary of CA-VEN-214 intersects the project's Phase 3 disturbance area, coupled with the level of testing and disturbances observed during the XPI, additional Phase II testing within CA-VEN-214 was not warranted. Further, XPI testing within the project's Phase 4 disturbance area did not identify any subsurface archaeological deposits associated with CA-VEN-1123 within the testing area and, therefore, Phase II testing within CA-VEN-1123 was not warranted. Phase II testing within the previously recorded boundaries of CA-VEN-71 and CA-VEN-339 was determined necessary given the positive results of XPI testing.

Phase II Investigation

The Phase II investigation was conducted to determine if intact (i.e., previously undisturbed) cultural deposits associated with CA-VEN-71 and/or CA-VEN-339 existed within the project's Phase 3 disturbance area in order to evaluate the deposit(s) for listing in the CRHR and determine whether the project would impact historical or unique archaeological resources under CEQA. Phase II testing identified low-density marine shell and faunal bone fragments within intact and disturbed contexts. Soils within Test Unit (TU) 1, excavated within the recorded CA-VEN-339 boundaries, were disturbed to a depth of 60 centimeters below surface (cmbs) before transitioning to intact soils from 60 to 140 cmbs. Soils within TU2, excavated within the recorded CA-VEN-71 boundaries, were disturbed to a depth of 70 cmbs. No intact soils were observed within TU2. Human remains were identified within a disturbed context during the Phase II investigation. The discovery and notification procedures for the identification and treatment of human remains were conducted in accordance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Consultation regarding treatment and reinterment of the remains was conducted between Calleguas and the MLD identified by the NAHC. Given the sensitivity, confidentiality, and heritage value, the specific nature of the remains will not be discussed further.

Although intact soils were observed within TU1 excavated within the previously recorded boundaries of CA-VEN-339, the results of Phase II testing determined the deposits associated with CA-VEN-71 and CA-VEN-339 within the project's Phase 3 disturbance area are limited in both density and diversity and, therefore, do not have the potential to provide data to answer research questions important to the prehistory of the Ventura County area. Two marine shell samples were recovered from intact soils within CA-VEN-339 and submitted for radiocarbon dating to confirm the date(s) of prehistoric occupation of the site; however, the results of radiocarbon dating indicate the marine shell samples are Pleistocene aged (>40,000 Before Present [BP]). An uncalibrated radiocarbon age of >45,000 BP predates human occupation in North America. Therefore, the recovered shell is unrelated to prehistoric occupational periods associated with CA-VEN-339. The tested areas of the project alignment exhibited a high level of previous ground disturbance from the construction and maintenance of adjacent roadways and underground utility installations, as well as adjacent nursery and agricultural activities, and therefore lack integrity.

b. Project Impacts and Mitigation Measures

Impacts related to Thresholds 1 through 3 are analyzed below. The impact assessments consider the results of the 2023 CRA and 2024 XPI/Phase II. The results of these studies, along with the CEQA Guidelines, were considered to determine if the project would result in a significant impact to historical resources. Pursuant to Section 15064.5(b) of the CEQA Guidelines, a significant effect on the environment would occur if a historical resource is materially impaired (i.e., the resource's significant physical features would be directly or indirectly altered in such a way that it would no longer be eligible for listing in the CRHR or a local register).

Threshold 1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Impact CUL-1 No resources were identified within the project site that qualify as a historical resource pursuant to Section 15064.5. Therefore, the project would have no impact to historical resources and no mitigation is required.

Implementation of the project would have a significant adverse impact if it would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines, Section 15064.5. A substantial adverse change in the significance of a historical resource would have potential to occur if the elements that contribute to its significance were to be damaged through direct or indirect impacts of a project. Built environment and archaeological resources (both historic-period and prehistoric) may qualify as historical resources under CEQA; however, for clarity of this discussion, built environment resources are addressed under Impact CUL-1 and archaeological resources are addressed under Impact CUL-2.

As described in Section 4.2.2(b) *Methodology*, the 2023 CRA did not identify any built environment resources over 45 years old present within the project site that may be considered historical resources under CEQA. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines and no impact would occur.

Mitigation Measures

The project would have no impact to historical built environment resources; therefore, no mitigation is required.

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Impact CUL-2 Construction of the project has the potential to impact previously recorded and unknown archaeological resources. Mitigation Measure CUL-1 requires archaeological sensitivity training for all construction personnel and Mitigation Measure CUL-2 requires archaeological and Native American monitoring within CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123, and a 50-foot buffer surrounding them. Mitigation Measure CUL-3 requires the proper treatment of any previously unknown archaeological resources that may be unearthed during project construction activities. Impacts would be less than significant with mitigation incorporated.

As described in Section 4.2.2(b) *Methodology*, the 2023 CRA identified four previously recorded archaeological resources (CA-VEN-71, CA-VEN-214, CA-VEN-339, or CA-VEN-1123) within the project site. The archaeological survey did not result in the identification of archaeological materials associated with the previously recorded resources identified by the CHRIS records search; however, the lack of surface evidence of archaeological materials does not preclude their subsurface existence and portions of the project alignment are considered highly sensitive for archaeological resources. Given the cultural resources sensitivity of the area and the location of the project within and adjacent to previously recorded prehistoric archaeological resources, project-related ground disturbances have the potential to impact CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123. An XPI investigation was conducted to determine if subsurface archaeological deposits associated with CA-VEN-71, CA-VEN-214, CA-VEN-339, or CA-VEN-1123 are present within the Phases 3 and/or 4 alignments. Given the results of the XPI investigation, a subsequent Phase II investigation was

conducted to determine if intact (i.e., previously undisturbed) cultural deposits associated with CA-VEN-71 and/or CA-VEN-339 existed within the project's Phase 3 disturbance area. The Phase II investigation also evaluated the deposit(s) for their potential to contribute to the eligibility for listing of CA-VEN-71 and CA-VEN-339 in the CRHR and determined whether the project would impact historical or unique archaeological resources under CEQA. Given the northernmost boundary of CA-VEN-214 intersects the Phase 3 disturbance area, coupled with the level of testing and disturbances observed during the XPI, additional Phase II testing within CA-VEN-214 was not warranted. Further, XPI testing within the Phase 4 disturbance area did not identify any subsurface archaeological deposits associated with CA-VEN-1123 within the testing area and, therefore, Phase II testing within CA-VEN-1123 was not warranted.

The results of the Phase II investigation identified intact and disturbed subsurface archaeological deposits associated with CA-VEN-71 and CA-VEN-339. Given the extent of excavation conducted, along with the existing level of previous disturbances, additional archaeological excavation would have a low potential to identify intact archaeological features or diagnostic artifacts that retain integrity and have the ability to provide additional data to inform on the subsistence practices of the prehistoric inhabitants. The project would not alter the existing level of integrity of CA-VEN-71 or CA-VEN-339 within the current alignment and the portions of CA-VEN-71 and CA-VEN-339 tested as part of the Phase II investigation do not contribute to their CRHR eligibility under Criteria 1, 2, 3, and 4. Therefore, the portions of CA-VEN-71 and CA-VEN-339 tested as part of the Phase II investigation are not considered historical resources under CEQA. Although CA-VEN-71 and CA-VEN-339 have been heavily disturbed and the data potential and integrity of the resources are limited, the heritage value of the resources as they relate to the local tribes and Native American community are not diminished. Ground-disturbing activities associated with the project have the potential to impact previously recorded and unknown prehistoric archaeological resources that may be present on or below the ground surface. Such impacts would constitute a significant impact under CEQA. To reduce potential impacts to archaeological resources, the following mitigation measures are required.

Mitigation Measures

CUL-1 Cultural and Archaeological Resources Education (CARE) Program

An archaeologist shall be retained to conduct a Cultural and Archaeological Resources Education (CARE) Program training on archaeological sensitivity prior to the commencement of any ground-disturbing activities. This training shall occur under the direction of a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983). The initial archaeological sensitivity training shall be given to all construction personnel, including, but not limited to, Calleguas personnel (including the assigned inspectors), contractors, and subcontractors, prior to their involvement in any ground-disturbing activities. Additional personnel who subsequently become involved in the project shall also receive the training prior to their involvement in any ground-disturbing activities. This can be accomplished by additional in-person training sessions, viewing a recording of the initial training session, or through the distribution of hardcopy or electronic training materials. The CARE Program shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, safety procedures when working with monitors, specific procedures to be followed in the event of an inadvertent discovery, proper protocol for treatment of cultural materials in the event of a find, and consequences in the event of non-compliance. As a result of Assembly Bill 52 consultation, the Fernandefio Tataviam Band of Mission Indians deferred the

remainder of Phase 4 work to the Barbareño/Ventureño Band of Mission Indians. As such, a representative of the Barbareño/Ventureño Band of Mission Indians shall be invited to participate in the CARE Program for work occurring within Phase 3 and Phase 4 of the project. In the event the Barbareño/Ventureño Band of Mission Indians elects not to participate in the CARE Program within the Phase 4 alignment, the Fernandeno Tataviam Band of Mission Indians shall be contacted.

CUL-2 Archaeological and Native American Monitoring

An archaeological monitor shall be retained to monitor all project-related ground disturbing activities that occur within the recorded boundaries of previously recorded archaeological resources CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them. Archaeological monitoring shall be performed under the direction of the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983). A Native American monitor representing the Barbareño/Ventureño Band of Mission Indians shall be retained to monitor project-related ground-disturbing activities occurring within the recorded CA-VEN-71, CA-VEN-214, CA-VEN-339 and CA-VEN-1123 boundaries, which intersect portions of the Phase 3 and Phase 4 alignment, and a 50-foot buffer surrounding them. In the event the Barbareño/Ventureño Band of Mission Indians elects not to monitor within the Phase 4 alignment, the Fernandeno Tataviam Band of Mission Indians shall be contacted to provide Native American monitoring services. Previous testing within the previously recorded boundaries of CA-VEN-71, CA-VEN-214 and CA-VEN-339 identified sparse flaked stone and shell within disturbed soils. Should any archaeological resources that are not consistent with previous findings be identified during monitoring, the archaeological and appropriate Native American monitor shall have the authority to halt work within 50 feet of the discovery and/or direct work to another area until the archaeological and appropriate Native American monitor, with input from the qualified archaeologist if necessary, have assessed the nature of the find and the location has been cleared for further construction activity. The discovery of archaeological materials consistent with previous findings shall not require work to be halted or redirected. If intact (i.e., previously undisturbed) archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the qualified archaeologist, and an appropriate Native American monitor if the resource is Native American in origin, shall determine if Phase II archaeological testing for CRHR eligibility is appropriate.

If Phase II archaeological testing is completed and the resource is eligible for the CRHR and significant impacts to the resource cannot be avoided via redesign, the qualified archaeologist, in consultation with an appropriate Native American monitor if the resource is Native American in origin, shall prepare a data recovery plan tailored to the nature and characteristics of the resource, per the requirements of California Code of Regulations Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural materials related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and appropriate Native American monitor shall recover and document the scientifically consequential information which justifies the resource's significance. Calleguas shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Code of Regulations Guidelines Section 15126.4(b)(3)(C).

CUL-3 Unanticipated Discovery of Archaeological Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them, in areas not observed by an archaeological monitor and appropriate Native American monitor, work within 50 feet of the find shall halt and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist or by an archaeologist working under their direction to be Native American in origin, then an appropriate Native American monitor shall also be contacted to participate in the evaluation of the resource consistent with Mitigation Measure TCR-2. The qualified archaeologist and appropriate Native American monitor shall determine appropriate steps consistent with Mitigation Measure CR-2.

Significance After Mitigation

Mitigation Measures CUL-1 and CUL-2 would reduce impacts to previously recorded archaeological resources (CA-VEN-71, CA-VEN-214, CA-VEN-339 and CA-VEN-1123) located within the project site to a less-than-significant level. With implementation of Mitigation Measure CUL-3, potential impacts to previously unknown archaeological resources during project construction would be reduced to a less than significant level.

Threshold 3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

Impact CUL-3 Ground-disturbing activities associated with the project could result in damage to or destruction of human burials. Impacts would be less than significant with adherence to existing regulations.

Human burials outside of formal cemeteries can occur in prehistoric archaeological contexts. Native American burials have been documented within previously recorded archaeological resource boundaries that fall within a portion of the project site. The XPI/Phase II investigation conducted for the project identified fragmentary human remains within disturbed soil contexts; no intact burials were identified. Construction activities could have the potential to disturb human remains regardless of their context or composition. With adherence to existing regulations (State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98), impacts to human remains would be less than significant.

Regulatory Compliance

Discovery of Human Remains

If human remains are found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of a discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a MLD. The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance.

Results of the impacts analysis provided above indicate that ground-disturbing activities associated with construction of the project could disturb human remains; however, compliance with existing regulations would require proper identification and treatment of any human remains that may be present. As a result, impacts to human remains would be less than significant.

4.2.3 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065[a][3]).

As discussed under Impacts CUL-1 through CUL-3, the project would result in no impact to built environment historical resources, a less than significant impact to archaeological resources with the implementation of Mitigation Measures CUL-1 through CUL-3, and a less than significant impact to human remains with adherence to existing regulations (California Health and Safety Code Section 7050.5; Public Resources Code Section 5097.98). The potential for cumulative impacts to historical built environmental resources, archaeological resources, and human remains is discussed further below.

Projects listed in Table 3-1 in Section 3, *Environmental Setting*, were considered during the analysis of cumulative impacts. The project, in conjunction with other nearby past, present, and reasonably foreseeable probable future projects in the region, may have the potential to adversely impact cultural resources. Cumulative projects increase the potential for impacts to historical built environment resources, buried archaeological resources, and human remains through construction activities in the area. As acknowledged in CEQA documentation for previous phases of the CRSMP (e.g., 2002 CRSMP Phase 1 EIR), cumulative impacts to cultural resources are significant. However, with implementation of mitigation and adherence to existing regulations, the proposed project's impacts to cultural resources would be less than significant and would not compound regional impacts to cultural resources in conjunction with the cumulative projects listed in Table 3-1 in Section 3, *Environmental Setting*. Future projects would be similarly subject to existing regulations intended to protect cultural resources. As such, the project's incremental contributions to the significant cumulative impact would not be cumulatively considerable.

4.3 Geology and Soils

This section of the SEIR identifies and evaluates issues related to paleontological resources in the context of the proposed project. Other CEQA checklist questions related to geology and soils are addressed in the Initial Study Environmental Checklist Section 7, Geology and Soils (Appendix A).

4.3.1 Setting

4.3.1.1 *Paleontological Resources*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows). Paleontological resources occur within bedrock geologic deposits that underlie the soil layer and are almost exclusively preserved in sedimentary rocks; however, in rare cases, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions. The Society of Vertebrate Paleontology (SVP; 2010) has defined fossils as being remains or traces of plants and animals that are greater than 5,000 years old (i.e., older than middle Holocene in age). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors.

The project area is located in the Transverse Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Transverse Ranges extend approximately 275 miles west-east from Point Arguello in Santa Barbara County, east to the San Bernardino Mountains, and south to the Anacapa-Santa Monica-Hollywood-Raymond-Cucamonga fault zone (Yerkes and Campbell 2005). The Transverse Ranges are composed of Proterozoic to Mesozoic intrusive crystalline igneous and metamorphic rocks overlain by Cenozoic marine and terrestrial sedimentary deposits and volcanic rock (Morton and Miller 2006). More specifically, the project lies within the Santa Rosa Valley and Tierra Rejada Valley and crosses the Las Posas Hills.

The region surrounding the project area was mapped by Dibblee and Ehrenspeck (1990, 1992, and 1993), who identified eight geologic units underlying the project area (Figure 4.3-1):

- Quaternary stream channels
- Quaternary alluvium
- Quaternary old alluvium
- Saugus Formation
- Conejo Volcanics, andesitic flows and breccias
- Conejo Volcanics, basaltic rocks
- Topanga Formation
- Sespe Formation

Figure 4.3-1 Geologic Map of Project Area (Phase 3 Alignment)



Figure 4.3-2 Geologic Map of Project Area (Phase 4 Alignment, Western Portion)

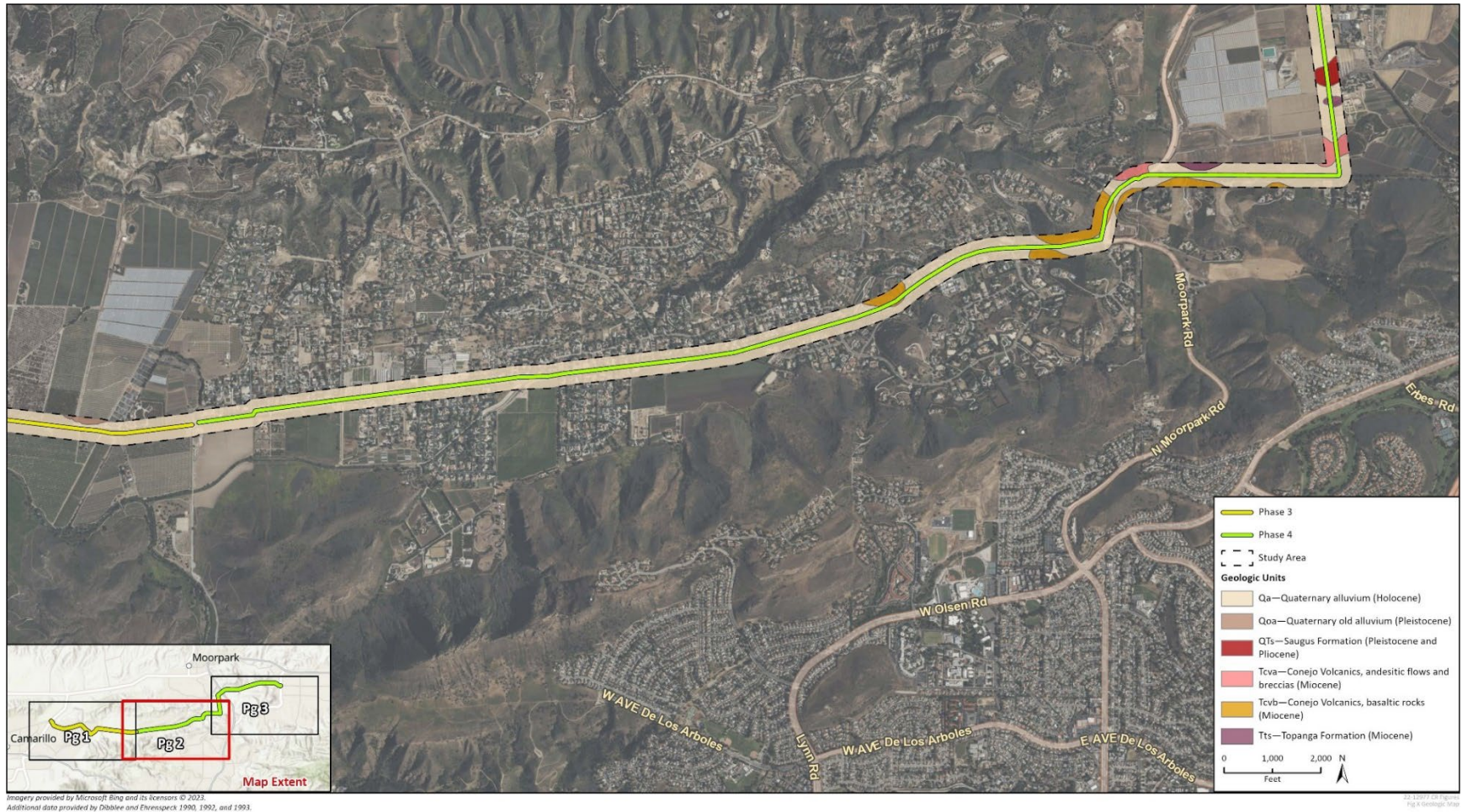
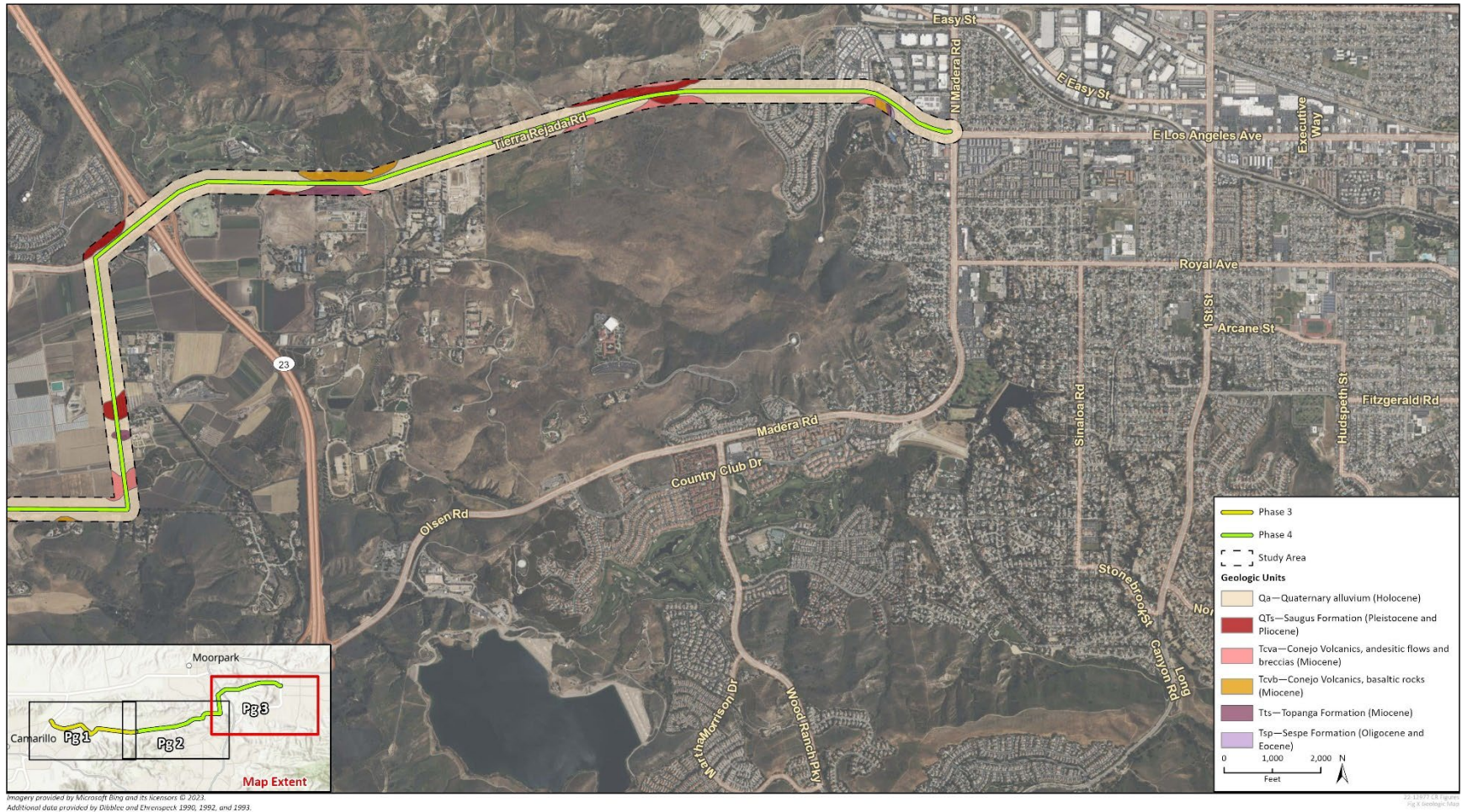


Figure 4.3-3 Geologic Map of Project Area (Phase 4 Alignment, Eastern Portion)



Imagery provided by Microsoft Bing and its licensors © 2023.
 Additional data provided by Distasco and Everspeck 1990, 1992, and 1993.

2023 11/17/23 Figure 4.3-3 Geologic Map

Quaternary stream channels

Quaternary stream channels underlie Arroyo Las Posas and Arroyo Conejo in the project area (Figure 4.3-1). Quaternary stream channels consist of sand and gravel that underlie major stream channels (Dibblee and Ehrenspeck 1990 and 1993). Quaternary stream channels consist of actively deposited or late Holocene sediment, which is generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources. Therefore, Quaternary stream channels have low paleontological sensitivity.

Quaternary alluvium

Quaternary alluvium underlies much of the project area (Figure 4.3-1). Quaternary alluvium consists of clay, sand, and gravel, that underlies the valley areas (Dibblee and Ehrenspeck 1990, 1992, and 1993). Quaternary alluvium is Holocene in age, which is generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources. Therefore, Quaternary alluvium has low paleontological sensitivity.

Quaternary landslide deposits

Quaternary landslide deposits underlie a small part of the project area along Tierra Rejada Road near Lapeyre Road (Figure 4.3-1). Quaternary landslide deposits are Holocene to late Pleistocene in age meaning they may be old enough to preserve paleontological resources (Dibblee and Ehrenspeck 1992). However, the high-energy nature of the deposition of these landslides means it is unlikely fossils would be preserved in these sediments. Therefore, Quaternary landslide deposits have low paleontological sensitivity.

Quaternary old alluvium

Quaternary old alluvium underlies part of the project area along Upland Road and Santa Rosa Road in the southern edge of the Las Posas Hills (Figure 4.3-1). Quaternary old alluvium consists of moderately consolidated clay, sand, and gravel, and is Pleistocene in age (Dibblee and Ehrenspeck 1990 and 1993). Numerous fossil localities are known from Pleistocene sediments in Ventura County, including near Camarillo and Simi Valley, which have yielded taxa such as mammoth (*Mammuthus*), mastodon (*Mammut*), bison (*Bison*), ground sloth (*Paramylodon*), horse (*Equus*), rodents, and invertebrates (Jefferson 2010; Paleobiology Database [PBDB] 2023; University of California Museum of Paleontology [UCMP] 2023). Given the fossil-producing history of similar sediments in the region, Quaternary old alluvium has high paleontological sensitivity.

Saugus Formation

The Saugus Formation underlies several areas of the project area along Upland Road and Tierra Rejada Road (Figure 4.3-1). The Saugus Formation is Pliocene to Pleistocene in age and consists of light gray to brown, weakly consolidated conglomerate, sandstone, and claystone (Dibblee and Ehrenspeck 1990 and 1992). Multiple fossil localities are known from the Saugus Formation, bearing taxa such as sharks, bivalves, gastropods, and brachiopods (PBDB 2023; UCMP 2023). Given this fossil-producing history, the Saugus Formation has high paleontological sensitivity.

Conejo Volcanics: andesitic flows and breccias, basaltic rocks

The Conejo Volcanics underlie small parts of the project area (Figure 4.3-1). The Conejo Volcanics include many different types of middle Miocene-aged volcanic rocks (Dibblee and Ehrenspeck 1990, 1992, and 1993). The two main types of Conejo Volcanics deposits that underlie the project area are andesitic flows and breccias and basaltic rocks. Andesitic flows and breccias consist of gray to brown, large-grained, somewhat stratified rocks, with some epiclastic and pyroclastic deposits. Basaltic rocks consist of gray-black to olive-brown, fine-grained, vesicular rock with some ashfall deposits. In certain parts, areas mapped as basaltic rocks contain a sandstone layer at its stratigraphic base that can preserve bivalve (oyster) fossils. Both andesitic flows and breccias and basaltic rocks are igneous rocks that form from the cooling of lava at Earth's surface, which generally, but not always, precludes the preservation of paleontological resources (SVP 2010). However, the presence of ashfall deposits and a locally fossiliferous sandstone at the base of certain regions mapped as basaltic rocks mean that andesitic flows and breccias and basaltic rocks of the Conejo Volcanics have low paleontological sensitivity.

Topanga Formation

The Topanga Formation underlies small parts of the project area along Sunset Valley Road and Tierra Rejada Road (Figure 4.3-1). The Topanga Formation contains distinguishable sediment types, but the areas underlying the project area consist of light gray to tan, friable, massive to vaguely bedded sandstone with some clay shale interbeds (Dibblee and Ehrenspeck 1992). The Topanga Formation is Miocene in age and has produced sea cow (*Sirenia*), eared seal (*Otariidae*), walrus (*Odobenidae*), desmostylian (*Desmostylia*), shark, and invertebrate fossils in Los Angeles, Orange, and Ventura Counties (Aranda-Manteca et al. 1994; PBDB 2023; UCMP 2023; Velez-Juarbe 2017). Given this fossil-producing history, the Topanga Formation has high paleontological sensitivity.

Sespe Formation

The Sespe Formation does not directly underlie the project area, but a small portion of the project on Tierra Rejada Road lies very close to an area mapped as Sespe Formation (Figure 4.3-1). However, slight inaccuracies in the geologic mapping and unknown geological conditions below the surface mean project construction could impact the Sespe Formation, so this geologic unit is discussed here. The Sespe Formation primarily consists of gray to pink sandstone that is occasionally pebbly and cross-bedded with local interbeds to reddish to greenish claystone (Dibblee and Ehrenspeck 1992). The Sespe Formation is Eocene and Oligocene in age and has an extensive history of producing terrestrial fossils in Los Angeles, Orange, Santa Barbara, and Ventura Counties, including mammals (Primates, Carnivorans, Artiodactyla, Perissodactyla, Rodentia), reptiles (lizards, snakes, turtles), and invertebrates (Kelly and Whistler 1998; Kelly et al. 1991; PBDB 2023; UCMP 2023; Whistler and Lander 2003). Given this fossil producing history, the Sespe Formation has high paleontological sensitivity.

4.3.2 Regulatory Setting

4.3.2.1 State Regulations

California Public Resources Code

Section 5097.5 of the Public Resources Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Here “public lands” means those owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, and for permit actions (e.g., encroachment permits) undertaken by others.

4.3.2.2 Local Regulations

In addition to the jurisdictions discussed below, the project area passes through parts of the cities of Camarillo and Moorpark. However, these cities do not have any specific policies or regulations relevant to paleontological resources.

Ventura County 2040 General Plan

The Conservation and Open Space Element of the Ventura County 2040 General Plan defines paleontological resources as “the fossilized remains of plant and animal life” (County of Ventura 2020). Goal COS-4 and several of its implementing policies address paleontological resources.

- **Goal COS-4.** To identify, inventory, preserve and protect cultural, historical, paleontological, and archaeological resources in Ventura County, including Native American resources, for their scientific, educational, and cultural value.
 - **COS-4.1 Tribal, Cultural, Historical, Paleontological, and Archaeological Resources Inventory.** The County shall maintain an inventory of tribal, cultural, historical, paleontological, and archaeological resources in Ventura County based on project studies and secondary resources, including record studies and reports filed with natural history programs, the California Historical Resources Information System and the Native American Heritage Commission
 - **COS-4.2 (a) Cooperation for Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall cooperate with cities, special districts, appropriate organizations and private landowners to identify known cultural, archaeological, historical, and paleontological resources to preserve identified resources within the county.
 - **COS-4.4 Discretionary Development and Tribal, Cultural, Historical, Paleontological, and Archaeological Resource Preservation.** The County shall require that all discretionary development projects be assessed for potential tribal, cultural, historical, paleontological, and archaeological resources by a qualified professional and shall be designed to protect

existing resources. Whenever possible, significant impacts shall be reduced to a less-than-significant level through the application of mitigation and/or extraction of maximum recoverable data. Priority shall be given to measures that avoid resources.

- **COS-4.7 Cultural Heritage Board Review.** Prior to environmental review of discretionary development projects, the County shall initiate a records search request with the South Central Coastal Information Center and coordinate with the Cultural Heritage Board to identify sites of potential archaeological, historical, tribal cultural and paleontological significance, to ensure that all known resources have been properly identified. Should a site of archaeological, tribal, architectural, or historical significance be identified, the County shall provide an opportunity for the Cultural Heritage Board to include recommendations specific to the discretionary project and identified resource(s). If it is determined during the review that a site has potential archaeological, tribal, architectural, or historical significance, information shall be provided to the County Cultural Heritage Board for evaluation. Recommendations identified by the Cultural Heritage Board shall be provided to the appropriate decision-making body.

City of Simi Valley General Plan

Chapter 3: Community Development of the City of Simi Valley General Plan contains the following policies and goals addressing paleontological resources (City of Simi Valley 2012):

- **Goal HR-2 Archaeological and Paleontological Resources.** Important archeological and paleontological resources are identified and protected within the city.
 - **HR-2.1 New Development Activities.** Require that new development protect and preserve paleontological and archaeological resources from destruction and avoid and mitigate impacts to such resources. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated.
 - **HR-2.2 Grading and Excavation Activities.** Maintain sources of information regarding paleontological and archeological sites and the names and addresses of responsible organizations and qualified individuals who can analyze, classify, record, and preserve paleontological or archeological findings. Require a qualified paleontologist/archeologist to monitor all grading and/or excavation where there is a potential to affect cultural, archeological, or paleontological resources. If these resources are found, the applicant shall implement the recommendations of the paleontologist/archeologist, subject to the approval of the City.
 - **HR-2.4 Paleontological or Archaeological Materials.** Require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Simi Valley or the County of Ventura, whenever possible.

Thousand Oaks General Plan

The Conservation Element of the Thousand Oaks General Plan contains the following policies and implementation measures that address paleontological resources (City of Thousand Oaks 2013):

- **CO-37** Management of paleontological resources such as significant fossil beds, or fossils of regional significance shall emphasize resource protection and conservation unless excavation and salvage is deemed appropriate by scientific authorities.

- **CO-38** Decisions pertaining to the disposition of paleontological resources shall be made in concert with recognized public agencies, groups or individuals having jurisdiction, expertise or interest in these matters, including but not limited to the Stagecoach Inn Museum, local natural history museums, colleges and universities.

These policies would be enacted through the following implementation measures:

- In areas considered to have a high likelihood of harboring paleontological resources, the City shall require the preparation of a Paleontological Resource survey as part of the environmental review process for proposed development projects.
- Support the efforts of local citizens, appointed committees or other public agencies and private institutions that are working to conserve and curate paleontological resources. Full public discussion shall be encouraged prior to any action being taken.

4.3.3 Impact Analysis

4.3.3.1 Methodology and Significance Thresholds

Methodology

Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Direct impacts to paleontological resources occur when earthwork activities, such as grading or trenching, cut into the geologic deposits within which fossils are buried and physically destroy the fossils. Sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey.

In the absence of other sensitivity criteria required by certain federal, state, or local regulatory agencies, the paleontological sensitivity scale explained in the SVP (2010) *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* is generally used. According to this system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the project site. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present (refer to Section 4.3.1 and Table 4.3-1). The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, impacts related to geology and soils would be significant if the proposed project would:

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - b. Strong seismic ground shaking;

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- c. Seismic-related ground failure, including liquefaction; and
 - d. Landslides.
2. Result in substantial soil erosion or the loss of topsoil.
 3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
 4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
 5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
 6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The Initial Study completed for the proposed project (Appendix A) determined that impacts involving Thresholds 1, 2, 3, 4, and 5 would be less than significant or have no impact. These impacts are discussed in the Initial Study Environmental Checklist Section 7, Geology and Soils (Appendix A). Thus, the following analysis solely focuses on the threshold question regarding paleontological resources (Threshold 6).

4.3.3.2 Project Impacts and Mitigation Measures

Threshold 6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-1 The project may require excavations into previously undisturbed sediments with high paleontological sensitivity. Impacts to paleontological resources would be less than significant with mitigation incorporated.

Consistent with SVP (2010) guidelines, a paleontological sensitivity rating was assigned to each of the geologic units underlying the project site based on review of published geologic maps, a literature review, online fossil locality databases, and geotechnical reports for nearby projects. The age and paleontological sensitivity of these geologic units are summarized in Table 4.3-1.

Table 4.3-1 Geologic Units of Project Area and their Paleontological Sensitivity

Geologic Unit	Age	Paleontological Sensitivity
Quaternary stream channels	Holocene	Low
Quaternary alluvium	Holocene	Low
Quaternary old alluvium	Pleistocene	High
Saugus Formation	Pleistocene and Pliocene	High
Conejo Volcanics, andesitic flows and breccias	Miocene	Low
Conejo Volcanics, basaltic rocks	Miocene	Low
Topanga Formation	Miocene	High
Sespe Formation	Oligocene and Eocene	High

The project will involve open-cut trench and trenchless pipeline installation methods, both of which will require excavations of 8 feet or more in depth. At these depths, it is likely that undisturbed sediments will be encountered. Geotechnical reports conducted for other projects near and along the project alignment generally first encountered undisturbed sediments between 0 and 4 feet below the surface (Converse Consultants 2010; Fugro West, Inc. 1998; LeRoy Crandall & Associates 1963; Pacific Materials Laboratory, Inc. 1975; Tierra Tech Testing Laboratory Inc. 1984). Additionally, at this depth, it is possible low-sensitivity, Holocene-aged sediments (i.e., Quaternary stream channels and Quaternary alluvium) could be underlain by older, highly sensitive, geologic units (Table 4.3-1). This is particularly likely for sections of the project alignments underlain by Quaternary alluvium but have surficial exposures of these older geologic units mapped nearby, such as parts of Phase 3 along the eastern section of Upland Road or the eastern end of Phase 4 along Tierra Rejada Road (Figure 4.3-1). In some areas mapped as Quaternary alluvium, geotechnical borings recorded the Saugus Formation or basalt at depths as shallow as 5 feet (Fugro West, Inc. 1998; LeRoy Crandall & Associates 1963).

Excavations within undisturbed portions of geologic units assigned high paleontological sensitivity could result in significant impacts to paleontological resources. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to a less-than-significant level and would effectively mitigate the project's impacts to these resources through the recovery, identification, and curation of previously unrecovered fossils.

Mitigation Measures

GEO-1 Paleontological Resources Monitoring and Mitigation

Qualified Professional Paleontologist. Prior to excavation, Calleguas shall retain a Qualified Professional Paleontologist, as defined by the SVP (2010). The Qualified Professional Paleontologist shall draft a Paleontological Resources Impact Mitigation Program to direct all mitigation measures related to paleontological resources.

Paleontological Worker Environmental Awareness Program. Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a Paleontological Resources Awareness Training (PRAT) for construction personnel and Calleguas inspectors (including soil materials specialists) regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction or Calleguas personnel.

Paleontological Monitoring. In areas mapped as high paleontological sensitivity (i.e., Quaternary old alluvium, Saugus Formation, Topanga Formation, and Sespe Formation), where Calleguas personnel determine construction activities will be disturbing previously undisturbed sediments (i.e., native sediments), full-time paleontological monitoring shall be conducted. Through coordination between the Qualified Professional Paleontologist, Calleguas, and construction personnel, the paleontological monitoring schedule shall be determined by considering published geologic maps, field observations, and the construction schedule, as directed by the Paleontological Resources Impact Mitigation Program. The Qualified Professional Paleontologist may recommend monitoring be reduced in frequency or ceased entirely based on field observations. For example, excavations that are determined to only affect disturbed (i.e., artificial fill) or low-sensitivity (i.e., Holocene-aged) sediments shall not be monitored even if these areas are mapped as high-sensitivity geologic units. Such decisions shall be subject to review and approval by Calleguas. Additionally, spot-checks shall be conducted for ground-disturbing activities that reach depths of 5 feet or greater in areas mapped as Holocene-aged sediments (i.e., Quaternary stream channels and Quaternary alluvium) to check for the presence of older, high-sensitivity sediments. If such sediments are observed, then full-time

monitoring shall be conducted. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The Qualified Professional Paleontologist shall coordinate with the contractor and Calleguas personnel to determine the monitoring schedule and minimize unnecessary site visits.

In the event of a fossil discovery, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined the fossil(s) is (are) scientifically significant, the following shall be completed:

- **Fossil Salvage.** The paleontological monitor shall salvage (i.e., excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume.
- **Fossil Preparation and Curation.** Fossils shall be identified to the lowest (i.e., most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist.

Final Paleontological Mitigation Report. Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to Calleguas and, if fossil curation occurs, the designated scientific institution.

Significance After Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the potential impact to paleontological resources to a less-than-significant level.

4.3.4 Cumulative Impacts

In conjunction with other nearby cumulative projects identified in Table 3-1 in Section 3, *Environmental Setting*, the project would have the potential to adversely impact paleontological resources. Cumulative development in the region would continue to disturb areas with the potential to contain paleontological resources. However, individual development proposals are reviewed separately by the appropriate jurisdiction and undergo environmental review when it is determined the potential for significant impacts exists. In the event future cumulative projects would result in impacts to paleontological resources, impacts to such resources would be addressed on a case-by-case basis. It is anticipated other developments that would have significant impacts on paleontological resources would be required to implement similar mitigation measures described herein and would comply with all applicable laws and regulations governing paleontological resources. Therefore, the cumulative impact to paleontological resources would be less than significant.

4.4 Noise

This section discusses the project's potential impacts related to noise and vibration. It considers both the temporary impacts relating to construction activities and potential long-term impacts associated with project operation.

4.4.1 Setting

4.4.1.1 Background

Noise Overview

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called "A weighting" is used to filter noise frequencies which are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the "A-weighted" levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and "dBA" is understood to identify the A-weighted decibel.

Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; a change of 5 dBA is readily perceptible; and an increase (decrease) of 10 dBA sounds twice (half) as loud (Caltrans 2013).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period. Typically, L_{eq} is equivalent to a one-hour period, even when measured for shorter durations as the noise level of a 10- to 30-minute period would be the same as the hour if the noise source is relatively steady. L_{max} is the highest Root Mean Squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period.

Propagation

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance. Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dBA per doubling of distance.

Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration 2011).

Vibration Overview

Vibration levels are usually expressed as a single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (ppv) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses experienced by buildings, ppv is often used in monitoring and controlling construction vibration. Although ppv is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibration. In a sense, the human body responds to an average vibration amplitude (Federal Transit Administration [FTA] 2018). Because vibration waves are oscillatory, the net average of a vibration signal is zero. Thus, the RMS amplitude is used to describe the “smoothed” vibration amplitude (FTA 2018). The RMS of a signal is the square root of the average of the squared amplitude of the signal, usually measured in inches per second. The average is typically calculated over a one-second period. The RMS amplitude is always less than the ppv and is always positive. Decibel notation is used to compress the range of numbers required to describe vibration. The abbreviation VdB is used in this analysis for vibration decibels to reduce the potential for confusion with sound decibels.

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Along the project alignment, noise-sensitive land uses are generally considered to include residences, schools, hospitals and care facilities, recreation and open space areas, hotels and motels, and places of worship (City of Moorpark 1998; City of Simi Valley 2012; City of Camarillo 2015; County of Ventura 2020). Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, and hospitals. Nearby noise sensitive receivers include single-family residences surrounding the project alignment along Upland Road, Tierra Rejada Road, and Santa Rosa Road; residential uses are as close as 15 feet to the alignment. The closest school to the project alignment is the Santa Rosa Technology Magnet

School; the classrooms of the school are located approximately 200 feet south of the alignment. In addition, Camarillo Senior Living, a nursing home, is located 200 feet south of the alignment.

Project Noise Setting

The primary noise sources along the project alignment are motor vehicles (e.g., automobiles, buses, and trucks) on Tierra Rejada Road, Sunset Valley Road, and Santa Rosa Road. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. Caltrans states typical noise levels for quiet urban daytime, quiet urban nighttime, and quiet suburban nighttime as 50 dBA, 40 dBA, and 35 dBA, respectively (Caltrans 2013). In addition, the Construction Noise Threshold Criteria and Control Plan for the County of Ventura provides a presumed ambient noise level of 50 dBA L_{eq} (one hour) and 45 dBA L_{eq} (one hour) for the evening and nighttime hours (County of Ventura 2010). According to the County of Ventura General Plan Hazards and Safety Element, noise levels generated by traffic at 50 feet from the roadway on Santa Rosa Road and Tierra Rejada Road at the project alignment are 71 dBA Community Noise Equivalent Level (CNEL) and 72 dBA CNEL, respectively (County of Ventura 2020).

4.4.2 Regulatory Setting

4.4.2.1 *Local Regulations*

The pipeline alignment would travel through sections of unincorporated Ventura County, Camarillo, Simi Valley, and a small section of Moorpark. In addition, the project would skirt the boundary of Thousand Oaks. Noise regulations related to construction are provided below. As project operation of a pipeline is a negligible noise concern due to the pipe being underground, operational noise regulations are not discussed.

Ventura County

The County of Ventura Construction Noise Threshold Criteria and Control Plan establishes thresholds for temporary construction-generated noise at sensitive receivers (County of Ventura 2010). Construction noise thresholds are divided into daytime hours (7:00 a.m. to 7:00 p.m.), evening hours (7:00 p.m. to 10:00 p.m.), and nighttime hours (10:00 p.m. to 7:00 a.m.). Per the Construction Noise Threshold Criteria and Control Plan, hospitals and nursing homes are sensitive receivers at all hours, single- and multi-family residences as well as hotels/motels are sensitive receivers during evening and nighttime hours, and schools, churches, and libraries are sensitive receivers during daytime and evening hours when in use. Daytime construction noise thresholds are summarized in Table 4.4-1.

Table 4.4-1 Daytime Construction Activity Noise Threshold Criteria

Construction Duration Affecting Noise-Sensitive Receivers	Noise Threshold Criteria shall be the greater of these noise levels at the nearest receiver area or 10 feet from the nearest noise-sensitive building	
	dBA Leq [1H]	Hourly Equivalent Noise Level, dBA ^{1, 2}
0 – 3 days	75	Ambient L _{eq} [1H] + 3 dB
4 – 7 days	70	Ambient L _{eq} [1H] + 3 dB
1 – 2 weeks	65	Ambient L _{eq} [1H] + 3 dB
2 – 8 weeks	60	Ambient L _{eq} [1H] + 3 dB
Longer than 8 weeks	55	Ambient L _{eq} [1H] + 3 dB

dBA Leq = A-weighted decibels one-hour equivalent noise level

¹ The instantaneous L_{max} shall not exceed the Noise Threshold Criteria by 20 dBA more than 8 times per daytime hour.

² Local ambient L_{eq} measurements shall be made on any mid-week day prior to project work.

Source: County of Ventura 2010

In addition, the Construction Noise Threshold Criteria and Control Plan establishes thresholds of 50 dBA L_{eq}[1H] for construction activities occurring during evening hours (7:00 p.m. to 10:00 p.m.) near residential land uses and 45 dBA L_{eq}[1H] for construction activities occurring during nighttime hours (10:00 p.m. to 7:00 a.m.) near residential and live-in institutional land uses. The Construction Noise Threshold Criteria and Control Plan also specifies a significant construction noise impact would occur if maximum construction noise levels exceed the evening and nighttime noise threshold criteria by 20 dBA more than six times per evening hour or four times per nighttime hour (County of Ventura 2010).

Simi Valley

The City of Simi Valley’s noise ordinance is codified in Chapter 16, *Noise*, of the Simi Valley Municipal Code (SVMC). The noise ordinance establishes hours of operation for certain uses, standards for identifying noise disturbances, and legal remedies for violations. SVMC Section 5-16.02(a) states that, in addition to conducting activities that are specifically identified as unlawful in the noise ordinance, the willful making or continuation of any loud, unnecessary, or unusual noise that disturbs the peace or quiet, or which causes discomfort or annoyance to a reasonable person of normal sensitiveness in an adjacent residence or business, shall be considered a nuisance. Section 5-16.02(b-k) lists specific noise-producing acts that are considered to be nuisances, including excessive noise from radios, engines, and domestic animals. SVMC Section 5-16.02(i) prohibits the erection, excavation, demolition, alteration, construction, or repair of any structure or building outside the hours of 7:00 a.m. and 7:00 p.m., except when the urgent necessity, in the interests of the public health and safety, requires the work and the Simi Valley Engineer consents.

Camarillo

Section 10.34.120 of the City of Camarillo Municipal Code (CMC) regulates noise from the construction of buildings and structures adjacent to or within any residential zone. Exterior construction or repair work that could generate noise levels that exceed the CMC noise standards presented in Table 4.4-2 at residential properties is prohibited between the hours of 7:00 p.m. of one day and 7:00 a.m. of the next day or at any time on Sunday, or at any time on any public holiday. CMC Section 10.34.040(B) states that the exterior noise level standards may not be exceeded for more than 5 dBA for a cumulative period of more than 20 minutes in any hour; 10 dBA

for a cumulative period of more than ten minutes in any hour; and 15 dBA for a cumulative period of one minute in any hour.

Table 4.4-2 City of Camarillo Exterior Noise Level Standards

Noise Zone	Designated Noise Zone Land Use	Time Interval	Exterior Noise Level (dBA)
I	Agricultural and open space properties	7:00 a.m. – 9:00 p.m.	55
		9:00 p.m. – 7:00 a.m.	45
II	Residential properties	7:00 a.m. – 9:00 p.m.	55
		9:00 p.m. – 7:00 a.m.	45
III	Commercial/office properties	7:00 a.m. – 9:00 p.m.	65
		9:00 p.m. – 7:00 a.m.	55

Source: CMC Section 10.34.040

Moorpark

The City of Moorpark Municipal Code states that “it is unlawful within the incorporated limits of the city to engage in or conduct any outdoor work relative to construction, except between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday, unless a permit for different hours has first been issued by the Public Works Director for projects within the public ROW; or by the Community Development Director for projects on private property. Application for such a permit would be made in writing to the appropriate department director and should state the name and business address of the applicant, the location of the proposed work, the reason for seeking a permit to do the work on Sunday or between 7:00 p.m. and 7:00 a.m. on other days, and the estimated duration of the work. For purposes of this section “construction” means the erection, maintenance or repair of any building or structure, the moving or excavation of earth, the laying of pavement, the loading or unloading of material, equipment or supplies or any other construction activity.

Thousand Oaks

Chapter 4.9 of the City of Thousand Oaks General Plan Noise Element limits construction activities to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday, with no construction permitted on Sunday. Chapter 21 of the City of Thousand Oaks Municipal Code discusses noise associated with music, residential landscaping, and nuisance noise; it does not contain any provisions related to construction noise.

Vibration

The local jurisdictions have not adopted quantified standards for vibration impacts during construction. Vibration limits used in this analysis to determine a potential impact to local land uses are based on guidelines for vibration damage potential and human annoyance potential contained in the Caltrans (2020) *Transportation and Construction Vibration Guidance Manual*, shown in Table 4.4-3 and Table 4.4-4, respectively.

Table 4.4-3 Caltrans Vibration Damage Potential Threshold Criteria

Type of Situation	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Extremely fragile historic buildings, ruins, and ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic sites and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

in/sec = inches per second; PPV = peak particle velocity
 Source: Caltrans 2020

Table 4.4-4 Human Response to Transient Vibration

Vibration (in/sec PPV)	Human Response
2.0	Severe
0.9	Strongly perceptible
0.24	Distinctly perceptible
0.035	Barely perceptible

in/sec = inches per second; PPV = peak particle velocity
 Source: Caltrans 2020

4.4.3 Impact Analysis

4.4.3.1 Thresholds of Significance

To determine whether a project would have a significant noise impact, Appendix G of the CEQA Guidelines requires consideration of whether a project would result in:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Generation of excessive groundborne vibration or groundborne noise levels.
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

As discussed in the Initial Study (Appendix A), the airport nearest to the project site, Camarillo Airport, is located approximately 4.6 miles to the southwest. The project site is not located within the airport land use plan (Ventura County Land Use Commission 2000). Therefore, no substantial noise exposure from airport noise would occur to construction workers and no impact would occur, and impacts under Threshold 3 are not discussed further in this SEIR.

Specific impact criteria for Thresholds 1 and 2 are provided below:

Threshold 1

The project would pass through unincorporated county areas, Moorpark, Simi Valley, and Camarillo, and skirt the boundary of Thousand Oaks. Camarillo, Simi Valley, Moorpark, and Thousand Oaks do not have quantitative construction noise thresholds for the daytime hours. Therefore, the County of Ventura daytime noise construction thresholds presented in Table 4.4-1 are used in this analysis.

Simi Valley, Moorpark, and Thousand Oaks do not have quantitative construction noise thresholds for the evening or nighttime hours. Therefore, the County of Ventura nighttime noise construction thresholds of 50 dBA L_{eq} [1H] for construction activities occurring during evening hours (7:00 p.m. to 10:00 p.m.) and 45 dBA L_{eq} [1H] for construction activities occurring during nighttime hours (10:00 p.m. to 7:00 a.m.) are used. Per the County's Construction Noise Threshold Criteria and Control Plan, hospitals and nursing homes are sensitive receivers at all hours, single- and multi-family residences as well as hotels/motels are sensitive receivers during evening and nighttime hours, and schools, churches and libraries are sensitive receivers during daytime and evening hours when in use. Therefore, the daytime thresholds apply to hospitals, nursing homes, schools, churches, and libraries. The nighttime thresholds apply to hospitals, nursing homes, and residences. Nighttime construction noise thresholds in Camarillo are presented in Table 4.4-2.

Threshold 2

The County and the Cities within the alignment do not have specific vibration thresholds. Therefore, vibration thresholds used to determine project vibration impacts are from the Caltrans (2020) *Transportation and Construction Vibration Guidance Manual*, shown in in Table 4.4-3.

4.4.3.2 Methodology

Construction noise was estimated using the Federal Highway Administration's (2006) Roadway Construction Noise Model (RCNM). Typical construction projects have long-term noise averages that are lower than louder short-term noise events due to equipment moving from one point to another on the site, work breaks, and idle time. Each construction activity has a specific equipment mix, depending on the work. Each activity also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have discontinuous high-impact noise levels. The maximum hourly L_{eq} of each activity is determined by combining the L_{eq} contributions from each piece of equipment used in that activity (FTA 2018). Project construction activities would include open-cut trenching activities, trenchless construction activities, and paving and ground restoration. Trenchless activities would occur at busy intersections to minimize traffic disruptions and to cross certain drainages and storm drain channels. Construction work would include trench excavation (including saw cutting of pavement where applicable), pipe bedding stabilization, pipe installation, and backfill.

Nighttime work between the hours of 9 p.m. and 6 a.m. may be required for the installation of trenchless portions of the pipelines and in areas where traffic conditions require non-traditional working hours. The following areas for nighttime work may include, but are not limited to, the following areas:

- St. John's Seminary Driveway
- Santa Rosa Road Between Morongo Drive and Tuscan Grove Place
- Crossing from Sunset Valley Road to Tierra Rejada Road

Threshold 1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact NOI-1 Construction noise would exceed thresholds during nighttime construction. Implementation of Mitigation Measure NOI-1 would reduce construction noise levels to the extent feasible; however, construction impacts would be significant and unavoidable. operation of the project would result in negligible noise from the underground pipeline and impacts would be less than significant.

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities. For a construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pavement breakers). Mobile equipment moves around the construction area with power applied in cyclic fashion, such as bulldozers, graders, and loaders.

Open-cut trenching activities and paving and ground restoration activities would be mobile and would be constantly moving in a linear path along the pipeline alignment. Construction equipment used for these activities would travel linearly for an average of 80 linear feet per day, with a general work area approximately 20 feet in width (assumed four-foot-wide trench plus construction area buffer). County of Ventura thresholds are based upon construction duration affecting sensitive receivers; with the linear aspect of pipeline construction, a sensitive receiver would typically be exposed to construction for 4 to 7 days. Therefore, the 70 dBA L_{eq} (one hour) County of Ventura threshold for 4 to 7 days of noise exposure would apply for daytime construction noise impacts.

Open-cut trenching would involve the following equipment: a backhoe, excavator, dump trucks, utility trucks (with truck-mounted or towed generator and hand tools), and water trucks/water buffalos.¹ Trenchless construction involves two excavators, dump truck, and a crane. Paving and ground restoration is assumed to involve a paver, paving equipment, and a roller. Construction would include the noise abatement measures discussed under *Project Description*; the analysis for construction noise conservatively did not include reductions for these measures. Table 4.4-5 summarizes construction noise levels at the nearest daytime noise-sensitive receivers. As shown in the table, construction noise levels would not exceed the daytime noise thresholds at these receivers. Therefore, daytime construction noise impacts would be less than significant.

¹ The following assumptions were made in RCNM for equipment: utility truck as a pick-up truck and water truck as a dump truck.

Table 4.4-5 Construction Noise Estimates - Daytime

Receiver	Land Use Type	Distance to Receiver (feet)	Open-cut Trenching (dBA Leq [1H])	Paving and Ground Restoration (dBA Leq [1H])	Trenchless Construction (dBA Leq [1H])	Daytime Threshold	Daytime Threshold Exceeded? ¹
Camarillo Senior Living	Nursing Home	200	69	67	69	70	No
Padre Serra Parish	Church	300	65	63	66	70	No
Santa Rosa Technology Magnet School	School	200	69	67	69	70	No
St. John's Seminary	School	800	57	55	57	70	No

dBA Leq = A-weighted decibels one-hour equivalent noise level

See Appendix D for RCNM outputs.

¹ The daytime threshold used for the entire project alignment is the County of Ventura's 70 dBA Leq [1H] threshold (7 a.m. to 7 p.m.). This threshold only applies to daytime sensitive uses as defined by the County, which include nursing homes, churches, and schools.

Nighttime construction noise levels are analyzed in Table 4.4-6. As nighttime construction areas have not been finalized, it is conservatively assumed nighttime construction may occur at any location along the alignment. As such, the closest residential receivers would be approximately 15 feet from project construction. As shown in the table below, construction noise levels during the nighttime hours would exceed the nighttime noise standards. The approximate 45 dBA noise contour from construction noise would be 3,100 feet; i.e., if construction occurs within this distance to a sensitive receiver, noise levels may exceed 45 dBA. Therefore, nighttime construction noise impacts would be significant.

Table 4.4-6 Construction Noise Estimates - Nighttime

Receiver	Land Use Type	Distance to Receiver (feet)	dBA Leq [1H]			Nighttime Threshold	Nighttime Threshold Exceeded? ¹
			Open-cut Trenching	Paving and Ground Restoration	Trenchless Construction		
Camarillo Senior Living	Nursing Home	200	69	67	69	45	Yes
Residential	Residential	15	91	89	92	45	Yes

dBA Leq = A-weighted decibels one-hour equivalent noise level

See Appendix D for RCNM outputs.

¹ The nighttime threshold used for the County of Ventura, Moorpark, Thousand Oaks, and Simi Valley portions of the alignment is the County of Ventura's 45 dBA Leq [1H] threshold (10 p.m. to 7 a.m.); the nighttime threshold used for the Camarillo portion of the alignment is Camarillo's 45 dBA Leq [1H] threshold (9 p.m. to 7 a.m.). The nighttime threshold was also applied to the evening hours of 7 p.m. to 10 p.m.

Operation

Project operation would require infrequent vehicle trips associated with routine inspection and maintenance, periodic testing, and emergency repairs, which would result in a negligible addition to traffic noise. Pipeline operation is a negligible noise concern due to the pipe being underground. Therefore, operational noise impacts are less than significant.

Mitigation Measures

NOI-1 Nighttime Construction Noise Reductions

Project construction occurring during the evening and nighttime hours of 7 p.m. to 7 a.m. shall implement a Night Operations Noise Impact Reduction Program composed of measures such as the following. Alternative methods achieving similar noise reductions could also be implemented.

- Installation of temporary sound barriers/blankets of sufficient height to break the line of sight between construction equipment and nearby residences. The barriers may be at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. Alternately, if sound blankets are preferred, barriers may be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated Sound Transmission Class 32 or higher.
- To the extent consistent with applicable safety regulations, operation of vehicles requiring use of back-up beepers may be avoided and/or the staging area may be arranged in a way that avoids the need for any reverse motions of large trucks. If these measures are not feasible, trucks operating with reverse motion alarms may be outfitted with SAE J994 Class D or equivalent alarms (ambient-adjusting, or “smart alarms” that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment), or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.
- Where nighttime operations are necessary and in the vicinity of nearby residences or other sensitive receivers, a sign shall be posted at the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of Calleguas and contractor authorized representatives assigned to respond in the event of a noise complaint. If the authorized contractor’s representative receives a complaint, that person shall investigate, take appropriate corrective action, and report the action to Calleguas.
- Where trenchless operations may be necessary during evening and nighttime hours, and where the operations are in the vicinity of sensitive receivers, key power units, including generators, shall be enclosed or acoustically packaged to reduce potential noise impacts.
- Upgraded silencers shall be placed on applicable engines.
- Quiet mode specifications for nighttime work that minimizes the use of crane and pipe handling operations and restricts materials deliveries to site.

Significance After Mitigation

With implementation of Mitigation Measure NOI-1, the temporary noise barrier would block the line-of-sight between the equipment exhaust stacks and nearby receivers and would reduce construction noise. With this reduction, noise levels at the closest residences during evening and nighttime construction activities would reach up to 77 dBA L_{eq} , which would still exceed the

nighttime threshold of 45 dBA L_{eq} [1H]. Therefore, impacts from evening and nighttime construction noise with implementation of the Mitigation Measure NOI-1 would be significant and unavoidable.

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Impact NOI-2 Project-related vibration would not result in excessive ground-borne vibration or noise. Impacts would be less than significant.

Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be conducted as part of the project. The greatest anticipated source of vibration during general project construction activities would be general construction equipment such as an excavator, which may be used within 15 feet of the nearest residential structures. A large bulldozer would create approximately 0.089 in/sec PPV at a distance of 25 feet (Caltrans 2020); this equipment would represent similar vibration levels to an excavator due to its similar size and use. This would equal a vibration level of approximately 0.156 in/sec PPV at a distance of 15 feet.² This vibration level would be lower than the Caltrans structural damage impact threshold to older residential structures of 0.3 in/sec PPV, and the distinctly perceptible human response vibration threshold of 0.24 in/sec PPV. Therefore, temporary impacts associated with an excavator (and other potential equipment) would be less than significant.

Project operation would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

4.4.4 Cumulative Impacts

Construction noise and vibration are localized and rapidly attenuate within an urban environment. Although some of the cumulative projects listed in Table 3-1 may be under construction at the same time as the proposed project, these projects are not located in close enough proximity to the project site such that noise and vibration from construction activities would impact the same sensitive receivers and structures. The project would result in significant and unavoidable nighttime construction noise impacts; construction does not typically occur during the nighttime and it would be unlikely to occur from another project at the same time and within the same vicinity. Therefore, cumulative construction noise and vibration impacts would be less than significant.

As an underground pipeline project, operation would result in negligible operational noise. Therefore, no cumulative operational noise impacts would occur.

² $PPV_{Equipment} = PPV_{Ref} (25/D)^n$ (in/sec), PPV_{Ref} = reference PPV at 25 feet, D = distance, and $n = 1.1$

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4.5 Transportation

This section of the SEIR identifies and evaluates issues related to transportation in the project area and the potential impacts of the proposed project related to transportation. Considering project-related traffic would impact roadways in Camarillo, Thousand Oaks, Moorpark, Simi Valley, and unincorporated Ventura County, this section focuses on impacts to transportation networks in each of these jurisdictions and collectively refers to project roadways as the “study area.”

4.5.1 Setting

4.5.1.1 Roadway Network

The study area includes SR 23, Somis Road (SR 34), and major/principal arterial, minor arterial, and collector streets. Please refer to Figure 2-2 in Section 2, *Project Description*, which shows project roadways, including SR 23 and SR 34. SR 23 is a two-lane highway that runs north-south, connecting Thousand Oaks with Moorpark as well as SR 118 with U.S. 101. SR 23 passes over the project’s Phase 4 alignment on Tierra Rejada Road.

SR 34 runs through the western portion of the study area, and serves as the western terminus for Phase 3 of the CRSMP. SR 34 is a three-lane divided highway that runs north-south, connecting Camarillo to the unincorporated community of Somis, as well as U.S. 101 with SR 1 and SR 118. Existing daily traffic volumes for SR 23 and SR 34 are summarized in Table 4.5-1.

Table 4.5-1 Existing Traffic on Regional Roadways in Study Area

Roadway	Post Mile	Description	Back AADT ¹	Ahead AADT ²
SR 23	8.209	Thousand Oaks, Olsen Road	66,000	52,000
	10.164	Moorpark, Tierra Rejada Road	52,000	49,500
	11.432	Moorpark, Junction Route 118	49,500	21,000
SR 34	15.870	Camarillo, Las Posas Road, East Junction	9,300	7,400

AADT = average annual daily traffic; SR = State Route

¹ Back AADT usually represents traffic volumes south or west of the count location.

² Ahead AADT usually represents traffic volumes north or east of the count location.

Source: Caltrans 2020

The Ventura County Transportation Commission’s (VCTC) Draft Comprehensive Transportation Plan (CTP) (2023) provides information regarding circulation, transportation, and traffic volumes for respective jurisdictions within the study area. The following subsections detail roadway networks and local traffic in each jurisdiction within the study area, including Camarillo, Thousand Oaks, Moorpark, and Simi Valley, as well as unincorporated Ventura County.

City of Camarillo

Camarillo roadways experience approximately 179,387 average daily vehicle trips, with approximately 50 percent of these trips travelling from inside Camarillo to outside city limits (VCTC 2023). Project roadways in Camarillo include Upland Road and Santa Rosa Road. According to the VCTC, Upland Road is classified as a minor arterial and Santa Rosa Road is classified as a principal arterial, with an average weekday traffic volume of approximately 10,000 to 20,000 vehicles (VCTC

2023). The stretch of roadway beginning at Upland Road, continuing along Santa Rosa Road and Moorpark Road, and ending at Tierra Rejada Road, is identified by the VCTC as a major arterial that funnels traffic and could potentially contribute to county-wide traffic delays (VCTC 2023).

City of Thousand Oaks

Thousand Oaks roadways experience approximately 396,679 average daily vehicle trips, with approximately 40 percent of these trips traveling from inside Thousand Oaks to outside city limits (VCTC 2023). Project roadways in Thousand Oaks include Moorpark Road and Read Road, which serve as northern city limits. Moorpark Road is classified as a minor arterial, with an average weekday traffic volume of approximately 20,001 to 60,000 vehicles, and Read Road is classified as a local street (VCTC 2023).

City of Moorpark

Moorpark roadways experience approximately 83,037 average daily vehicle trips, with approximately 58 percent of these trips traveling from inside Moorpark to outside city limits (VCTC 2023). Project roadways in Moorpark include Tierra Rejada Road, which serves as the southeastern city limit. According to the VCTC, the segment of Tierra Rejada Road located within Moorpark is classified as a principal arterial, with an average weekday traffic volume of approximately 20,001 to 60,000 vehicles (VCTC 2023).

City of Simi Valley

Simi Valley roadways experience approximately 324,619 average daily vehicle trips, with approximately 39 percent of these trips traveling from inside Simi Valley to outside city limits (VCTC 2023). Project roadways in Simi Valley include Tierra Rejada Road. The segment of Tierra Rejada Road located within Simi Valley is classified as a principal arterial, with an average weekday traffic volume of approximately 10,000 to 20,000 vehicles (VCTC 2023).

Ventura County

Project roadways in unincorporated Ventura County include Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road. According to the VCTC, the segment of Santa Rosa Road located in unincorporated Ventura County is a major arterial, with an average weekday traffic volume of approximately 10,000 to 20,000 vehicles (VCTC 2023). Sunset Valley Road is a local street, and the segment of Tierra Rejada Road located in unincorporated Ventura County is a minor arterial, with an average weekday traffic volume of approximately 10,000 to 20,000 vehicles (VCTC 2023).

4.5.1.2 Public Transit Services

Camarillo Area Transit operates an intracity public bus transit system in Camarillo, with a single fixed route that travels northwest along Upland Road (Camarillo Area Transit 2023). Thousand Oaks Transit, Moorpark City Transit, and Simi Valley Transit all operate intracity bus systems within Thousand Oaks, Moorpark, and Simi Valley, respectively, with no stops or routes that occur in the study area (Moorpark City Transit 2021; Simi Valley Transit 2020; Thousand Oaks Transit 2023).

Additionally, the VCTC provides an intercity bus service that operates primarily in Ventura County, but also in Carpinteria, Santa Barbara, and Goleta. VCTC Intercity offers six fixed route transit connections, with stops in Camarillo, Thousand Oaks, Moorpark, and Simi Valley (VCTC 2022). VCTC Intercity does not operate any routes or stops that occur in the study area.

4.5.1.3 *Bicycle and Pedestrian Facilities*

Bicycle facilities in the study area consist of Class I, II, and III bikeways. Class I bike paths are facilities with a separate ROW with crossflows by vehicles minimized. Class II bike lanes provide a striped lane for one-way bicycle travel on the side of the street adjacent to vehicle traffic. Class III bike routes consist of a roadway that is shared between bicycle and vehicle traffic with supplemental bike signage.

The nearest bikeways to the project alignment are a Class I bikeway that intersects with Upland Road in Camarillo; a Class II bikeway along Santa Rosa Road in Camarillo; and a Class II/III bikeway along Tierra Rejada Road in Moorpark and unincorporated Ventura County. The entire extent of existing and proposed bikeways in the study area is detailed in the VCTC (2007) Ventura Countywide Bicycle Master Plan.

Sidewalks occur adjacent to the project alignment along the entirety of the Upland Road alignment; along the Santa Rosa Road alignment, from the Upland Road intersection to the Tuscan Grove Place intersection; along the Tierra Rejada Road alignment in Moorpark until the SR 23 junction; and along the Tierra Rejada Road alignment in Simi Valley, from Simi Valley western city limits to Madera Road.

4.5.1.4 *Railroads*

Union Pacific Railroad tracks run north-south across the project's alignment on Upland Road in Camarillo, parallel to SR 34. This railroad is single-track and provides both freight and passenger services. Passenger services are provided by Amtrak's Pacific Surfliner Route, which runs between San Luis Obispo and San Diego; Amtrak's Coast Starlight, which runs between Los Angeles and Seattle; and Metrolink's Ventura County Line, which runs from Los Angeles to Ventura (VCTC 2023). Phase 3 of the proposed pipeline would cross under the Union Pacific Railroad tracks, directly north of the intersection of Upland Road and SR 34.

4.5.1.5 *Airports*

There are no airports located within the study area. The closest airport to the study area is the Camarillo Airport, located approximately 4.6 miles to the southwest. The Camarillo Airport operates as a general aviation reliever airport for use by private aircraft, charter aircraft, aircraft maintenance, and flight training activities (City of Camarillo 2014). The study area is not located within the airport land use plan for the Camarillo Airport (Ventura County Airport Land Use Commission 2010).

4.5.2 **Regulatory Setting**

4.5.2.1 *State Regulations*

California Department of Transportation

Caltrans is the responsible agency for implementing state-level policies and standards for highway facilities under state jurisdiction. Caltrans issues transportation permits to operate or move a vehicle, combination of vehicles, or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations specified in the California Vehicle Code. Construction activities for the proposed project would include work within roadway ROW for pipeline installation; these activities would require an Encroachment Permit from Caltrans where the roadway is under Caltrans

jurisdiction (SR 34/Lewis Road at the beginning of the Phase 3 alignment and the SR 23 crossing halfway along the Phase 4 alignment).

4.5.2.2 *Local Regulations*

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The Regional Transportation Plan/Sustainable Communities Strategy, adopted in April 2016, is a long-range planning document for the Southern California Association of Governments' (SCAG) regional transportation system, which includes Ventura County. The Regional Transportation Plan analyzes the transportation needs of the region into the future and identifies project priorities in order to improve the transportation system. The Sustainable Communities Strategy, as required by Senate Bill 375, outlines how the region will meet or exceed its greenhouse gas (GHG) reduction targets by creating more compact, walkable, bike-friendly, transit-oriented communities; preserving important habitat and agricultural areas; and promoting a variety of transportation demand management and system management tools and techniques to maximize the efficiency of the transportation network (SCAG 2016). Major initiatives within the Regional Transportation Plan/Sustainable Communities Strategy include:

1. Preserving the existing transportation system
2. Expanding regional transit to provide more alternatives than single occupancy vehicles
3. Expanding passenger rail
4. Improving highway and arterial capacity
5. Managing demands and optimizing performance of the transportation system
6. Promoting walking, biking, and other forms of active transportation
7. Strengthening the regional transportation network for goods movement
8. Leveraging technology
9. Improving airport access
10. Focusing new growth around transit
11. Improving air quality and reducing GHGs
12. Preserving natural lands

Ventura County Comprehensive Transportation Plan

The Ventura County CTP describes the vision for transportation and mobility in Ventura County over the next 25 years. The VCTC is responsible for long-range regional transportation planning in Ventura County, and is currently preparing a 2023 Ventura County CTP. The 2023 Draft CTP aims to help VCTC and local jurisdictions plan and provide a transportation system that meets the needs of residents, businesses, and visitors, maintains an enjoyable quality of life for county residents, and meets the needs of businesses to ensure a healthy local and regional economy.

Ventura Countywide Bicycle Master Plan

The Ventura Countywide Bicycle Master Plan makes recommendations to enhance and expand the existing bikeway network, close gaps, address constrained areas, provide for greater local and regional connectivity, and encourage more residents to bicycle. The plan provides for an updated countywide system of bike paths, bike lanes, and bike routes; identifies necessary support facilities such as bicycle parking; and recommends a variety of programs and policies to allow for safe,

efficient, and convenient bicycle travel within Ventura County and outside the county. Additionally, the Ventura Countywide Bicycle Master Plan consolidates proposed bikeway networks of locally adopted plans, including the Camarillo Bikeway Master Plan (2003), the Thousand Oaks Bikeway Facilities Master Plan (2005), and the Simi Valley Bicycle Master Plan (2002), as well as provides new bikeway plans for jurisdictions that lack adopted plans, such as the City of Moorpark (VCTC 2007).

Camarillo General Plan Circulation Element

The City of Camarillo (2014) General Plan Circulation Element describes the circulation system for the safe and efficient movement of people, goods, and services within the city's existing and proposed land use patterns. The following policies from Camarillo's General Plan Circulation Element are relevant to the project:

- **Policy 1.2.9:** On-site circulation patterns shall be examined to ensure that traffic will flow in a reasonable manner and not interfere with normal traffic movement adjacent to the project or on the subject site.
- **Policy 10.1.7:** Utilities and wireless communication facilities located within the public right-of-way shall be designed so as to not adversely impact the use of the public right-of-way including the movement and visibility of vehicles and pedestrians.

Moorpark General Plan Circulation Element

The City of Moorpark (1992) General Plan Circulation Element designates a safe and efficient circulation system that promotes the movement of people and goods in and around the city. The following policies from Moorpark's General Plan Circulation Element are relevant to the project:

- **Policy 2.3:** New development projects shall mitigate off-site traffic impacts to the maximum extent feasible.

Simi Valley General Plan Mobility Element

The City of Simi Valley (2012) General Plan Mobility Element provides sustainable strategies to meet the City's requirement for safe and efficient travel at the level of development anticipated to occur as Simi Valley is built out. The following goals and policies from Simi Valley's General Plan Mobility Element are relevant to the project:

- **Policy M-1.3: Complete Streets:** Accommodate and balance the needs of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers through all phases of transportation and development projects so that all users can travel safely within the various public rights-of-way.
- **Policy M-8.5: Coordinate Improvements:** Coordinate project phasing with the construction of on-site and off-site circulation improvements to maintain optimum levels of traffic movement.
- **Policy M-8.7: Emergency Access:** Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles and evacuation routes.
- **Policy M-9.2: Neighborhood Traffic Control Measures:** Incorporate traffic control measures in residential neighborhoods as part of proposed roadway improvement or development projects to mitigate traffic impacts to residents and reduce the negative impacts of motor vehicle traffic on the residents' quality of life.

4.5.3 Impact Analysis

4.5.3.1 Methodology and Significance Thresholds

Methodology

Potential transportation impacts were evaluated for both construction and operation of the project. Impacts are evaluated in light of existing transportation conditions and anticipated project-related traffic generated during construction activities and operation and maintenance activities.

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, impacts related to transportation would be significant if the proposed project would:

1. Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment).
4. Result in inadequate emergency access.

The Initial Study completed for the proposed project (Appendix A) determined impacts involving Thresholds 2, 3, and 4 would be less than significant or have no impact. These impacts are discussed in Appendix A. Thus, the following analysis solely focuses on the threshold question regarding whether the project would conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

4.5.3.2 Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
--

Impact TRA-1 Project construction would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Calleguas would obtain encroachment permits from applicable jurisdictions for construction work in the public ROW. Impacts would be less than significant.

The primary plans that address the circulation system in the study area are the SCAG Regional Transportation Plan/Sustainable Communities Strategy, the VCTC Draft CTP, and General Plan Circulation/Mobility Elements developed for respective jurisdictions within the study area. Each of these plans addresses various modes of transportation, including vehicles, bicycles, pedestrian, and transit and includes objectives and policies related to these modes of transportation. These plans are detailed in Section 4.5.2, *Regulatory Setting*.

Construction

The proposed project would involve the installation of 14.4 miles of underground pipeline within public ROW along the following roadways: Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. The proposed project may temporarily alter the

movement of vehicles, public transit, bicycles, and/or pedestrians within the study area because temporary lane closures would be required for installation of the pipeline. Furthermore, construction equipment and materials would be staged temporarily within the public ROW near the construction area, which may impact bicycle and/or pedestrian facilities.

Construction activities would consist of open-cut trenching and targeted trenchless installation. Open-cut trenching activities and paving and ground restoration activities would be mobile and constantly moving in a linear path along the pipeline alignment. Construction equipment used for these activities would travel linearly for an average of 80 linear feet per day. Thus, lane closures would only affect one specific area of the project’s alignment for a short period of time.

Construction of the proposed project would temporarily increase traffic associated with project roadways. Project-generated traffic during construction would include worker-related commuter trips, trucks used for delivering construction equipment, and trucks used for delivering and hauling construction materials and wastes. Construction traffic would likely utilize SR 23 and SR 34 to access the study area, and would travel along Upland Road, Santa Rosa Road, Read Road, Sunset Valley Road, Moorpark Road, and Tierra Rejada Road to access the project alignment as construction progresses.

Table 4.5-2 summarizes the anticipated trip generation related to project construction activities. As detailed in Table 4.5-2, project construction would require a total of approximately 6,400 vehicle trips across the construction period. When averaged over the duration of the construction period (766 days), project construction would result in approximately 8.3 vehicle trips per day. As discussed in Section 4.5.1, *Setting*, traffic volumes on project roadways range from 10,000 to 60,000 vehicles per day. Therefore, average construction traffic per day would be less than one percent of traffic volumes on roadways in the study area. Construction traffic would be temporary and distributed on several roadways in the study area.

Table 4.5-2 Estimated Project Construction Traffic

Type of Vehicle Trip	Construction Phase	Number of Trips
Construction Worker Trips	Excavation—Pipe in a Bridge	3
	Excavation—Trenchless	10
	Excavation—Open Trench	15
	Installation—Pipe in a Bridge	45
	Installation—Trenchless	45
	Installation/Backfill—Open Trench	45
	Paving—Open Trench	13
Haul Truck Trips	Excavation—Trenchless	1,095
	Installation—Pipe in a Bridge	140
	Installation—Trenchless	451
	Installation/Backfill—Open Trench	4,505
Estimated Daily Construction Trips		6,397

Source: The number of trips was calculated through CalEEMod project modelling. CalEEMod outputs are included within Appendix A, Subappendix A, Air Quality and Greenhouse Gas Study, Attachment 1

Installation of the proposed pipeline under the Union Pacific Railroad track would be completed using horizontal directional drilling or jack-and-bore techniques. Union Pacific Railroad would require these construction activities to adhere to the applicable guidelines for utility installations underneath railroad ROW as established by the most current version of the American Railway Engineering and Maintenance-of-Way Association *Manual for Railway Engineering* (Union Pacific Railroad 2019). Train operations are permitted to continue throughout the duration of construction activities unless any movement is detected, at which point the installation process and all train movement must be immediately stopped, the damage reported to Union Pacific Railroad, and the damaged area immediately repaired. The installation process must be reviewed and modified as required before the installation may proceed. Therefore, with compliance with applicable Union Pacific Railroad requirements, including American Railway Engineering and Maintenance-of-Way Association guidelines, temporary construction impacts to railroad operations would be less than significant. Once installed, the proposed pipeline would not have any impact to railroad operations because it would be located underground and designed in accordance with Union Pacific Railroad requirements.

To minimize traffic impacts to the traveling public, trenchless construction methods would be used to cross busy intersections as well as Somis Road (SR 34) and Santa Rosa Road. As detailed in Section 2, *Project Description*, save for a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access at these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

Calleguas would also engage in community outreach to notify the public of anticipated lane closures. Notifications may include, but are not limited to, social media posts, mailers, and/or emails to interested parties. Calleguas would also coordinate directly with adjacent landowners whose driveways may be affected by construction activities.

Per Calleguas' standard Contract Documents, precautions would be taken to protect the roadway facilities and to repair any damage caused by the construction of the proposed project. In addition, Calleguas would be required to obtain encroachment permits from applicable jurisdictions for construction activities in the public ROW. Calleguas would be responsible for preparing and submitting Traffic Control Plans to accompany encroachment permit applications. The proposed project would also be subject to encroachment permit conditions, which may include requirements such as construction signage, peak traffic hour avoidance, and post-construction pavement restoration.

Specifically, the City of Camarillo would require the following encroachment permit conditions:

- Minimize the distance, hours, and duration of lane closures to minimize traffic congestion, especially congestion affecting the City of Camarillo's fixed route bus schedule; and
- Prior to any construction, Calleguas would upgrade traffic signal controller equipment to provide permanent video vehicle detection equipment at all signalized intersections affected by construction activities within Camarillo's city limits. Equipment upgrades would be subject to approval by the City of Camarillo.

As such, construction transportation impacts would be less than significant.

Operation

All public roadway ROW affected during construction would be restored upon completion following all relevant requirements for damage repair and pavement restoration. The proposed pipeline would be installed underground; thus, project components would not physically interfere with the circulation system during project operation. Project-generated traffic during operation would be limited to annual employee-related vehicle trips to inspect the pipeline and to exercise valves for pipeline maintenance. As a result, operational transportation impacts would be less than significant.

4.5.4 Cumulative Impacts

The geographic scope of potential cumulative transportation impacts is the study area, which includes Camarillo, Thousand Oaks, Moorpark, Simi Valley, and portions of unincorporated Ventura County. This geographic scope is appropriate for evaluating transportation impacts because it includes the regional and local transportation network that would primarily be impacted by the proposed project and cumulative development projects. It is possible project construction would occur at the same time as some of the cumulative development projects listed in Table 3-1 in Section 3, *Environmental Setting*. Overlapping construction activities, simultaneous lane/road closures, and simultaneous staging of construction equipment and materials in public ROW could result in cumulative impacts to transportation patterns in the study area and bicycle and/or pedestrian facilities.

Of particular concern would be cumulative project numbers 1 and 4, which are either located in close proximity or along the same roadway as the project alignment. Therefore, cumulative impacts related to construction traffic would be potentially significant. However, the project would implement traffic controls to minimize transportation impacts, such as public notifications, construction phasing to maintain property access, and flagger-controlled traffic. In addition, due to the linear nature of the project, any needed lane closures would only affect one specific area of the project's alignment for a short period of time. Lastly, the project would be required to obtain encroachment permits from applicable jurisdictions for construction activities in the public ROW, with accompanying Traffic Control Plans and permit conditions. Therefore, the project would not have a cumulatively considerable contribution to the potentially significant cumulative impact related to construction traffic.

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4.6 Tribal Cultural Resources

This section identifies and evaluates the proposed project’s potential impacts to tribal cultural resources (TCRs) as defined in PRC Section 21074. The analysis in this section is based on the results of consultation with California Native American tribes conducted by Calleguas for the proposed project, as required by CEQA as amended by AB 52. This section is also based on information provided in the 2023 CRA and 2024 XPI/Phase II. The 2023 CRA and 2024 XPI/Phase II contain confidential cultural resources information and are, therefore, not available for public review. The reports can be provided to qualified cultural resource specialists upon request. Native American AB 52 consultation letters are provided in Appendix E of this Draft SEIR.

4.6.1 Regulatory Setting

4.6.1.1 State Regulations

Assembly Bill 52

AB 52 was approved on September 25, 2014. The act amended PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. The primary intent of AB 52 is to involve California Native American tribes early in the environmental review process and to establish a category of resources related to Native Americans, known as TCRs, that require consideration under CEQA. PRC Section 21074(a)(1) and (2) defines TCRs as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource that is determined to be a TCR by a lead agency, in its discretion and supported by substantial evidence. A TCR is further defined by PRC Section 20174(b) as a cultural landscape that meets the criteria of subdivision (a) to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. PRC Section 20174(c) provides that a historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

PRC Section 21080.3.1 requires that, within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency of projects within their geographic area of concern.¹ Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency’s formal notification and the lead agency must begin consultation within 30 days of receiving the tribe’s request for consultation.²

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of TCRs; the significance of the project’s impacts on the TCRs; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to

¹ PRC Section 21080.3.1(b) and (c)

² PRC Sections 21080.3.1(d) and 21080.3.1(e)

mitigate or avoid a significant effect, if a significant effect exists, on a TCR; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.³

In addition to other CEQA provisions, the lead agency may certify an EIR or adopt a MND for a project with a significant impact on an identified TCR, only if a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or requested consultation but failed to engage in the consultation process, or the consultation process occurred and was concluded as described above, or if the California Native American tribe did not request consultation within 30 days.⁴

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the TCRs, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Confidentiality does not apply to data or information that are, or become publicly available, already in lawful possession of the project applicant⁵ before the provision of the information by the California Native American tribe, are independently developed by the applicant or the applicant's agents or are lawfully obtained by the project applicant from a third party that is not the lead agency, a California Native American tribe, or another public agency.⁶

4.6.2 Tribal Cultural Resources Setting

4.6.2.1 *Ethnographic Setting*

The project alignment is situated on the boundaries of two Native American tribal territories identified by anthropologists in the early twentieth century from ethnographic accounts with Native American groups. The historically identified territories are occupied by the Fernandeño Tataviam and the Ventureño Chumash. While these boundaries are defined based on interviews with informants from the Hispanic Catholic Missions in the region, it is likely such boundaries were fluid and may have changed through time. Below are synopses of ethnographic data for each of these two Native American groups.

Fernandeño Tataviam

The Phase 4 project alignment lies in the traditional territory of the Fernandeño Tataviam (Tataviam) people. The Tataviam were not well documented by early ethnographers. John P. Harrington was a primary source ethnographer, who conducted interviews with Tataviam descendants in the early twentieth century (Johnson and Earle 1990). Today, researchers generally agree the Tataviam spoke an Uto-Aztecan language, most likely a Takic language (Hudson 1982). This language is now dead (Johnson and Earle 1990).

³ PRC Section 21080.3.2(b)

⁴ PRC Section 21082.3(d)(2) and (3)

⁵ The project applicant is the CEQA lead agency for this project

⁶ PRC Section 21082.3(c)(2)(B)

Tataviam territory included the upper Santa Clara River from Piru Creek eastward, extending over the Sawmill Mountains to the southwest edge of the Antelope Valley (King and Blackburn 1978). Their territory was bounded on the west and north by various Chumash groups, on the east by the Kitanemuk and Serrano, and on the south by the Tongva (Gabrieleño and Fernandeano, although some Tataviam were also identified as Fernandeano because of their association with Mission San Fernando). Environmentally, their lands consisted of sloped areas surrounded by desert (Stickel and Weinman-Roberts 1980). Dwellings were domed-thatch shelters under shady overhanging rocks that aided in cooling (Eargle 2008). Settlement size ranged from 10 to 200 persons, with small settlements often ancillary to large villages.

Archaeological evidence from Bower's Cave—located between Newhall and Piru—combined with ethnographic evidence suggest the Tataviam ritual organization was similar to both the Chumash and Gabrieliño, two groups whose lifestyles were distinct from one another. Rock art found in their traditional territory included representational and abstract pictographs, incised pictographs, petroglyphs, and cupules (Knight 2010).

The Tataviam were a hunting and gathering society. Acorns were a main food source and were ground into flour (Eargle 2008; Garza 2012). King and Blackburn (1978) hypothesize that, because of the predominance of large south-facing slopes in their territory, the Tataviam relied on yucca as a food source more than their neighbors. Additional food resources included sage seeds, berries, small mammals, deer, and possibly antelope.

Exogamous marriage was commonly practiced and Tataviam intermarried with Tongva, Chumash, and Kitanemuk neighbors (King and Blackburn 1978). Genealogical research suggests Tataviam individuals and families persisted into the twentieth century in other communities (Johnson and Earle 1990). Spanish missions developed in the area relatively early, with records of Tataviam baptisms as early as 1803. By 1810, the Tataviam were virtually completely missionized through baptism at Mission San Fernando (King and Blackburn 1978; Johnson and Earle 1990).

Ventureño Chumash

The Phase 3 and Phase 4 project alignment lies in the traditional territory of the Ventureño Chumash, a linguistically and culturally distinct Chumash group. The Chumash spoke six closely related Chumashan languages that have been divided into three branches—Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Golla 2007). The name “Ventureño Chumash” denotes the people who were administered by the Spanish from Mission San Buenaventura during the historic period. Their territory includes areas of present-day Santa Barbara and Ventura counties. Ventureño Chumash extensively occupied interior areas, which had creek corridors that provided intermittent or perennial fresh water sources. A series of trailways into these areas facilitated trade between coastal and other neighboring groups such as the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south (Roman 2017).

Early Spanish accounts from European-Native contact describe the Santa Barbara Channel as heavily populated. Estimates of the Chumash total population range from 8,000 to 10,000 (Kroeber 1925: 551) to 18,000 to 22,000 (Cook and Heizer 1965; Grant 1978a). Santa Cruz Island had at least six villages observed by Juan Rodríguez Cabrillo in 1542 (Johnson 1982). Typical house structures were large (up to 55 feet in diameter) and could accommodate 70 people (Kroeber 1925; Grant 1978b). The village of *šukuw* (or *shuku*) at Rincon Point was encountered by Gaspar de Portolá in 1769. This village had 60 houses and seven canoes, with an estimated population of 300 (Grant 1978b). Western coastal Chumash lived in hemispherical dwellings covered by interwoven grasses, such as

tule, carrizo grass, wild alfalfa, and fern (Grant 1978b). Other structures in a village included small sweatshouses and a large ceremonial chamber (Kroeber 1925: 557).

Ventureño Chumash groups were socially and religiously multifaceted (Gamble et al. 2001; Arnold and Green 2002). Historic Spanish period accounts suggest the overarching social structure to be patrilineal chiefdoms. These have been separated into three sub-chief categories: “Big Chief,” who lead groups of settlements; “Chief,” who was head of a single village; and “Lesser Chief,” who was subordinate to the others (Gamble et al. 2001). Social or economic status may also have been indicated through mortuary practices, although this is debated by archaeologists. Mourning rituals consisted of burials in cemeteries with grave goods, such as *Olivella* shell beads, and beads made from other local shells. Other recorded mortuary rituals included burying individuals in the floor of a residence and burning the deceased’s house and possessions (Gamble et al. 2001; Arnold and Green 2002).

Chumash exploited multiple subsistence strategies. The acorn was an especially important resource. It could be gathered, stored, ground into meal, or cooked into paste. Other seeds or fruits like pine nuts and wild cherries would be gathered and processed with a mortar. Hunting and fishing were also an important aspect of Chumash subsistence. Hunters would use a bow and arrow for land mammals like deer, coyote, and fox (Grant 1978b). Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets, hooks, and lines. Shellfish were gathered from beaches using digging sticks, and mussels and abalone were pried from rocks using wood or bone wedges (Johnson 1982). Other subsistence technology included skillet-like flat stones called *comals*, sandstone storage bowls, and wooden plates and bowls. Archaeological evidence suggests the Ventureño Chumash practiced lithic production of tools from quartzite, chalcedony, and chert in separate lithic workspaces near their occupation sites (Roman 2017). Woven baskets were also used for food storage and food preparation. Tightly woven baskets for holding or draining water were made with coiling or twining techniques (Grant 1978b).

The Chumash were heavily affected by the arrival of Europeans. The Spanish missions and later Mexican and American settlers dramatically altered traditional Chumash lifeways. The Chumash population was considerably reduced by the introduction of European diseases. However, many Chumash descendants still inhabit the region (Grant 1978a).

4.6.2.2 *Assembly Bill 52 Consultation*

Calleguas initiated AB 52 consultation on December 8, 2022, by sending letters via email with return receipt requested to the 20 Native American contacts from a total of 15 tribes identified by the NAHC. The emails sent to the Chumash Council of Bakersfield, Gabrielino-Tongva Tribe, the Pechanga Band of Indians, and the San Luis Obispo County Chumash Council were returned to sender; therefore, on December 19, 2022, Calleguas mailed certified letters to those four Native American tribes. Copies of the consultation letters sent to these tribes are included in Appendix E of this SEIR.

The Native American tribes that received letters via email and certified mail included the following:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Fernandeano Tataviam Band of Mission Indians
- Gabrieleño Band of Mission Indians – Kizh Nation

- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians
- Pechanga Band of Indians
- Rincon Band of Luiseño Indians
- San Fernando Band of Mission Indians

A project description and map were included in the letters, which stated that tribal contacts had 30 days from receipt of the letter to request, in writing, formal consultation under AB 52. The following summarizes the results of Native American consultation under AB 52. No additional requests for consultation were received.

Barbareño/Ventureño Band of Mission Indians

Although the Barbareño/Ventureño Band of Mission Indians did not formally request AB 52 consultation for the project, Calleguas considers the Tribe to be a consulting party under AB 52 given their monitoring participation during the XPI/Phase II investigation and subsequent testing results.

On June 19, 2023, a virtual meeting was held between former Cultural Resources Committee Chair Annette Ayala and Chairperson Matthew Vestuto of the Barbareño/Ventureño Band of Mission Indians, Calleguas staff, the County of Ventura, and Rincon Consultants. The NAHC previously identified the Barbareño/Ventureño Band of Mission Indians as the most-likely-descendant (MLD) and Ms. Ayala accepted the designation on behalf of the Tribe. During the meeting, Ms. Ayala appointed Chairperson Vestuto as the MLD point-of-contact.

On July 6, 2023, a second virtual meeting was held between Chairperson Vestuto, Calleguas staff, the County of Ventura, and Rincon Consultants. Chairperson Vestuto requested archaeological and Native American monitoring within the previously recorded boundaries of prehistoric archaeological resources CA-VEN-71, CA-VEN-214, and CA-VEN-339, as well as hand excavation within designated areas of CA-VEN-71 where cultural materials were recovered during the XPI/Phase II investigation.

On January 11, 2024, Calleguas sent a letter via email to Chairperson Vestuto summarizing the consultation efforts to date and the project's draft mitigation measures reflecting the coordination between Calleguas and the Barbareño/Ventureño Band of Mission Indians. Calleguas requested Chairperson Vestuto's review of the draft mitigation measures by January 26, 2024, to ensure input from the Barbareño/Ventureño Band of Mission Indians was received prior to finalizing the project's mitigation measures. The letter stated that if a response was not received by January 26, 2024, Calleguas assumed the draft mitigation measures were appropriate, the Tribe's comments and concerns had been addressed through prior communication with Calleguas, and consultation under AB 52 would be concluded. A response was not received from Chairperson Vestuto, and consultation between Calleguas and the Barbareño/Ventureño Band of Mission Indians was concluded.

Fernandeño Tataviam Band of Mission Indians

On December 16, 2022, a response was received from Sarah Brunzell of the Fernandeño Tataviam Band of Mission Indians via email. Ms. Brunzell requested formal consultation under AB 52 for the proposed project and stated the Tribe would like to review the SLF results and cultural resources report. On December 20, 2022, Calleguas responded via email and stated the cultural resources report was still in progress and Calleguas would provide the Tribe with a copy of the report once it had been finalized. Calleguas stated that the cultural report was anticipated to be completed by the end of January. On December 20, 2022, Ms. Brunzell replied via email and stated the Tribe would wait to review the final cultural resources report prior to scheduling a consultation meeting and providing tribal comments.

On January 17, 2023, Calleguas followed up with Ms. Brunzell via email regarding the status of the cultural resources report. Calleguas stated that further archaeological investigations were being conducted and the report would not be ready for review as anticipated. On January 18, 2023, Ms. Brunzell replied via email and thanked Calleguas for the update. On January 19, 2023, Calleguas replied via email and stated that they can provide any project description information while the cultural report was in progress. On January 20, 2023, Ms. Brunzell replied via email and stated the letter described the project well and she would wait to discuss the project more during consultation.

On October 19, 2023, Calleguas followed up with Ms. Brunzell via email to discuss the report preparation status, draft mitigation measures, and initiation of consultation with the Fernandeño Tataviam Band of Mission Indians. On October 20, 2023, Ms. Brunzell responded via email thanking Calleguas for the update and stated the Tribe would like to review the draft report and draft mitigation measures.

On January 11, 2024, Calleguas sent a follow up letter via email to the Fernandeño Tataviam Band of Mission Indians which included a summary of the consultation efforts to date, the Tribe's participation in the XPI investigation conducted within Phase 4, a copy of the 2024 XPI/Phase II which included the draft mitigation measures, and a request to schedule a consultation meeting.

On January 30, 2024, a virtual AB 52 consultation meeting was held between Calleguas and the Fernandeño Tataviam Band of Mission Indians. During the consultation meeting, Ms. Brunzell stated the Phase 4 alignment is located within a tribal territory buffer zone that is shared between the Fernandeño Tataviam Band of Mission Indians and the Barbareño/Ventureño Band of Mission Indians. Ms. Brunzell further stated that, given the findings of the archaeological investigation and previous consultation efforts between Calleguas and the Barbareño/Ventureño Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians defers the remainder of Phase 4 work to the Barbareño/Ventureño Band of Mission Indians. Future work within the Phase 4 alignment includes Native American monitoring during project construction within the previously recorded boundaries of CA-VEN-1123 and a 50-foot buffer surrounding it. In the event the Barbareño/Ventureño Band of Mission Indians elects not to monitor within CA-VEN-1123, Ms. Brunzell requested the Fernandeño Tataviam Band of Mission Indians be contacted to provide Native American monitoring services. Calleguas concurred with Ms. Brunzell's request and the meeting was adjourned.

On February 5, 2024, Calleguas sent a follow-up letter via email to the Fernandeño Tataviam Band of Mission Indians which summarized the AB 52 consultation meeting, acknowledged the Tribe's request for the Barbareño/Ventureño Band of Mission Indians to monitor within Phase 4 of the project, and confirmed Calleguas would contact the Fernandeño Tataviam Band of Mission Indians to provide Native American monitoring services in the event the Barbareño/Ventureño Band of

Mission Indians elects not to monitor within CA-VEN-1123. Calleguas thanked the Fernandeano Tataviam Band of Mission Indians for their participation and valuable contributions in the AB 52 consultation process and consultation between Calleguas and the Fernandeano Tataviam Band of Mission Indians was concluded. On February 5, 2024, Ms. Brunzell responded via email and stated the Cultural Resource Management Division of the Fernandeano Tataviam Band of Mission Indians was in agreement with concluding consultation pursuant to AB 52.

4.6.3 Impact Analysis

4.6.3.1 Significance Thresholds and Methodology

Significance Thresholds

In accordance with Appendix G of the CEQA Guidelines, a project would result in a significant impact related to TCRs if it would:

1. Cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Methodology

The presence and significance of a potential TCR is determined through consultation between lead agencies and local California Native American tribes. Impacts to TCRs are highly dependent on the nature of the resource but, in general, could occur if there is destruction or alteration of the resource and its surroundings, restricted access to the resource, or other disturbances. The following summarizes the results of the 2023 CRA and 2024 XPI/Phase II as they relate to the identification of potential TCRs.

Sacred Lands File Review

The NAHC is a Statewide Trustee Agency for the protection and preservation of Native American cultural resources pursuant to PRC Section 21070. The SLF search is a search of recorded Native American sacred sites and burial sites as defined by the NAHC and PRC Sections 55097.94(a) and 5097.96. As set forth in PRC Section 21074, TCRs are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

The following summarizes the results of a SLF search conducted by the NAHC for the proposed project. Rincon contacted the NAHC on September 26, 2022, to request a search of the SLF and an AB 52 list of tribal contacts culturally and traditionally affiliated with the project site. On October 17, 2022, the NAHC responded to Rincon's SLF request, stating the results of the SLF search returned negative results and provided a list of 20 tribal contacts who had requested notification of proposed

projects in the geographic area within which the tribe is traditionally and culturally affiliated. As noted above, all tribal representatives identified by the NAHC, as provided in Appendix E of this SEIR, were notified of the proposed project by Calleguas in compliance with AB 52.

California Historical Resources Information System Review

A cultural resources records search of the California Historical Resources Information System located at the South Central Coastal Information Center was conducted on October 25, 2022. The records search consisted of a review of recorded archaeological and built-environment resources, as well as a review of cultural resource reports on file. The search identified 51 previously recorded cultural resources within a 0.5-mile radius of the proposed project site. Of these resources, three previously recorded prehistoric archaeological resources (CA-VEN-071, CA-VEN-214 and CA-VEN-339) were identified within the Phase 3 alignment and one previously recorded prehistoric archaeological resource (CA-VEN-1123) was identified within the Phase 4 alignment. For additional information regarding these resources, refer to Section 4.3, *Cultural Resources*, of this SEIR.

Field Survey

Rincon conducted an archaeological field survey, consisting of both a pedestrian survey and a windshield survey, on November 21, 2022. The survey did not result in the identification of any surficial archaeological materials.

Extended Phase I/Phase II Investigation Tribal Involvement

Native American monitoring during the XPI/Phase II investigation within the Phase 3 alignment was conducted by Rick Barrios of the Barbareño/Ventureño Band of Mission Indians. Native American monitoring during the XPI investigation within the Phase 4 alignment was conducted by Adam Fregozo of the Fernandeño Tataviam Band of Mission Indians. A Phase II investigation was not conducted within the Phase 4 alignment area due to negative findings during the XPI. No TCRs, as defined in PRC Section 21074 or subdivision (c) of PRC Section 5024.1, were identified during the XPI/Phase II investigation. Human remains were identified within a disturbed context during the Phase II investigation. The discovery and notification procedures for the identification and treatment of human remains were conducted in accordance with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Consultation regarding treatment and reinterment of the remains was conducted between Calleguas and the MLD identified by the NAHC. Given the sensitivity, confidentiality, and heritage value, the specific nature of the remains will not be discussed further. For additional information regarding the XPI/Phase II investigation refer to Section 4.3, *Cultural Resources*, of this SEIR.

a. Project Impacts and Mitigation Measures

Threshold 1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact TCR-1 No known TCRs have been identified within the project site. The proposed project may cause a substantial adverse change in the significance of a previously unknown or unidentified TCR due to project construction activities. Mitigation Measure TCR-1 requires hand excavation and archaeological and Native American monitoring in designated culturally sensitive areas. Mitigation Measure TCR-2 requires the proper treatment of any previously unknown tribal cultural resources that may be unearthed during construction. Impacts would be less than significant with mitigation.

As of the date of this SEIR, no specific TCRs have been identified within the project site during the background research or AB 52 consultation process; however, given the general archaeological sensitivity of the area, project related ground-disturbing activities have the potential to encounter previously undiscovered cultural resources of Native American origin that could be considered TCRs. As a result, impacts to such resources during construction would be potentially significant.

Upon completion of construction activities, ground disturbing activities would cease, and project operation would not result in impacts to TCRs.

Mitigation Measures

TCR-1 Hand Excavation Within Culturally Sensitive Areas

Project-related ground disturbing activities shall be completed by hand, with hand tools, in two locations of the Phase 3 alignment. Hand excavation shall occur within a 20-foot buffer surrounding the two locations (i.e., 10 linear feet on either side of the point locations for a total buffer of 20 feet). If no intact archaeological deposits or no intact or previously disturbed human remains are identified during hand excavation within the 20-foot buffer areas, hand excavation shall not be required outside the buffer areas and mechanical excavation methods can be employed. However, if intact archaeological deposits or intact or previously disturbed human remains are identified during mechanical excavation outside of the designated hand excavation areas, then mechanical excavation methods shall cease and hand excavation methods shall be re-employed until soils void of archaeological materials are encountered for a distance of 10 feet. An archaeological monitor and Native American monitor from the Barbareño/Ventureño Band of Mission Indians shall be retained to observe all hand and mechanical excavation activities within this area, consistent with Mitigation Measure CUL-2.

In the event intact archaeological deposits are identified during hand or mechanical excavations, the procedures outlined in Mitigation Measures CUL-2 and CUL-3, as applicable, shall be followed. In the event human remains and/or associated grave goods are identified during hand or mechanical excavations, regardless of their context or condition, the State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98 shall be followed.

TCR-2 Unanticipated Discovery of Tribal Cultural Resources

In the event cultural resources of Native American origin are identified during project construction outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 in areas not monitored by an archaeological monitor and Native American monitor, all ground-disturbing activities in the vicinity of the find shall be temporarily suspended or redirected until an archaeological monitor and/or qualified archaeologist has evaluated the nature and significance of the find and an appropriate Native American monitor is consulted. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is a TCR and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with appropriate tribal representative(s). The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archaeologist, if applicable, and the appropriate Native American tribal representative. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is not a TCR, then Mitigation Measure CUL-2 shall be followed.

Significance After Mitigation

Implementation of Mitigation Measures TCR-1 and TCR-2 would reduce impacts to TCRs to a less-than-significant level by requiring hand excavation and archaeological and Native American monitoring be conducted within designated culturally sensitive areas, and measures are in place for the proper treatment of TCRs that may be inadvertently unearthed during project construction.

4.6.4 Cumulative Impacts

A project's environmental impacts are "cumulatively considerable" if the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines Section 15065[a][3]). TCRs have the potential to extend across project sites; therefore, the appropriate geographic scope for cumulative TCR impacts includes development projects adjacent to the project as well as within the surrounding region. Projects listed in Table 3-1 in Section 3, *Environmental Setting*, were considered during the analysis of cumulative impacts.

The proposed project, in conjunction with other nearby past, present, and reasonably foreseeable probable future projects in the region may have the potential to adversely impact TCRs. Cumulative development in the region would continue to disturb areas with the potential to contain TCRs. As discussed in Section 4.2, *Cultural Resources*, CEQA documentation for previous phases of the CRSMP (e.g., 2002 CRSMP Phase 1 EIR) acknowledged cumulative impacts to cultural resources are significant. Similarly, cumulative impacts to tribal cultural resources are also significant. However, with implementation of mitigation and adherence to existing regulations, the proposed project's impacts to tribal cultural resources would be less than significant and would not compound regional impacts to tribal cultural resources in conjunction with the cumulative projects listed in Table 3-1 in Section 3, *Environmental Setting*. Future projects would be similarly subject to existing regulations

intended to protect cultural resources, such as AB 52. As such, the project's incremental contributions to the significant cumulative impact would not be cumulatively considerable.

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5 Other CEQA Required Discussions

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 4.0, *Environmental Impact Analysis*. These additional issues include: the potential to induce population growth and/or economic expansion; establishment of a precedent-setting action; development or encroachment in an isolated or adjacent area of open space; removal of obstacles to growth; and significant and irreversible impacts on the environment.

5.1 Growth Inducement

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth itself does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. Generally speaking, a project may be considered growth-inducing if it results in one or more of the five conditions identified below:

1. Induces population growth
2. Induces economic expansion
3. Establishes a precedent-setting action (e.g., an innovation, a radical change in zoning or general plan designation)
4. Results in development or encroachment in an isolated or adjacent area of open space (i.e., being distinct from "infill" development)
5. Removes an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area)

A proposed project's growth-inducing potential is considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

The proposed project is a water infrastructure project that would improve water quality and water supply reliability in Ventura County. As discussed in Initial Study Section 14, *Population and Housing*, no direct growth would occur as a result of the project because it does not propose new homes, businesses, or other land uses that would generate population growth.

The project could indirectly generate population growth through the expansion of future water supplies. The proposed project would extend the CRSMP inland to connect to additional dischargers. The project would facilitate the treatment and use of local water supplies which are currently unusable due to brine concentrate discharge obstacles. As discussed in the 2014 SEIR for Phase 2 of the CRSMP, any additional water supply projects facilitated by the extended CRSMP would improve the reliability of local water supplies and reduce the region's reliance on imported supplies. As described in Calleguas' 2020 Urban Water Management Plan (UWMP), imported supplies from the State Water Project have become increasingly vulnerable, and the "continued support of local supply projects through the implementation and expansion of the SMP is anticipated to offset imported water demands" (Calleguas 2021). As such, the CRSMP is not intended to facilitate water

supply development for unplanned future population growth, but rather improve local supply reliability to offset imported water demands.

These local water supply projects have likely been identified already in planning documents such as UWMPs. For example, the Camrosa Water District's 2020 UWMP identifies a potential groundwater desalter project to treat for nitrates in the Santa Rosa Basin. If developed, the desalter would discharge brine from the treatment process to the CRSMP. According to the UWMP, the purpose of the desalter would be to improve water quality in the Santa Rosa Basin and increase Camrosa Water District's self-reliance (Camrosa Water District 2021). The proposed project would not induce substantial unplanned population growth, but would support local water agencies in meeting demand generated by the existing and planned population, activities, and land uses in the project area.

5.1.2 Economic Growth

Construction activities would utilize skilled and general workers from the existing regional workforce to fill temporary employment opportunities. Because construction workers would be expected to be drawn from the existing regional workforce, construction of the project would not be growth-inducing from a temporary employment standpoint. Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. The proposed project is not anticipated to require new permanent employees for operational and maintenance activities; however, any increase in job opportunities would be a negligible addition to the amount of long-term employment opportunities currently available in the project area. As a result, the proposed project would not induce substantial economic expansion such that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around the project area would be addressed as part of the CEQA environmental review for such development projects.

5.1.3 Precedent-Setting Action

The proposed project does not propose any General Plan or zoning amendments. As discussed in Initial Study Section 11, *Land Use and Planning*, the proposed project would be consistent with the land use and zoning designations of Camarillo, Thousand Oaks, Moorpark, Simi Valley, and Ventura County. Furthermore, the proposed project is a water infrastructure project that would improve water supply reliability and enable local water agencies to meet existing and planned water demands. As such, the project would not set a precedent that would result in new growth-inducing impacts in the area.

5.1.4 Development of Open Space/Vacant Land

Development of open space is considered growth-inducing when it occurs outside urban boundaries or in isolated locations instead of infill areas. The proposed project would be constructed primarily within public roadway right-of-way, and would not result in the development of open space or vacant land in isolated areas. The project would not induce growth at the periphery of developed areas within Camarillo, Thousand Oaks, Moorpark, Simi Valley, or Ventura County.

5.1.5 Removal of an Impediment to Growth

The proposed project is located in an area that is well-served by existing infrastructure. As previously discussed, the proposed project is not intended to facilitate water supply development to remove an impediment to unplanned future population growth, but rather is intended to improve local supply reliability to offset imported water demands. Accordingly, the proposed project would not remove existing obstacles to growth.

5.2 Significant Unavoidable Effects

CEQA Guidelines Section 15126(b) requires that an EIR identify those significant impacts that cannot be reduced to a less-than-significant level with the application of mitigation measures. As discussed in Section 4, *Environmental Impact Analysis*, most environmental impacts of the proposed project would be less than significant through implementation of mitigation measures. The proposed project would have a significant and unavoidable impact involving noise due to construction noise exceeding applicable nighttime thresholds. Although Mitigation Measure NOI-1 would reduce construction noise to the extent feasible, this impact would not be reduced to a less-than-significant level. However, this impact would be temporary and would cease upon the completion of project construction.

5.3 Significant Irreversible Environmental Effects

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes caused by the proposed project should it be implemented. Such significant irreversible environmental changes may include the following:

- Use of non-renewable resources during the initial and continued phases of the project that would be irreversible because a large commitment of such resources makes removal or non-use unlikely.
- Primary impacts and, particularly secondary impacts (such as highway improvements that provide access to a previously inaccessible area) that generally commit future generations to similar uses.
- Irreversible damage which may result from environmental accidents associated with the project.

Construction of the proposed project would require the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development projects in the region and are not unique to the project. Operation of the project would irreversibly increase local demand for non-renewable energy resources such as petroleum for vehicle fuels used during maintenance activities. It is not anticipated the proposed project would significantly affect local or regional energy supplies. Initial Study Section 5, *Energy*, includes a full analysis of potential impacts related to use of energy resources during construction and operation of the proposed project.

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6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this SEIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts. As discussed in Section 2, *Project Description*, the objectives for the proposed project are as follows:

- Enable both public and private water agencies to develop new water sources that at the present time cannot be widely used due to poor quality;
- Manage the use of high salinity groundwater and treated municipal wastewater; and
- Dispose of brine produced by enhanced water treatment.

Included in this analysis are three alternatives, including the CEQA-required “no project” alternative, involving changes to the project that may reduce the project-related environmental impacts as identified in this SEIR. Alternatives have been developed to provide a reasonable range of options for consideration to help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated in this SEIR:

- Alternative 1: No Project Alternative
- Alternative 2: Phase 3 Alternative Alignment
- Alternative 3: Phase 4 Alternative Alignment

The following sections describe each alternative pipeline alignment and identify potential environmental impacts associated with each.

6.1 Alternative 1: No Project Alternative

6.1.1 Description

Under the No Project Alternative, the proposed Phase 3 and Phase 4 extensions of the CRSMP would not be installed. No construction activities would occur, and the CRSMP would not be extended to connect to additional dischargers. CRSMP operations for previously installed pipeline segments would remain the same as under existing conditions.

6.1.2 Impact Analysis

No change in environmental conditions would occur under this alternative because no development would occur and site conditions would not change. This alternative would avoid the proposed project’s significant and unavoidable construction noise impacts related to nighttime noise generation, and significant but mitigable impacts in the areas of biological resources, cultural resources, geology and soils, and tribal cultural resources. No significant impacts would occur under this alternative, and none of the mitigation measures recommended for the proposed project would apply.

Overall, this alternative's environmental impacts would be less than those of the proposed project. However, the No Project Alternative would not fulfill any project objectives, as the CRSMP would not be extended to allow for the development of new water sources, management of high salinity groundwater and recycled water, and brine disposal. The No Project Alternative would not result in the project's beneficial impacts of improving water quality and water supply reliability.

6.2 Alternative 2: Phase 3 Alternative Alignment

6.2.1 Description

Alternative 2 would be generally similar to the proposed project and would retain the same alignment on Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. However, whereas the proposed project Phase 3 alignment would be located within the public right-of-way on Upland Road, under Alternative 2, a 0.5-mile portion of the Phase 3 alignment along Upland Road would be located north of and generally parallel to Upland Road instead. This alternative alignment would traverse the edge of a residential neighborhood, a grass field at St. John's Seminary, Calleguas Creek, and private agricultural land at the corner of Upland Road and Somis Road. In comparison to the proposed project, which would cross Calleguas Creek via a utility cell in Upland Road, Alternative 2 would cross under Calleguas Creek via an 800-foot trenchless casing. Under Alternative 2, operation and maintenance activities would be the same as for the proposed project. Figure 6-1 presents the Alternative 2 alignment in comparison to the proposed project's alignment, where the two alignments differ in location.

Alternative 2 would reduce construction-related impacts on Upland Road as compared to the proposed project. However, whereas the proposed project alignment follows previously disturbed, paved roadways, Alternative 2 would traverse undeveloped areas. As a result, Alternative 2 may result in increased impacts to biological resources, cultural resources, and tribal cultural resources. In addition, the Alternative 2 alignment would skirt the edge of a residential neighborhood, which would require construction activities to occur in close proximity to residences. Air quality and noise impacts would be increased in comparison to the proposed project.

Figure 6-1 Alternative 2 (Phase 3 Alternative Alignment) Location



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EPS Proj, Regional, Phase 3 Locn Fig X Alternative 2

6.2.2 Impact Analysis

a. Biological Resources

Due to the location of this alternative in Calleguas Creek and its vegetated banks, Alternative 2 would have increased impacts to biological resources. As discussed in Appendix C, the least Bell's vireo is a federally and state-listed special-status species with the potential to occur in riparian areas such as Calleguas Creek. Additionally, depending on design and engineering feasibility, construction work areas associated with this alternative could be located in jurisdictional areas and result in potential impacts to jurisdictional features. Similar to the proposed project, implementation of Mitigation Measures BIO-1 through BIO-3 would reduce impacts to special-status species, and implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts to sensitive habitats and jurisdictional features. Alternative 2 would also incorporate BMPs from the project's SWPPP, which would further minimize project impacts to special-status species, sensitive habitats, jurisdictional features, and wildlife movement. Should impacts to protected trees occur, implementation of Mitigation Measure BIO-4 would reduce impacts to a less-than-significant level, as for the proposed project. Overall impacts to biological resources would be greater under Alternative 2 when compared to the proposed project, but would remain less than significant after implementation of mitigation.

b. Cultural Resources

Project construction would involve excavation and ground-disturbing activities, which could potentially impact archaeological resources and human remains. Similar to the proposed project, implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3 would reduce impacts to archaeological resources and human remains. However, Alternative 2 would route the alignment through areas that are not previously disturbed, whereas the proposed project would route the alignment through previously disturbed and paved roadways. When compared to the proposed project, Alternative 2 would have a greater impact to cultural resources, which would be less than significant with mitigation incorporated.

c. Geology and Soils

Project construction would involve excavation and ground-disturbing activities, which could result in potential impacts to paleontological resources located in sediment underneath the Alternative 2 alignment. As indicated by Figure 4.3-1 in Section 4.3, *Geology and Soils*, the Upland Road alignment of the proposed project overlies soils with high paleontological sensitivity, such as the Saugus Formation. Alternative 2 would be located north of Upland Road, however, according to geologic unit mapping data, construction of the Alternative 2 alignment would occur in similarly sensitive formations as the proposed project. Furthermore, unlike the proposed project alignment in Upland Road, the Alternative 2 alignment is primarily undisturbed. Similar to the proposed project, implementation of Mitigation Measure GEO-1 would reduce impacts to paleontological resources. Alternative 2 would have a similar level of impact to paleontological resources as the proposed project, and this impact would be less than significant with mitigation incorporated.

d. Noise

This section of the alignment would be located in direct proximity to residences on the north side of Upland Road and would increase construction noise experienced at these residences. However, the

Alternative 2 pipeline would be located in the same alignment as the proposed project along Santa Rosa Road and Tierra Rejada Road and would produce the same level of noise experienced at sensitive receptors, including residences and the Santa Rosa Technology Magnet School, as the proposed project. Similar to the proposed project, implementation of Mitigation Measure NOI-1 would reduce construction noise levels. When compared to the proposed project, Alternative 2 would result in a significant and unavoidable impact regarding construction noise, and this impact would be greater than the proposed project due to the reduced distance between the Alternative 2 alignment and sensitive receptors along Upland Road.

e. Transportation

Under Alternative 2, pipeline installation would no longer occur throughout Upland Road, which would reduce disruption to the existing circulation system as pipeline installation would occur on Upland Road to a lesser extent than under the proposed project. Alternative 2 would result in lesser transportation-related impacts during project construction on Upland Road. As the Alternative 2 alignment continues east, it would be located within the same alignment as the proposed project and would result in the same transportation impacts along Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road as the proposed project. Similar to the proposed project, Alternative 2 would implement Mitigation Measure TRA-1, which would require preparation of a TMP. Alternative 2 would have a less than significant impact to transportation, which would be slightly lesser than the proposed project.

f. Tribal Cultural Resources

Project construction would involve excavation and ground-disturbing activities, which could potentially impact tribal cultural resources. Similar to the proposed project, implementation of Mitigation Measures TCR-1 and TCR-2 would reduce impacts to tribal cultural resources. However, Alternative 2 would route the alignment through areas that are not previously disturbed, whereas the proposed project would route the alignment through previously disturbed and paved roadways. When compared to the proposed project, Alternative 2 would have a greater impact to tribal cultural resources, which would be less than significant with mitigation incorporated.

6.3 Alternative 3: Phase 4 Alternative Alignment

6.3.1 Description

Alternative 3 would be generally similar to the proposed project and would retain the same alignment on Upland Road, Santa Rosa Road, Moorpark Road, and Read Road. Whereas Phase 4 of the proposed alignment would extend north from Sunset Valley Road to Tierra Rejada Road and then east to cross over SR 23 within Tierra Rejada Road, Alternative 3 would involve a trenchless crossing under SR 23. Under Alternative 3, this portion of the Phase 4 alignment would exit the public ROW from Sunset Valley Road, then the alignment would turn east to follow Arroyo Santa Rosa, cross under SR 23 via a trenchless casing, and then travel northward up an agricultural dirt access road to Tierra Rejada Road. The eastern portion of the Alternative 3 alignment would then be the same as the proposed project's Phase 4 alignment along Tierra Rejada Road. Under Alternative 3, operation and maintenance activities would be the same as for the proposed project. Figure 6-2 presents the Alternative 3 alignment in comparison to the proposed project's alignment, where the two alignments differ in location.

Figure 6-2 Alternative 3 (Phase 4 Alternative Alignment) Location



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EPS Proj, Regional, Phase 3 Loc1
Fig X Alternative 3

Alternative 3 would fulfill the project objectives. This alternative would reduce transportation impacts on Tierra Rejada Road, but would result in increased impacts to agricultural land and biological resources, given the reconfiguration of the Phase 4 alignment through agricultural land east of Sunset Valley Road and south of Tierra Rejada Road.

6.3.2 Impact Analysis

a. Biological Resources

Alternative 3 would have similar impacts to special-status species as the proposed project. As discussed in Appendix C, special-status species are not likely to be present in the agricultural areas in which this alternative would be located. However, depending on design and engineering feasibility, construction work areas associated with this alternative could be located in jurisdictional areas and result in potential impacts to jurisdictional features. Similar to the proposed project, implementation of Mitigation Measures BIO-1 through BIO-3 would reduce impacts to special-status species, and implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts to sensitive habitats and jurisdictional features. Alternative 3 would also incorporate BMPs from the project's SWPPP, which would further minimize project impacts to special-status species, sensitive habitats, jurisdictional features, and wildlife movement. Should impacts to protected trees occur, implementation of Mitigation Measure BIO-4 would reduce impacts to a less-than-significant level, similar to the proposed project. Overall, impacts to biological resources would be greater under Alternative 3 when compared to the proposed project, but would remain less than significant with implementation of mitigation.

b. Cultural Resources

Project construction would involve excavation and ground-disturbing activities, which could potentially impact archaeological resources and human remains. Similar to the proposed project, implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3 would reduce impacts to archaeological resources and human remains. When compared to the proposed project, Alternative 3 would have a similar impact to cultural resources, which would be less than significant with mitigation incorporated.

c. Geology and Soils

Project construction would involve excavation and ground-disturbing activities, which could potentially impact paleontological resources located in geologic formations underneath the Alternative 3 alignment. As indicated by Figure 4.3-1 in Section 4.3, *Geology and Soils*, the Tierra Rejada Road alignment of the proposed project overlies soils with high paleontological sensitivity, including the Topanga Formation. Alternative 3 would be located south of Tierra Rejada Road, however, according to geologic unit mapping data, construction of the Alternative 3 alignment would occur in similarly sensitive formations as the proposed project. Similar to the proposed project, implementation of Mitigation Measure GEO-1 would reduce impacts to paleontological resources. Alternative 3 would have a similar level of impact to paleontological resources as the proposed project, and this impact would be less than significant with mitigation incorporated.

d. Noise

This section of the alignment would be located further from sensitive receptors located in proximity to Tierra Rejada Road in Moorpark than the proposed alignment, and would reduce construction noise experienced at these residences. However, the Alternative 3 pipeline would be located in the same alignment as the proposed project along Santa Rosa Road and Tierra Rejada Road (in Simi Valley) and would produce the same level of noise experienced at sensitive receptors along these roads, including residences and the Santa Rosa Technology Magnet School, as the proposed project. Additionally, this alternative would be located next to the Tierra Rejada Equestrian Center and noise impacts on horses could be a potential issue. Similar to the proposed project, implementation of Mitigation Measure NOI-1 would reduce construction noise levels. When compared to the proposed project, Alternative 3 would result in a significant and unavoidable impact regarding construction noise, and this impact would be slightly lesser than the proposed project due to the increased distance between the Alternative 3 alignment and sensitive receptors by Tierra Rejada Road in Moorpark.

e. Transportation

Under Alternative 3, pipeline installation would no longer occur throughout Sunset Valley Road and Tierra Rejada Road, which would reduce disruption to the existing circulation system as pipeline installation would occur on these roadways to a lesser extent than the proposed project. Alternative 3 would result in lesser transportation-related impacts during project construction on Sunset Valley Road and Tierra Rejada Road; however, Alternative 3 would introduce impacts to private agricultural roads. Other than this segment of alignment, the Alternative 3 pipeline would have the same alignment and would thus result in the same transportation impacts along Upland Road, Santa Rosa Road, Moorpark Road, Read Road, and Tierra Rejada Road (in Simi Valley) as the proposed project. Similar to the proposed project, Alternative 3 would implement Mitigation Measure TRA-1, which would require preparation of a TMP. Alternative 3 would have a less than significant impact to transportation, which would be slightly lesser than the proposed project.

f. Tribal Cultural Resources

Project construction would involve excavation and ground-disturbing activities, which could potentially impact tribal cultural resources. Similar to the proposed project, implementation of Mitigation Measures TCR-1 and TCR-2 would reduce impacts to tribal cultural resources. When compared to the proposed project, Alternative 3 would have a similar impact to tribal cultural resources, which would be less than significant with mitigation incorporated.

6.4 Alternatives Considered but Rejected

In addition to potential alternative pipeline alignments, the 2002 Final EIR for the CRSMP analyzed a range of alternative brine disposal methods, including injection wells, local concentration and evaporation ponds, wetlands enhancement, and instream disposal. All alternative brine disposal methods were deemed infeasible and/or did not meet the project objectives. As such, these alternatives are not discussed further in this SEIR.

A “no nighttime construction” alternative was not analyzed in this SEIR because it was deemed infeasible from a permitting perspective. Nighttime work may be required by encroachment permitting agencies to minimize traffic congestion. As such, this alternative is not discussed herein.

6.5 Environmentally Superior Alternative

Table 6-1 indicates whether each alternative's environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied. Based on the alternatives analysis provided above, the No Project Alternative would be the environmentally superior alternative as it would eliminate all significant and unavoidable impacts of the project. However, the No Project Alternative would not meet any project objectives. Therefore, the proposed project would be the environmentally superior alternative, as it would meet all project objectives, result in lesser impacts to biological resources than Alternatives 2 and 3, result in lesser impacts to cultural resources and tribal cultural resources than Alternative 2, and result in generally the same, or slightly greater, impacts to other environmental issue areas.

Alternative 1 (No Project Alternative) assumes that the proposed Phase 3 and Phase 4 alignments of the CRSMP would not be constructed. Current uses on the project alignment include public roadway rights-of-way, and private agricultural land where the alignment would cross north of Upland Road. Under this alternative, there would be reduced impacts to biological resources, cultural resources, geology and soils, noise, transportation, and tribal cultural resources when compared to the proposed project.

Alternative 2 (Phase 3 Alternative Alignment) would involve construction of the western portion of the Phase 3 alignment through Calleguas Creek and private agricultural property located north of Upland Road. The Alternative 2 pipeline alignment would be the same as the proposed project's alignment along Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Alternative 2 would result in increased impacts to biological resources, cultural resources, noise, and tribal cultural resources, and decreased impacts to transportation when compared to the proposed project. Overall, Alternative 2 would not eliminate any significant and unavoidable impacts of the proposed project, and would fulfill project objectives to the same extent as the proposed project. Alternative 2 would not be the environmentally superior alternative as it would increase impacts to biological resources, including special-status species, sensitive habitat, and jurisdictional features; increase impacts to cultural resources and tribal cultural resources; and increase noise levels at sensitive receptors at Upland Road.

Alternative 3 (Phase 4 Alternative Alignment) would involve construction of the central portion of the Phase 4 alignment to the west of Sunset Valley Road and south of Tierra Rejada Road, adjacent to Arroyo Santa Rosa and within agricultural dirt access roads. The Alternative 3 pipeline alignment would be the same as the proposed project's alignment along Upland Road, Santa Rosa Road, Moorpark Road, Read Road, and Tierra Rejada Road (in Simi Valley). Alternative 3 would result in increased impacts to agricultural lands and biological resources, and decreased impacts to noise and transportation when compared to the proposed project. Overall, Alternative 3 would not eliminate any significant and unavoidable impacts of the proposed project, and would fulfill project objectives to the same extent as the proposed project. Alternative 3 would not be the environmentally superior alternative as it would increase impacts to biological resources and agricultural lands.

Table 6-1 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project Alternative	Alternative 2: Phase 3 Alternative Alignment	Alternative 3: Phase 4 Alternative Alignment
Aesthetics	Less than Significant	+	=	=
Agriculture and Forestry Resources	Less than Significant	+	-	-
Air Quality	Less than Significant	+	=	=
Biological Resources	Less than Significant with Mitigation Incorporated	+	-	-
Cultural Resources	Less than Significant with Mitigation Incorporated	+	-	=
Energy	Less than Significant	+	=	=
Geology and Soils	Less than Significant with Mitigation Incorporated	+	=	=
Greenhouse Gas Emissions	Less than Significant	+	=	=
Hazards and Hazardous Materials	Less than Significant	+	=	=
Hydrology and Water Quality	Less than Significant	+	=	=
Land Use and Planning	Less than Significant	+	=	=
Mineral Resources	Less than Significant	+	=	=
Noise	Significant and Unavoidable	+	+	+
Population and Housing	Less than Significant	+	=	=
Public Services	Less than Significant	+	=	=
Recreation	Less than Significant	+	=	=
Transportation	Less than Significant with Mitigation Incorporated	+	+	+
Tribal Cultural Resources	Less than Significant with Mitigation Incorporated	+	-	=
Utilities and Service Systems	Less than Significant	+	=	=
Wildfire	Less than Significant	+	=	=

+ Superior to the proposed project (reduced level of impact)
- Inferior to the proposed project (increased level of impact)
= Similar level of impact to the proposed project

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7.2 List of Preparers

This SEIR was prepared by Calleguas Municipal Water District, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the SEIR are listed below.

Rincon Consultants, Inc.

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Responses to Comments on the Draft SEIR

Responses to Comments on the Draft SEIR

This section includes comments received during public circulation of the Draft Subsequent Environmental Impact Report (SEIR) prepared for the Calleguas Regional Salinity Management Pipeline, Phases 3 and 4 Project (project).

The Draft SEIR was circulated for a 45-day public review period that began on May 13, 2024 and ended on June 27, 2024. Calleguas Municipal Water District received two comment letters on the Draft SEIR. The commenters and the page number on which each commenter's letter appears are listed below.

Letter No. and Commenter	Page No.
1 Anthony Higgins, California Department of Transportation	2
2 Ariel Bicular, Ventura County Public Works Agency – Roads and Transportation Department	5

The comment letters and responses follow. The comment letters are numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in Comment Letter 1).

These comments do not necessitate revisions to the Draft SEIR text.

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
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*Making Conservation
a California Way of Life*

June 12, 2024

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360

RE: Calleguas Regional Salinity Management
Pipeline Phase 3 and 4
SCH # 2023020421
Vic. LA-23 & LA-34
GTS # VEN-2023-00596-DSEIR

Dear Jennifer Lancaster:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced environmental document. The proposed project would install an underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials. The proposed project would involve the installation of 14.4 miles of underground pipeline within public ROW.

1.1

Caltrans is responsible for implementing state-level policies and standards for highways under its jurisdiction. It issues permits for vehicles or loads exceeding the California Vehicle Code's maximum size or weight limits. The proposed project requires construction within the roadway ROW for pipeline installation, necessitating an Encroachment Permit from Caltrans for work on SR 34/Lewis Road (Phase 3) and the SR 23 crossing (Phase 4). Please be reminded that any work performed within the State Right-of-way will require an Encroachment Permit from Caltrans. Any modifications to State facilities must meet all mandatory design standard and specifications.

1.2

The project construction would require a total of approximately 6,400 vehicle trips across the construction period. When averaged over the duration of the construction period (766 days), project construction would result in approximately 8.3 vehicle trips per day. Construction management plan would be needed for this project on the State intersections.

1.3

“Provide a safe and reliable transportation network that serves all people and respects the environment.”

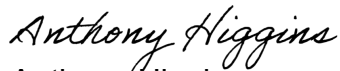
Jennifer Lancaster
June 12, 2024
Page 2 of 2

As a reminder, any transportation of heavy construction equipment and/or materials which require use of oversized transport vehicles on State highways will need a Caltrans transportation permit. We recommend large-size truck trips be limited to off-peak commute periods. Truck drivers should cover construction trucks with tarpaulin to avoid debris spillage onto the State Highway.

1.4

If you have any questions, please feel free to contact Mr. Alan Lin, the project coordinator, at (213) 269-1124 and refer to GTS # VEN-2023-00596AL-DSEIR.

Sincerely,



Anthony Higgins
Acting LDR Branch Chief

Cc: State Clearinghouse

Letter 1

COMMENTER: Anthony Higgins, California Department of Transportation

DATE: June 12, 2024

Response 1.1

The commenter expresses appreciation for their inclusion in the environmental review process, and provides a summary of the proposed project. This comment does not warrant changes to the Draft SEIR.

Response 1.2

The commenter requests Calleguas obtain an encroachment permit from Caltrans prior to project-related construction within SR 34/Lewis Road and the SR 23 crossing. As identified in Section 2.9, *Required Approvals*, of the Draft SEIR, Calleguas would obtain necessary permits, including the requested encroachment permit from Caltrans, prior to project construction. This comment does not warrant changes to the Draft SEIR.

Response 1.3

The commenter states Calleguas will need to prepare a construction management plan for this project at State-owned intersections. Calleguas would be responsible for preparing and submitting Traffic Control Plans, which will include construction management plans, to accompany permit applications, including the encroachment permit from Caltrans. This comment does not warrant changes to the Draft SEIR.

Response 1.4

Deliveries of equipment and materials to and from the project site would comply with all applicable rules and regulations. If use of oversized-transport vehicles is needed as part of project activities, the required Caltrans permit would be obtained. This comment does not warrant changes to the Draft SEIR.



COUNTY of VENTURA

David Sasek
Interim Agency Director

David Fleisch
Assistant Director

Central Services
Joan Araujo, Director

Engineering Services
James O'Tousa, Director

Roads & Transportation
Anitha Balan, Director

Water & Sanitation
Vacant, Director

Watershed Protection
Vacant, Director

Date: June 21, 2024

To: Calleguas Municipal Water District ^{Ben} ✓

From: Ventura County Public Works Roads and Transportation

Subject: REVIEW OF THE NOTICE OF AVAILABILITY OF A DRAFT SEIR AND FOR CALLEGUAS REGIONAL SALINITY MANAGEMENT PIPELINE, PHASES 3 AND 4; COUNTY OF VENTURA RMA #23-003-1

Pursuant to your request, the Public Works Agency – Roads and Transportation Department has reviewed the Notice of Preparation that was received June 6, 2024.

2.1

The proposed project involves installation of a pipeline and associated improvements in County-maintained streets.

We offer the following comments:

1. According to County policy, trenching shall not be permitted on any street that was rehabilitated within the last five years, unless a full width pavement improvement is provided after trenching is completed. Please be aware that Moorpark Road, (from Santa Rosa Road to Read Road), Read Road (from Moorpark Road to Sunset Valley Road), and Sunset Valley Road (from Read Road to Tierra Rejada Road) are listed in the County's 2024 to 2028 Multi-Year Pavement Plan as a Priority 1 (out of 5) projects. In addition, the Santa Rosa Road Bike Lane and Pedestrian Improvement project (from Yucca Drive to Moorpark Road) is scheduled for implementation in July 2024. These roads were identified in the report as locations for the pipeline alignment project. Please contact the County during your design for information regarding what type, and the extent, of pavement treatment will be necessary with your project.

2.2

The succeeding comments were provided in the Notice of Preparation of EIR letter, dated February 27, 2023, are included to reiterate.



- | | |
|--|-----|
| 2. The Water District shall repair any damage to County roads due to trenching and the traffic generated by this project up to and including providing a new overlay as determined by the Ventura County Public Works Agency-Roads and Transportation Department (“Transportation Department”). The overlay shall be done in accordance with the County of Ventura, Public Works Agency, Road Standards, in particular Plate E-11. | 2.3 |
| 3. Prior to any work conducted within the County right-of-way, the Water District shall obtain an encroachment permit from the Transportation Department. The applicant shall contact (805) 654-2055 for the requirements of this permit. | 2.4 |
| 4. The Water District must provide a Traffic Management Plan (TMP) to identify the construction-related vehicle route, especially for trucks, if there are any. The TMP must be submitted to the Transportation Department for review and approval. If the applicant uses the County roads for truck and construction related trips, proper precautions shall be taken to protect all pavements, curb and gutter, sidewalks, and drainage structures from damage. Any portion damaged by the project's operations, in the opinion of the Transportation Department or designee, shall be replaced in accordance with current Standard Construction Details and/or in a manner acceptable to the Transportation Department or designee. | 2.5 |
| 5. The proposed project would require construction in local roadways, including temporary closures of traffic lanes. Construction would cause driver inconvenience and could occur in proximity to homes, therefore, construction activity is recommended to take place during off-peak hours. | 2.6 |

Our review is limited to the impacts this project may have on the County’s Regional Road Network. If you have any questions, please contact Ariel Bicular at 805-477-1911, or by email at Ariel.Bicular@ventura.org.

Letter 2

COMMENTER: Ariel Bicular, Ventura County Public Works Agency – Roads and Transportation Department

DATE: June 21, 2024

Response 2.1

The commenter notes that the Ventura County Public Works Agency – Roads and Transportation Department has reviewed the CEQA notice for the proposed project, and the commenter provides a summary of the proposed project's activities and location. This comment does not warrant changes to the Draft SEIR.

Response 2.2

The commenter notes trenching shall not occur on any street that was rehabilitated within the last five years, unless a full width pavement improvement is provided after trenching. The commenter states that Moorpark Road, Read Road, Sunset Valley Road, and Santa Rosa Road are currently included in County plans for rehabilitation. The commenter requests Calleguas contact the County during design to determine the type and extent of pavement treatment necessary.

Calleguas would provide full width pavement improvement after trenching activities on Moorpark Road, Read Road, Sunset Valley Road, and Santa Rosa Road, as needed. Calleguas would coordinate with the County to determine the type and extent of pavement treatment, as requested. This comment does not warrant changes to the Draft SEIR.

Response 2.3

The commenter requests that Calleguas repair any damage to County roads due to project-related trenching and traffic. Per Calleguas' standard Contract Documents, precautions would be taken to protect the roadway facilities and to repair any damage caused by the construction of the proposed project. Should damage to County roads occur due to project activities, Calleguas would repair such damage in accordance with the County's Road Standards. This comment does not warrant changes to the Draft SEIR.

Response 2.4

The commenter requests Calleguas obtain an encroachment permit from the County Transportation Department prior to project-related construction within the County right-of-way. As identified in Section 2.9, *Required Approvals*, of the Draft SEIR, Calleguas would obtain necessary permits, including the requested encroachment permit from the County Transportation Department, prior to project construction. This comment does not warrant changes to the Draft SEIR.

Response 2.5

The commenter states Calleguas should provide a Traffic Management Plan to identify the construction-related vehicle route, and should submit this plan to the County's Transportation Department for review and approval. The commenter notes Calleguas should take proper precautions to protect roadway features from damage, and states that any damaged features should be replaced. Per Calleguas' standard Contract Documents, precautions would be taken to

protect the roadway facilities and to repair any damage caused by the construction of the proposed project. Additionally, Calleguas would be responsible for preparing and submitting Traffic Control Plans to accompany permit applications, including the encroachment permit from the County of Ventura Transportation Department. This comment does not warrant changes to the Draft SEIR.

Response 2.6

The commenter recommends project-related construction to occur during off-peak hours. Calleguas would obtain encroachment permits from both Caltrans and the County of Ventura Transportation Department, and would avoid construction during peak hours as feasible. This comment does not warrant changes to the Draft SEIR.

Revisions to the Draft SEIR

Revisions to the Draft SEIR

This chapter presents specific text changes made to the Draft SEIR since its publication and public review. The changes are presented in the order in which they appear in the original Draft SEIR and are identified by the Draft SEIR page number. Text deletions are shown in ~~striketrough~~, and text additions are shown in underline. The information contained within this chapter clarifies and expands on information in the Draft SEIR and does not constitute “significant new information” requiring recirculation. (See Public Resources Code Section 21092.1; CEQA Guidelines Section 15088.5.)

Project Description

Page 2-4

Phases 3 and 4 would connect additional dischargers to the CRSMP. Phase 3 would include construction of a discharge station near the intersection of Santa Rosa Road and Hill Canyon Road in unincorporated Ventura County for a future CRSMP customer. This facility would consist of a flow meter located inside a subterranean vault, control cabinet, and associated appurtenances. Discharges from ~~these phases~~ both Phases 3 and 4, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the ocean outfall.

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Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures and best management practices during the project implementation phase. For each mitigation measure or best management practice recommended in the Final Subsequent Environmental Impact Report (Final SEIR), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

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Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Aesthetics						
Best Management Practice: Nighttime Construction Lighting						
In the event nighttime construction lighting is needed, the lighting would be directed downwards towards construction activities and would be shielded so as to minimize visibility from adjacent land uses.	Within the project's Contract Documents, include requirements for nighttime construction lighting to be directed downwards and shielded.	Prior to start of construction	Once			
	Confirm lighting is directed downwards and shielded.	During construction	Ongoing			
Air Quality						
Best Management Practice: Protection of Air Quality						
Dust control would be conducted during ground-disturbing activities using an approved method such as water application, no substantial ground-disturbing activities would be conducted during periods of high winds, on-site construction vehicles would not travel at speeds greater than 15 miles per hour in unpaved areas, and trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard.	Within the project's Contract Documents, include requirements for water application during ground-disturbing activities; prohibition of ground-disturbing activities during periods of high wind; speed limits for construction vehicles in unpaved areas; and freeboard requirements and covering of earth-transporting trucks to and from the project site.	Prior to start of construction	Once			
	Confirm dust control requirements are implemented.	During construction	Ongoing			
Biological Resources						
BIO-1. Biological and Environmental Awareness Training (BEAT) Program						
<p>Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist to assist workers in recognizing special-status biological resources which may occur in the project area. The specifics of the BEAT Program shall include information about nesting birds and identification of special-status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under the SWPPP. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project.</p> <p>All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist.</p> <p>The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program, if required for this project. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs will be explicitly addressed.</p>	Retain a qualified biologist to conduct a Biological and Environmental Awareness Training Program. Ensure all employees working at the project site participate in the program.	Prior to and during construction, if new personnel are added.	Once and as needed			
	Ensure guidelines are followed during construction.	During construction	Ongoing			
BIO-2. General Best Management Practices for Biological Resources						
<p>To avoid and/or minimize potential direct and indirect impacts to special-status species and potentially jurisdictional waters and water quality, the following BMPs shall be implemented. The proposed project will be phased and construction is anticipated to be conducted in a linear fashion along the alignment; thus BMPs shall be implemented as necessary along the alignment ahead of or during anticipated construction.</p> <ul style="list-style-type: none"> ▪ No native vegetation with a diameter at breast height (DBH) of more than 4 inches shall be removed or damaged without approval by Calleguas. ▪ Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable. ▪ Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles. ▪ A speed limit of 15 miles per hour for construction vehicles shall be implemented on unpaved roads adjacent to native vegetation and potentially jurisdictional waters. ▪ All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site. ▪ No project construction, activities, and equipment staging shall occur within the bed or banks of Calleguas Creek. No vegetation shall be removed from the channel, bed, or banks of Calleguas Creek. 	Include general biological resources best management practice requirements in the construction contract.	Prior to construction	Once			
	Ensure best management practices are implemented during construction.	During construction	Ongoing			

Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<ul style="list-style-type: none"> ▪ Excavated material from trenching along any potentially jurisdictional feature shall be side cast away to prevent sediment deposition within the feature. ▪ All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality. ▪ All night-time lighting shall be shielded and downcast to avoid potential impacts to wildlife migration. ▪ No pets shall be allowed on the project site. ▪ If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas. ▪ While encounters with special-status species are not likely or anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction superintendent or biological monitor. The construction superintendent or biological monitor shall immediately notify Calleguas. ▪ Before starting or moving construction vehicles, especially after a few days of non-operation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area. 						
BIO-3. Protection of Nesting Birds						
<p>Project-related activities shall occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season and will impact potentially suitable nesting habitat (i.e., natural/ornamental habitats), then no more than seven days prior to initiation of ground-disturbing activities (including, but not limited to vegetation removal, site preparation, grading, excavation, and trenching) within the project site, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-foot for potential raptor nesting habitat), where accessible and public. The proposed project will be phased and construction is anticipated to be conducted in a linear fashion along the alignment; thus pre-construction nesting bird surveys shall be completed as necessary along the alignment (i.e., rolling surveys) ahead of anticipated construction. Surveys shall be completed no more than seven days before anticipated construction activities.</p> <p>Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to Calleguas.</p> <p>If no nesting birds are observed during pre-construction surveys, no further actions are necessary. If nests are found, an appropriate avoidance buffer ranging in size from 25 to 300 feet for passerines, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable material and/or via a digital mapping medium. Modifications to the buffer size shall occur only in consultation with the qualified biologist. Active nests shall be monitored at a minimum of once per week while construction is occurring until it has been determined the young have fledged the nest. No ground disturbance or vegetation removal shall occur within this buffer until the qualified biologist confirms breeding/nesting has ended, and the young are no longer dependent on the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.</p> <p>If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA Leq at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA Leq at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.</p>	<p>For construction that occurs during the nesting bird season, retain a qualified biologist to conduct pre-construction nesting bird surveys.</p> <hr/> <p>Establish avoidance buffers (and/or noise reduction measures), as needed, until a qualified biologist has determined that all young have fledged.</p>	<p>Seven days prior to initial ground disturbance and/or vegetation removal, or reinitiation of construction following a one-week lapse, between February 1 and August 31.</p> <hr/> <p>During construction activities, if nests are identified.</p>	<p>Once and as needed</p> <hr/> <p>As needed</p>			

Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
BIO-4. Arborist Report						
<p>Based on final design, if project construction is anticipated to impact protected trees, then prior to construction, an Arborist Report shall be prepared to address tree protection measures during construction and mitigation requirements for those protected trees impacted by the project. The report shall be prepared by an arborist certified by the International Society of Arboriculture (ISA) or a related professional, such as a landscape architect, with qualifying education, knowledge, and experience. The report shall meet the specific content requirements for Arborist Reports as outlined in any applicable municipal code. The Arborist Report shall include, at minimum, the following:</p> <ul style="list-style-type: none"> An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating Representative photographs of each regulated tree which may be encroached upon Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes Requirements for protective tree fencing, and designated tree protection zones (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), and measures for addressing roots and limbs that are cut during trenching Description of activities prohibited/permitted within the tree protection zone, encroachment boundaries Description of any potential transplanting or replacement tree plantings. 	Retain an arborist or related qualified professional to prepare an Arborist Report that contains tree protection measures during construction and mitigation for protected trees impacted by the project.	Prior to construction activities.	Once			
	Implement recommendations of Arborist report.	During and after construction	As needed			
Cultural Resources						
CUL-1. Cultural and Archaeological Resources Education (CARE) Program						
<p>An archaeologist shall be retained to conduct a Cultural and Archaeological Resources Education (CARE) Program training on archaeological sensitivity prior to the commencement of any ground-disturbing activities. This training shall occur under the direction of a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983). The initial archaeological sensitivity training shall be given to all construction personnel, including, but not limited to, Calleguas personnel (including the assigned inspectors), contractors, and subcontractors, prior to their involvement in any ground-disturbing activities. Additional personnel who subsequently become involved in the project shall also receive the training prior to their involvement in any ground-disturbing activities. This can be accomplished by additional in-person training sessions, viewing a recording of the initial training session, or through the distribution of hardcopy or electronic training materials. The CARE Program shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, safety procedures when working with monitors, specific procedures to be followed in the event of an inadvertent discovery, proper protocol for treatment of cultural materials in the event of a find, and consequences in the event of non-compliance. As a result of Assembly Bill 52 consultation, the Fernandeano Tataviam Band of Mission Indians deferred the remainder of Phase 4 work to the Barbareño/Ventureño Band of Mission Indians. As such, a representative of the Barbareño/Ventureño Band of Mission Indians shall be invited to participate in the CARE Program for work occurring within Phase 3 and Phase 4 of the project. In the event the Barbareño/Ventureño Band of Mission Indians elects not to participate in the CARE Program within the Phase 4 alignment, the Fernandeano Tataviam Band of Mission Indians shall be contacted.</p>	Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology and representative of the Barbareño/Ventureño Band of Mission Indians to provide CARE training to all construction personnel.	Prior to construction activities and as needed as construction personnel are added	Once and as needed			
	Ensure CARE Program guidelines are followed during construction.	During construction	Ongoing			
CUL-2. Archaeological and Native American Monitoring						
<p>An archaeological monitor shall be retained to monitor all project-related ground disturbing activities that occur within the recorded boundaries of previously recorded archaeological resources CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them. Archaeological monitoring shall be performed under the direction of the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983). A Native American monitor representing the Barbareño/Ventureño Band of Mission Indians shall be retained to monitor project-related ground-disturbing activities occurring within the recorded CA-VEN-71, CA-VEN-214, CA-VEN-339 and CA-VEN-1123 boundaries, which intersect portions of the Phase 3 and Phase 4 alignment, and a 50-foot buffer surrounding them. In the event the Barbareño/Ventureño Band of Mission Indians elects not to monitor within the Phase 4 alignment, the Fernandeano Tataviam Band of Mission Indians shall be contacted to provide Native American monitoring services. Previous testing within the previously recorded boundaries of CA-VEN-71, CA-VEN-214 and CA-VEN-339 identified sparse flaked stone and shell within disturbed soils. Should any archaeological resources that are not consistent with previous findings be identified during monitoring, the archaeological and appropriate Native American monitor shall have the authority to halt work within 50 feet of the discovery and/or direct work to another area until the archaeological and appropriate Native American monitor, with input from the qualified archaeologist if necessary, have assessed the nature of the find and the location has been cleared for further construction activity. The discovery of archaeological materials consistent with previous findings shall not require work to be halted or redirected. If intact (i.e.,</p>	Retain an archaeological monitor and a Native American monitor representing the Barbareño/Ventureño Band of Mission Indians to observe all ground-disturbing activities that occur within the recorded boundaries of previously recorded archaeological resources.	Prior to and during construction	As needed			
	If a find is eligible for listing and significant impacts would occur, prepare a data recovery plan.	During construction	As needed			

Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<p>previously undisturbed) archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the qualified archaeologist, and an appropriate Native American monitor if the resource is Native American in origin, shall determine if Phase II archaeological testing for CRHR eligibility is appropriate.</p> <p>If Phase II archaeological testing is completed and the resource is eligible for the CRHR and significant impacts to the resource cannot be avoided via redesign, the qualified archaeologist, in consultation with an appropriate Native American monitor if the resource is Native American in origin, shall prepare a data recovery plan tailored to the nature and characteristics of the resource, per the requirements of California Code of Regulations Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural materials related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and appropriate Native American monitor shall recover and document the scientifically consequential information which justifies the resource's significance. Calleguas shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per California Code of Regulations Guidelines Section 15126.4(b)(3)(C).</p>						
CUL-3. Unanticipated Discovery of Archaeological Resources						
<p>In the event archaeological resources are unexpectedly encountered during ground-disturbing activities outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 and a 50-foot buffer surrounding them, in areas not observed by an archaeological monitor and appropriate Native American monitor, work within 50 feet of the find shall halt and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist or by an archaeologist working under their direction to be Native American in origin, then an appropriate Native American monitor shall also be contacted to participate in the evaluation of the resource consistent with Mitigation Measure TCR-2. The qualified archaeologist and appropriate Native American monitor shall determine appropriate steps consistent with Mitigation Measure CR-2.</p>	<p>If archaeological resources are encountered during construction outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123, retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology to evaluate the unanticipated find(s).</p> <p>If the find is determined to be Native American in origin, contact an appropriate Native American monitor to participate in the evaluation of the resource.</p>	During construction	As needed			
		During construction	As needed			
Geology and Soils						
GEO-1. Paleontological Resources Monitoring and Mitigation						
<p>Qualified Professional Paleontologist. Prior to excavation, Calleguas shall retain a Qualified Professional Paleontologist, as defined by the SVP (2010). The Qualified Professional Paleontologist shall draft a Paleontological Resources Impact Mitigation Program to direct all mitigation measures related to paleontological resources.</p> <p>Paleontological Worker Environmental Awareness Program. Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a Paleontological Resources Awareness Training (PRAT) for construction personnel and Calleguas inspectors (including soil materials specialists) regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction or Calleguas personnel.</p> <p>Paleontological Monitoring. In areas mapped as high paleontological sensitivity (i.e., Quaternary old alluvium, Saugus Formation, Topanga Formation, and Sespe Formation), where Calleguas personnel determine construction activities will be disturbing previously undisturbed sediments (i.e., native sediments), full-time paleontological monitoring shall be conducted. Through coordination between the Qualified Professional Paleontologist, Calleguas, and construction personnel, the paleontological monitoring schedule shall be determined by considering published geologic maps, field observations, and the construction schedule, as directed by the Paleontological Resources Impact Mitigation Program. The Qualified Professional Paleontologist may recommend monitoring be reduced in frequency or ceased entirely based on field observations. For example, excavations that are determined to only affect disturbed (i.e., artificial fill) or low-sensitivity (i.e., Holocene-aged) sediments shall not be monitored even if these areas are mapped as high-sensitivity geologic units. Such decisions shall be subject to review and approval by Calleguas. Additionally, spot-checks shall be conducted for ground-disturbing activities that reach depths of 5 feet or greater in areas mapped as Holocene-aged sediments (i.e., Quaternary stream channels and Quaternary alluvium) to check for the presence of older, high-sensitivity sediments. If such sediments are observed, then full-time monitoring shall be conducted. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The Qualified Professional Paleontologist shall coordinate with the contractor and Calleguas personnel to determine the monitoring schedule and minimize unnecessary site visits.</p> <p>In the event of a fossil discovery, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined the fossil(s) is (are) scientifically significant, the following shall be completed:</p> <ul style="list-style-type: none"> ▪ Fossil Salvage. The paleontological monitor shall salvage (i.e., excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) 	<p>Retain a qualified professional paleontologist as defined by the Society of Vertebrate Paleontology (SVP 2010) to implement a Paleontological Resources Awareness Training, monitor initial ground-disturbing activities, and evaluate unanticipated finds. Review and approve the Final Paleontological Mitigation Report.</p>	Prior to excavation and during construction	Once and as needed			

Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
<p>require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume.</p> <ul style="list-style-type: none"> ▪ Fossil Preparation and Curation. Fossils shall be identified to the lowest (i.e., most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist. <p>Final Paleontological Mitigation Report. Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to Calleguas and, if fossil curation occurs, the designated scientific institution.</p>						
Noise						
NOI-1. Nighttime Construction Noise Reductions						
<p>Project construction occurring during the evening and nighttime hours of 7 p.m. to 7 a.m. shall implement a Night Operations Noise Impact Reduction Program composed of measures such as the following. Alternative methods achieving similar noise reductions could also be implemented.</p>	<p>Include the Night Operations Noise Impact Reduction Program in the construction contract.</p>	<p>Prior to construction</p>	<p>Once</p>			
<ul style="list-style-type: none"> ▪ Installation of temporary sound barriers/blankets of sufficient height to break the line of sight between construction equipment and nearby residences. The barriers may be at least 1.5 pounds per square foot with no gaps from the ground to the top of the barrier. Alternately, if sound blankets are preferred, barriers may be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated Sound Transmission Class 32 or higher. ▪ To the extent consistent with applicable safety regulations, operation of vehicles requiring use of back-up beepers may be avoided and/or the staging area may be arranged in a way that avoids the need for any reverse motions of large trucks. If these measures are not feasible, trucks operating with reverse motion alarms may be outfitted with SAE J994 Class D or equivalent alarms (ambient-adjusting, or “smart alarms” that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment), or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. ▪ Where nighttime operations are necessary and in the vicinity of nearby residences or other sensitive receivers, a sign shall be posted at the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of Calleguas and contractor authorized representatives assigned to respond in the event of a noise complaint. If the authorized contractor’s representative receives a complaint, that person shall investigate, take appropriate corrective action, and report the action to Calleguas. ▪ Where trenchless operations may be necessary during evening and nighttime hours, and where the operations are in the vicinity of sensitive receivers, key power units, including generators, shall be enclosed or acoustically packaged to reduce potential noise impacts. ▪ Upgraded silencers shall be placed on applicable engines. ▪ Quiet mode specifications for nighttime work that minimizes the use of crane and pipe handling operations and restricts materials deliveries to site. 	<p>Ensure noise measures are implemented during construction.</p>	<p>During construction</p>	<p>Ongoing</p>			
Best Management Practice: Noise Control						
<p>Noise abatement measures would be implemented as needed including acoustical mufflers and engine shielding on construction equipment, limiting the number and duration of equipment idling, directing noise away from residences, and maintaining equipment in good condition without rattling or banging of parts.</p>	<p>Within the project’s Contract Documents, include requirements for acoustical mufflers and engine shielding on construction equipment; limitations on equipment idling; the direction of noise away from residences; and maintenance of properly functioning equipment.</p>	<p>Prior to construction</p>	<p>Once</p>			
	<p>Confirm noise abatement measures are implemented as required in the Contract Documents.</p>	<p>During construction</p>	<p>Ongoing.</p>			

Mitigation Measure/Best Management Practice	Action Required	Timing	Monitoring Requirements	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Tribal Cultural Resources						
TCR-1. Hand Excavation Within Culturally Sensitive Areas						
<p>Project-related ground disturbing activities shall be completed by hand, with hand tools, in two locations of the Phase 3 alignment. Hand excavation shall occur within a 20-foot buffer surrounding the two locations (i.e., 10 linear feet on either side of the point locations for a total buffer of 20 feet). If no intact archaeological deposits or no intact or previously disturbed human remains are identified during hand excavation within the 20-foot buffer areas, hand excavation shall not be required outside the buffer areas and mechanical excavation methods can be employed. However, if intact archaeological deposits or intact or previously disturbed human remains are identified during mechanical excavation outside of the designated hand excavation areas, then mechanical excavation methods shall cease and hand excavation methods shall be re-employed until soils void of archaeological materials are encountered for a distance of 10 feet.</p> <p>An archaeological monitor and Native American monitor from the Barbareño/Ventureño Band of Mission Indians shall be retained to observe all hand and mechanical excavation activities within this area, consistent with Mitigation Measure CUL-2. In the event intact archaeological deposits are identified during hand or mechanical excavations, the procedures outlined in Mitigation Measures CUL-2 and CUL-3, as applicable, shall be followed. In the event human remains and/or associated grave goods are identified during hand or mechanical excavations, regardless of their context or condition, the State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98 shall be followed.</p>	<p>Retain an archaeological monitor and Native American monitor from the Barbareño/Ventureño Band of Mission Indians to monitor all hand and mechanical excavation activities within the two locations of the Phase 3 alignment.</p>	<p>Prior to excavation at the specified locations</p>	<p>Once</p>			
		<p>Ensure that hand excavation occurs in two locations of the Phase 3 alignment or when mechanical excavations unearth intact archaeological deposits or human remains.</p>	<p>During construction</p>	<p>As needed</p>		
TCR-2. Unanticipated Discovery of Tribal Cultural Resources						
<p>In the event cultural resources of Native American origin are identified during project construction outside the boundaries of CA-VEN-71, CA-VEN-214, CA-VEN-339, and CA-VEN-1123 in areas not monitored by an archaeological monitor and Native American monitor, all ground-disturbing activities in the vicinity of the find shall be temporarily suspended or redirected until an archaeological monitor and/or qualified archaeologist has evaluated the nature and significance of the find and an appropriate Native American monitor is consulted. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is a TCR and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with appropriate tribal representative(s). The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archaeologist, if applicable, and the appropriate Native American tribal representative. If Calleguas, in consultation with an appropriate Native American monitor, and with input from the qualified archaeologist if requested, determines the resource is not a TCR, then Mitigation Measure CUL-2 shall be followed.</p>	<p>Consult with an appropriate Native American monitor upon discovery of unanticipated tribal cultural resources.</p>	<p>During construction</p>	<p>As needed</p>			

Appendix A

Initial Study - Notice of Preparation



NOTICE OF PREPARATION OF AN EIR AND NOTICE OF PUBLIC SCOPING MEETING

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

NOTICE IS HEREBY GIVEN that Calleguas Municipal Water District (“Calleguas”) is preparing a Draft Subsequent Environmental Impact Report (SEIR) for the Calleguas Regional Salinity Management Pipeline, Phases 3 and 4 (herein referred to as the “project”). The public and other interested parties are invited to attend a public scoping meeting on **March 2nd, 2023, at 6:00 p.m.** to comment on environmental issues that should be addressed in the Draft SEIR.

Pursuant to the California Environmental Quality Act (CEQA) Guidelines (14 Calif. Code of Regs., §15000 et seq.), this notice contains a brief description of the project and its location, the anticipated environmental effects of the project, the period during which scoping comments will be received, the time and location of the public scoping meeting, and details on the availability of an Initial Study prepared for the project.

Project Title: Calleguas Regional Salinity Management Pipeline, Phases 3 and 4

Project Location: The proposed pipeline alignments would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the City of Camarillo to the western boundary of the City of Simi Valley. The alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would primarily be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment during construction activities. Regional access would be provided by State Route 118, State Route 23, State Route 34, and U.S. 101.

Figure 1 shows the alignments of both phases of the proposed project.

Project Background: The Calleguas Regional Salinity Management Pipeline (CRSMP) is a brine and treated wastewater conveyance pipeline designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The CRSMP was assessed programmatically in a 2002 Final Program EIR which provided CEQA clearance for the overall CRSMP and project-specific clearance for Phase 1. Additional CEQA documentation prepared since 2002 covered changes to the original design and implementation of Phase 2. The CRSMP, currently in operation, extends approximately 22 miles from its upstream end in Camarillo to its downstream terminus at the permitted ocean outfall in Port Hueneme.

Brief Project Description: The proposed project would extend the CRSMP approximately 14 miles inland from the existing eastern terminus, enabling connections to additional dischargers in Simi Valley and unincorporated Ventura County. Discharges from these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the existing ocean outfall. Dischargers connecting to Phases 3 and 4 would be subject to existing discharge permit constituent limits at the outfall. Any new infrastructure needed to connect specific dischargers to the CRSMP would be subject to separate CEQA review.

The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless

construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

Initial Study: An Initial Study was prepared for the project and is available for public review at: <https://www.calleguas.com/documents-and-reports/>. If a hard copy or electronic review copy is required, please contact Jennifer Lancaster at the email address provided below.

Based on the conclusions of the Initial Study, the following areas of potentially significant environmental impact are anticipated to require analysis in the Draft SEIR:

- Biological Resources
- Cultural Resources
- Geology/Soils (Paleontological Resources)
- Noise
- Transportation
- Tribal Cultural Resources

The EIR will also analyze alternatives, cumulative impacts, growth-inducing impacts, and other issues required by CEQA.

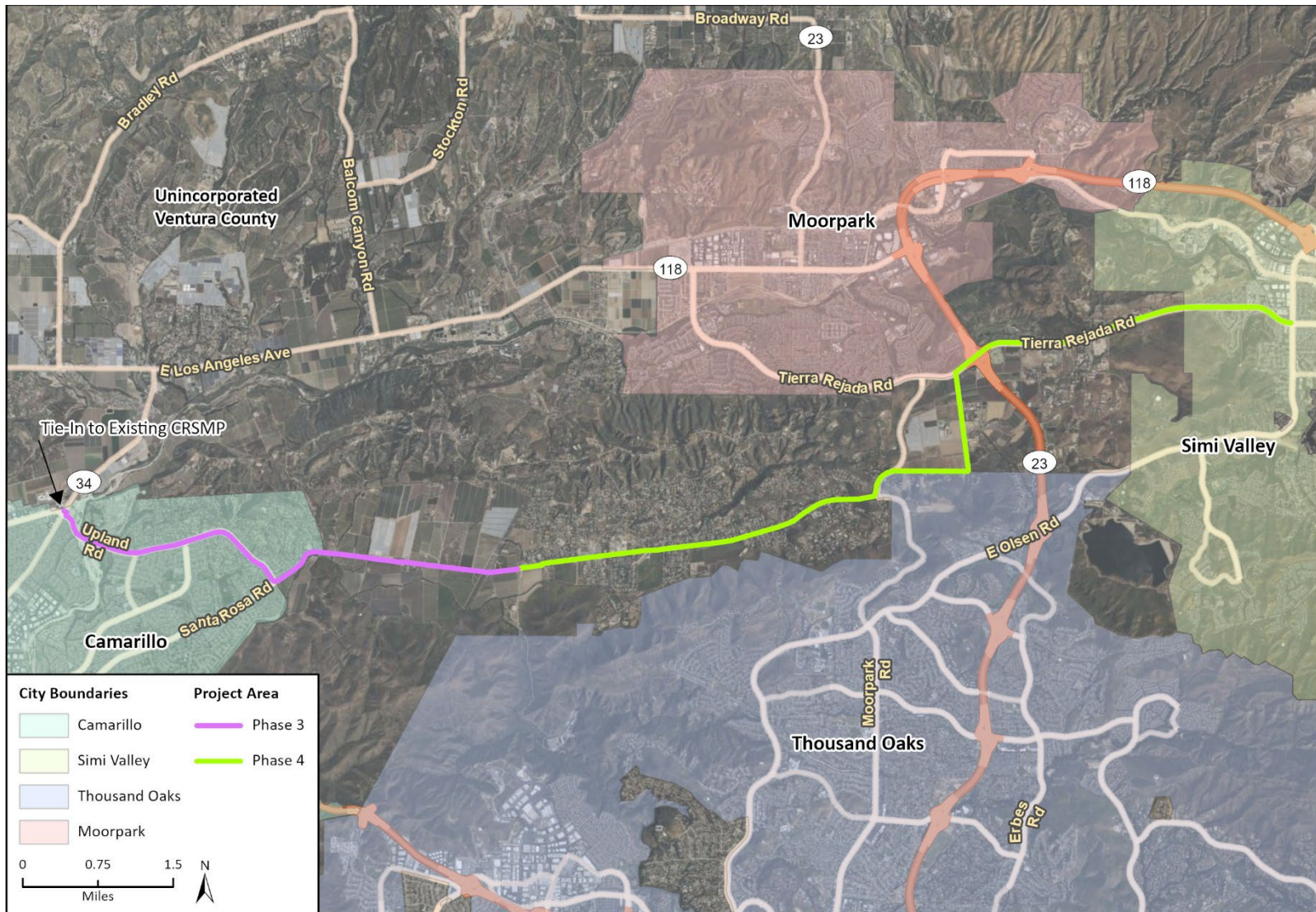
Public Scoping Meeting: The purpose of the scoping meeting is to present the project in a public setting and provide an opportunity for a full airing of the environmental issues that are important to the community. The meeting will include a presentation of the proposed project and a description of the environmental issues to be analyzed in the Draft SEIR. Oral and written comments made during the scoping meeting and scoping period will provide an inventory of potential environmental effects of the project to be addressed by the Draft SEIR. The scoping meeting will be held in person on **March 2nd, 2023, at 6:00 p.m.** at Santa Rosa Technology Magnet School at 13282 Santa Rosa Road, Camarillo, CA 93012.

30-Day Scoping Comment Period: This NOP is available for a 30-day public comment period from **February 21, 2023 to March 23, 2023**. Written comments must be submitted in writing no later than 5:00 p.m. on March 23, 2023.

Contact Person: Written comments may be submitted to Jennifer Lancaster, Principal Resource Specialist, via email: jlancaster@calleguas.com.



Figure 1. Project Site Location – Calleguas Regional Salinity Management Pipeline Phases 3 and 4



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Additional data provided by the County of Ventura.

Proj. Regional Phase 3 Locn
Fig 2.2 Project Location



Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

Final Initial Study – ~~Mitigated Negative Declaration~~

prepared by

Calleguas Municipal Water District

2100 Olsen Road

Thousand Oaks, California 91360

Contact: Jennifer Lancaster, Principal Resource Specialist

prepared with the assistance of

Rincon Consultants, Inc.

180 North Ashwood Avenue

Ventura, California 93003

April 2023



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

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Appendices

Appendix A Air Quality and Greenhouse Gas Study
Appendix B Energy Calculations

Initial Study

1. Project Title

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

2. Lead Agency Name and Address

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

3. Contact Person and Phone Number

Jennifer Lancaster, Principal Resource Specialist
jlancaster@calleguas.com
805-579-7194

4. Project Location

The proposed pipeline alignment would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the city of Camarillo to the western boundary of the city of Simi Valley. The alignment would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County.

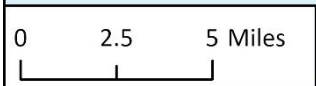
The pipeline alignment would mostly be located within the public right-of-way (ROW) within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment during construction activities. Regional access would be provided by State Route 118, State Route 23, State Route 34, and U.S. 101.

Figure 1 shows the regional location of the project alignment and Figure 2 shows the alignment of both phases of the proposed project. Figure 3 and Figure 4 depict the alignment of Phase 3 of the proposed project. Figure 5 and Figure 6 depict the alignment of Phase 4 of the proposed project. The figures identify potential dischargers to the Calleguas Regional Salinity Management Pipeline (CRSMP), which are either currently existing, planned for development, or under consideration.

5. Project Sponsor's Name and Address

Calleguas Municipal Water District
2100 East Olsen Road
Thousand Oaks, California 91360

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
 Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

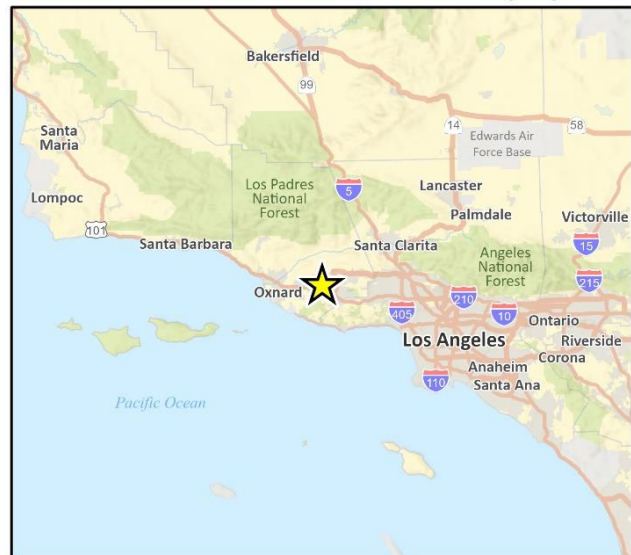
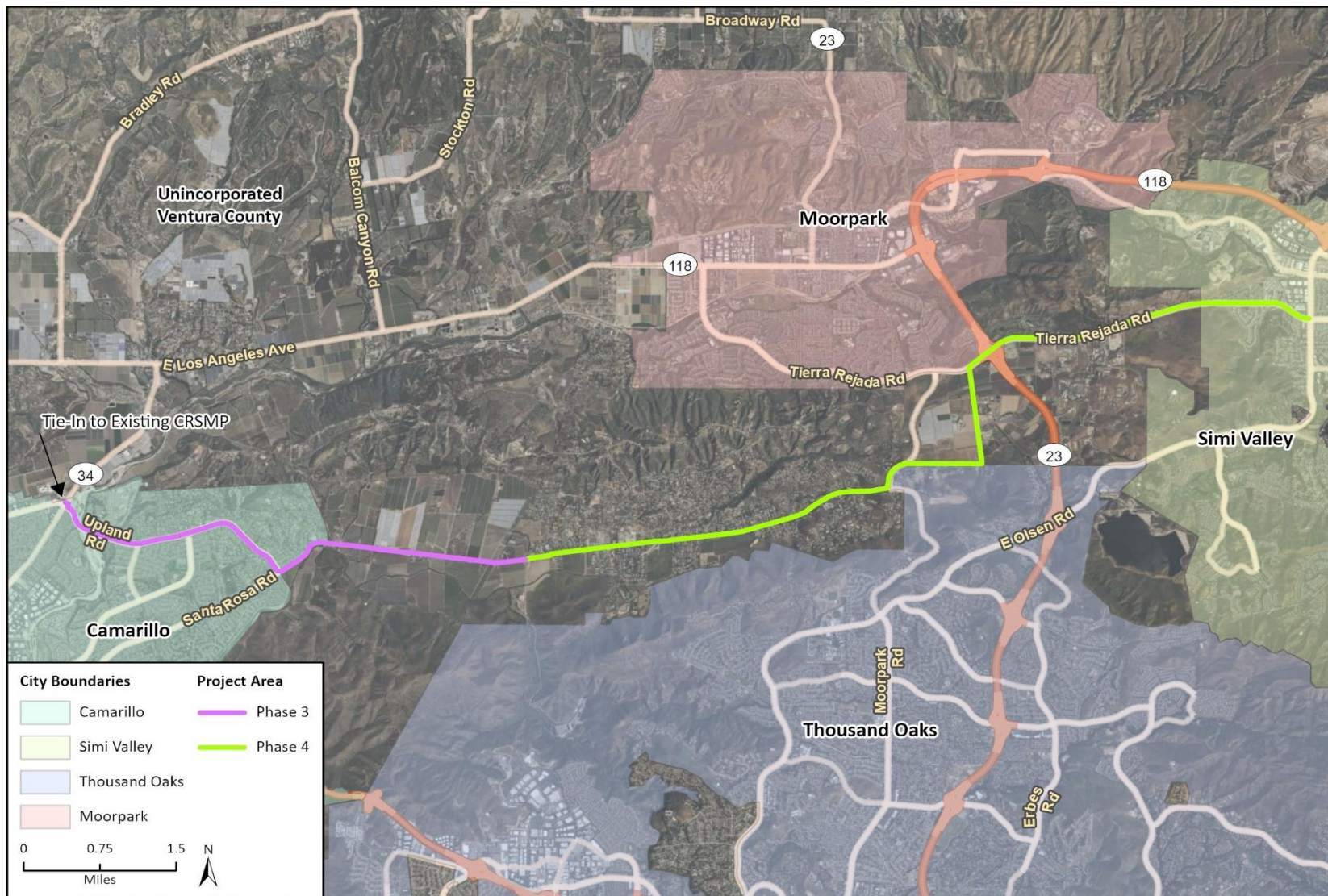


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

Proj. Regional, Phase 3 Loop
 Fig 2.2 Project Location

Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Loch
Fig 2.3 Phase 3 Pt 1

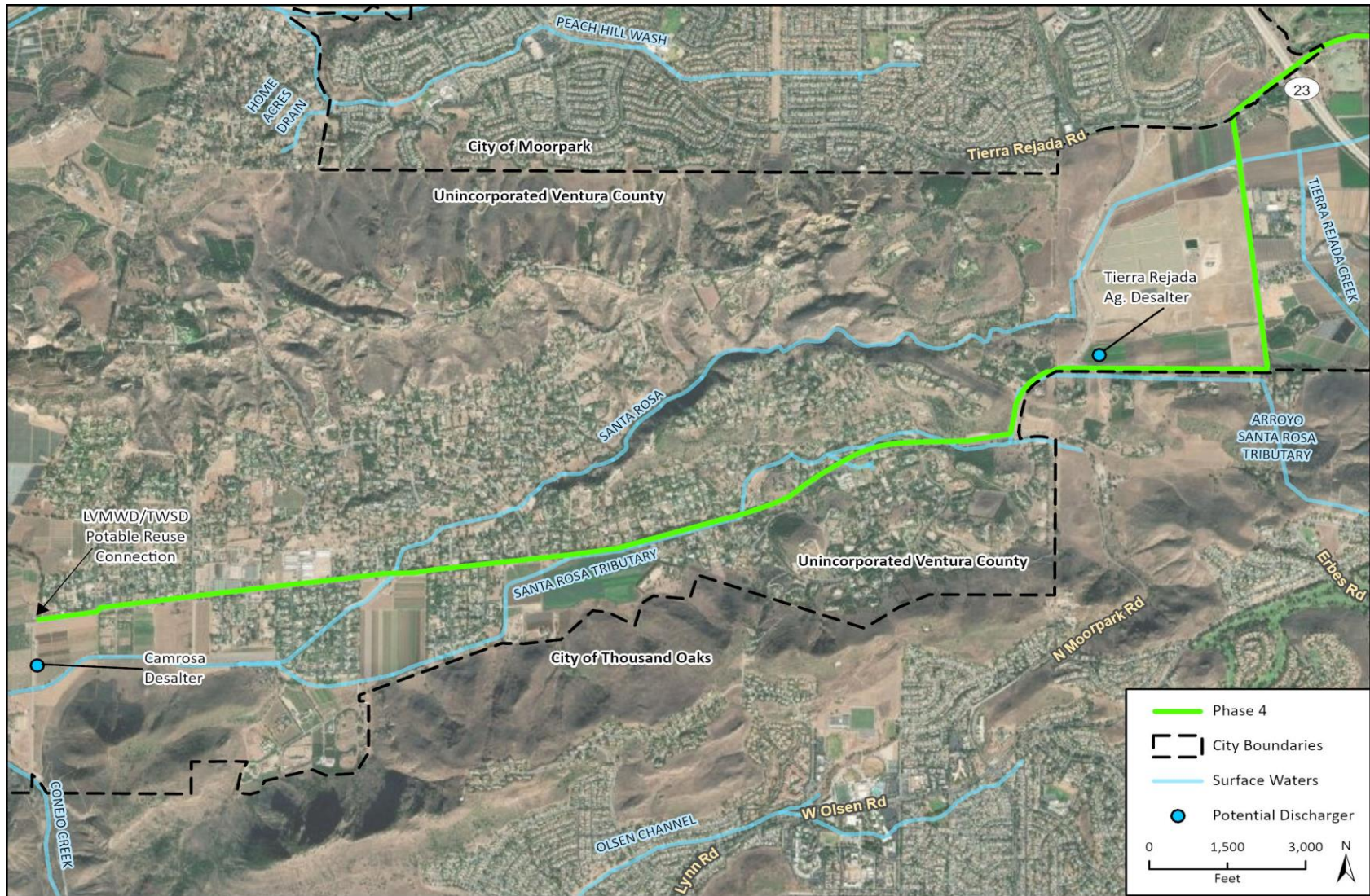
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

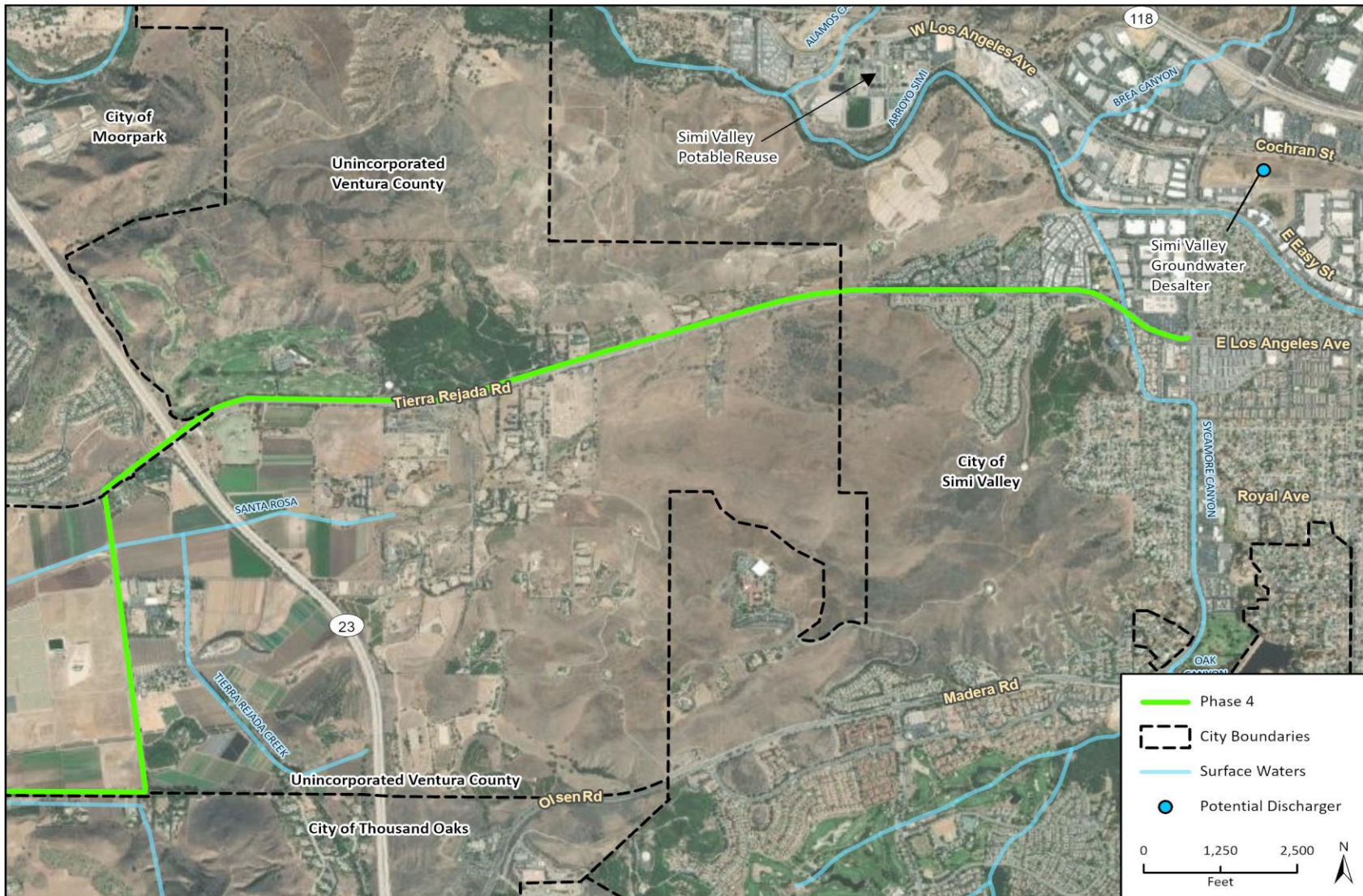
Figure 5 Phase 4 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
 Fig 2.5 Phase 4 pt 1

Figure 6 Phase 4 Pipeline Location, Eastern Portion



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Proj: Regional, Phase 3 Loch
Fig 2.6 Phase 4 pt.2

6. General Plan Designation

The pipeline alignment is mostly located within existing public roadway ROW and does not have a General Plan land use designation. One portion of the Phase 3 pipeline alignment would cross private property along Upland Road, which has a City of Camarillo land use designation of Agriculture (City of Camarillo 2022a).

7. Zoning

The pipeline alignment is mostly located within existing public roadway ROW and is therefore not zoned. The Phase 3 pipeline alignment would cross private property along Upland Road that is zoned Rural Exclusive Residential by the City of Camarillo (City of Camarillo 2022b).

8. Project Background

For decades, local agencies and regulators have been working to address increasing salinity levels in the Calleguas Creek Watershed. The CRSMP was designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The purpose of the CRSMP is to facilitate the utilization of additional water sources by providing a mechanism to efficiently dispose of the concentrate generated during treatment. The CRSMP has an existing National Pollutant Discharge Elimination System (NPDES) permit for ocean outfall discharges associated with the pipeline (NPDES CA0064521).

The CRSMP was assessed programmatically in a 2002 Final Program Environmental Impact Report (PEIR) which provided California Environmental Quality Act (CEQA) clearance for the overall CRSMP and project-specific clearance for Phase 1 of the CRSMP. It also discussed Phase 2 as a logical extension of Phase 1, with the acknowledgment that additional project-level CEQA review would be required at the time of alignment development for Phase 2 and subsequent phases of the CRSMP. As stated in the 2002 PEIR (pages 1-2), future project-specific analyses would be required "...when assumptions become commitments and fundamental parameters such as the identity, volume and water quality of each potential pipeline contributor are fully identified, and the alignment of pipelines can be finalized."

Table 1 below provides an overview of all CEQA documents prepared to date for the program-level CRSMP and for the project-specific alignment of individual CRSMP phases.

Table 1 Overview of Previous CEQA Analyses

Year	Document Type	Project Name	Project Overview
2002	Program Environmental Impact Report (PEIR) and Environmental Assessment (EA)	Calleguas Regional Salinity Management Pipeline	<p>The CRSMP consists of a pipeline system to transport wastewater and brine concentrate to an existing ocean outfall at the Reliant Energy Ormond Beach Power Generation Station near Point Mugu. Wastewater is defined as tertiary-treated municipal wastewater, and brine is defined as the byproduct of reverse osmosis treatment (or equivalent) of groundwater or wastewater.</p> <p>This document was a joint PEIR and EA to provide compliance with the federal National Environmental Policy Act (NEPA) as well as CEQA. NEPA clearance was required because the project would receive federal funding support through the United States Bureau of Reclamation, also the federal lead agency.</p>
2007	Subsequent EIR (SEIR) and EA to the 2002 PEIR/EA for the CRSMP	Hueneme Outfall Replacement Project	<p>This project was to replace a previously decommissioned outfall in Port Hueneme for use in providing ocean discharge for the CRSMP instead of the Reliant Energy outfall at Ormond Beach as originally planned. This became necessary when the Los Angeles Regional Water Quality Control Board (RWQCB) determined the Reliant Energy outfall may have an insufficient dilution ratio, which limits the ability of the CRSMP to meet the discharge requirements of the Ocean Plan (State Water Resources Control Board [SWRCB] 2019). This document was a joint CEQA/NEPA document (SEIR/EA) due to the federal funding previously described, as well as the federal permits required for the outfall. An EIR-level analysis was required for CEQA because the proposed replacement of a retired outfall could potentially result in significant impacts.</p>
2008	Addendum to the 2007 SEIR/EA for the Hueneme Outfall Replacement Project	Phase 1E Outfall Control and Meter Vault	<p>This addendum evaluated modifications to the Hueneme Outfall Replacement Project, including a modified location for the vault and ancillary facilities, to avoid construction impacts to recreation facilities and residents.</p> <p>This document was an Addendum to the joint SEIR/EA. An EIR-level analysis was not necessary because project modifications were minor and no new or substantially more severe significant impacts or mitigation measures were anticipated.</p>
2009	Initial Study and Mitigated Negative Declaration (IS-MND)	Phase 2 (Lower Reach) Pipeline Alignment Revision	<p>This project provided a modified alignment for Phase 2 of the CRSMP based upon refined engineering and ROW review and included a new control tank to provide operational control of the modified portion of the pipeline.</p> <p>This document was an IS-MND to address potentially new or modified impacts associated with design modifications; an EIR-level analysis was not necessary because impacts did not have the potential to be significant and unavoidable.</p>

Year	Document Type	Project Name	Project Overview
2011	Addendum to the 2009 IS-MND	Phase 2A (Lower Reach) Pipeline Alignment	This project modified the planned location of approximately 1,800 feet of the Phase 2 alignment assessed in the 2009 IS-MND, with the 50- to 65-foot-wide disturbance corridor shifting approximately 75 feet to the east. This document was an Addendum to the 2009 IS-MND because the modifications were limited to the alignment assessed therein and no new or substantially more severe significant impacts or mitigation measures were anticipated.
2014	SEIR to the 2002 PEIR	Phase 2 (Upper Reach) Pipeline Alignment	This project relocated a portion of the Phase 2 (Upper Reach) alignment from that analyzed in the 2002 PEIR. The modified alignment was approximately 0.2 mile shorter, and 2,500 feet east of the alignment analyzed in the 2002 PEIR. This modified alignment crossed agricultural land instead of being situated within public roadways; therefore, new potential impacts could occur. This document was an SEIR because the project addressed changes in design and baseline conditions not foreseen in the 2002 PEIR with the potential to result in significant environmental impacts.

The CRSMP currently extends approximately 22 miles from its upstream end in Somis, in unincorporated Ventura County, to its downstream terminus at the ocean outfall in Port Hueneme. Phases 3 and 4 of the CRSMP (“project” or “proposed project”) would extend the CRSMP inland to connect to additional dischargers. Any future phases of the CRSMP and new infrastructure needed to connect additional dischargers would be subject to separate CEQA review.

9. Project Description

The current project consists of Phases 3 and 4 of the Calleguas Regional Salinity Management Pipeline (CRSMP). The proposed project would install an underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials. An overview of the proposed project is provided in Table 2.

Table 2 Proposed Project Overview

Feature	Phase 3	Phase 4
Length	5.1 miles (27,000 feet)	9.3 miles (49,000 feet)
Diameter	18 inches – 24 inches	12 inches – 24 inches
Alignment	<p>Mostly within public ROW:</p> <ul style="list-style-type: none"> ▪ Initiates at eastern end of existing CRSMP on west side of Somis Road, approximately 200 feet north of the Las Posas Road / Upland Road intersection in Somis ▪ East across Somis Road to the east side of the Union Pacific Railroad on private property¹ ▪ South to Upland Road just east of the intersection with Las Posas Road ▪ Easterly along Upland Road to the Upland Road bridge and across Calleguas Creek, continuing on Upland Road to Santa Rosa Road² ▪ Northeast along Santa Rosa Road, terminating just past Hill Canyon Road 	<p>Entirely within public ROW:</p> <ul style="list-style-type: none"> ▪ Initiates at end of Phase 3, near intersection of Santa Rosa Road and Hill Canyon Road ▪ Eastward along Santa Rosa Road to Moorpark Road ▪ North on Moorpark Road then east on Read Road to Sunset Valley Road ▪ North on Sunset Valley Road to Tierra Rejada Road ▪ East on Tierra Rejada Road to terminate at Madera Road
Easement requirements	Permanent easement 180 feet by 20 feet on the property located at the northeast corner of the intersection of Las Posas Road and Upland Road	n/a
Construction duration (approximate)	16 months	30 months

¹ The Federal Railroad Administration (FRA) requires pipeline crossings under railroads to comply with design specifications such as, but not limited to, the following: installation of crossing is conducted by boring or jacking, if practicable; crossing occurs at a right angle, or as close thereto as possible, and not less than 45 degrees; pipeline is not placed within a culvert or within 100 feet of a railway bridge or other structure.

² Crossing Calleguas Creek would be accomplished by installing the pipeline inside an existing vacant utility cell in the deck of the Upland Road bridge. Coordination with the owner of the bridge, the City of Camarillo, has been initiated, including completing a structural analysis of the bridge to confirm the bridge has sufficient load capacity to carry the pipeline under full flow.

Phases 3 and 4 would connect additional dischargers to the CRSMP. Discharges from these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the ocean outfall. Effluent would be subject to existing NPDES constituent limits at the outfall. Prescribed sampling requirements in the NPDES permit necessitate weekly, monthly, quarterly, and semi-annual monitoring of effluent as well as monitoring of receiving water twice a year, monitoring of sediment every two years, and a biological monitoring study involving mussels that would occur once during the term of the permit. Additionally, while not required by the NPDES permit, Calleguas monitors the individual discharges quarterly for all effluent limit constituents except toxicity and radioactivity.

Phases 3 and 4 of the CRSMP would typically be installed in 20- to 40-foot sections. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

Project Construction

The typical construction sequence for the proposed project would include the following pipeline installation phases:

- **Open-cut trench pipeline installation** typically consists of trench excavation (including saw cutting of pavement where applicable), pipe bedding stabilization, pipe installation, and backfill. The construction crew would typically operate a backhoe and/or excavator, compaction equipment (attachment on an excavator and hand-operated equipment), dump trucks for stockpiling of soils and delivery of backfill material, utility trucks (with truck-mounted or towed generator and hand tools), and water trucks/water buffalos. Where required by the jurisdictional agency to backfill with sand cement slurry, concrete trucks would delivery slurry to the project site.
- **Trenchless installation** typically consists of excavation of launching and receiving pits (including saw cutting of pavement where applicable), installation of shoring system and boring equipment, installation of steel casing and pipeline, removal of equipment, and backfill. This step typically includes the excavation and backfill of the pits using an excavator, dump truck, and potentially a second mini excavator inside the pits. The trenchless installation would be performed by operating a crane to lower and remove equipment and materials.
- **Paving and ground restoration** typically is performed at the completion of each segment of pipeline and then at the end of a project once all excavation and backfill operations have been completed.

The maximum depth of excavation typically would be 8 feet. Where the pipeline would need to cross below an existing utility or drainage channel, the depths may be greater and would depend on the characteristics of the utility or channel.

Based on an installation rate of 80 feet per day and a 4-foot-wide trench, the average amount of excess spoils requiring removal would be approximately 60 cubic yards per day and would require approximately 7 haul roundtrips per day. The average daily number of heavy-duty trucks hauling material to and from the construction site (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 haul roundtrips per day.

Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal at an appropriately licensed landfill. Storage of materials and equipment would be dependent upon the location of the contractor and subcontractors. If the contractors are local, they may store equipment and materials in their own yards.

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be trucked off-site for reuse for dust control and irrigation.

Construction Schedule

Construction would mostly be limited to normal construction hours between 7:00 am and 4:30 pm, Monday through Friday. Weekend work, as well as evening and nighttime work between the hours of 4:30 pm and 7:00 am, may be required to install the trenchless portions of the pipelines. In areas where traffic conditions require non-traditional working hours, night and weekend work could also be necessary. Additionally, the tie-in connection to the CRSMP would require the shutdown of the

CRSMP, consequently requiring work be performed continuously until complete. Work hours would be finalized through the roadway encroachment permitting and design process.

Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. Due to uncertainties about the anticipated timing of dischargers, duration of permitting and design, and other considerations, there is currently no planned start date.

Traffic Controls

To minimize traffic impacts to the traveling public, trenchless construction methods would be used to cross busy intersections as well as Somis Road and Santa Rosa Road.

Save for a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

Best Management Practices

During construction of the proposed project, Calleguas' construction contractor would implement best management practices (BMPs) in accordance with the project's specifications. BMPs for the proposed project are anticipated to include measures for the protection of aesthetics, air quality, and noise control are listed below:

- **Protection of Air Quality.** Dust control would be conducted during ground-disturbing activities using an approved method such as water application, no substantial ground-disturbing activities would be conducted during periods of high winds, on-site construction vehicles would not travel at speeds greater than 15 miles per hour in unpaved areas, and trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard.
- **Noise Control.** Noise abatement measures would be implemented as needed including acoustical mufflers and engine shielding on construction equipment, limiting the number and duration of equipment idling, directing noise away from residences, and maintaining equipment in good condition without rattling or banging of parts.
- **Nighttime Construction Lighting.** In the event nighttime construction lighting is needed, the lighting would be directed downwards towards construction activities and would be shielded so as to minimize visibility from adjacent land uses.

Project Operation and Maintenance

Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. Valves on the appurtenances would be exercised roughly once per year and the pipeline alignment would be marked as needed in response to DigAlert (utility marking) requests.

The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands.

In the event any project component is compromised during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible; emergency response and

repairs are part of Calleguas' normal operations to maintain system integrity and reliability and are not a new or increased activity associated with the project.

10. Surrounding Land Uses and Setting

General Plan land use designations along the project alignment include City of Camarillo Rural Density, Low Density, Low-Medium Density, and Public designations along Upland Road (City of Camarillo 2022a); County of Ventura Agriculture, Open Space, and Very Low-Density Residential designations along Santa Rosa Road (County of Ventura 2022); County of Ventura Open Space and City of Thousand Oaks Reserve Residential designations along Read Road (City of Thousand Oaks 2022); County of Ventura Open Space designation along Sunset Valley Road (County of Ventura 2022); and County of Ventura Open Space and City of Simi Valley Open Space, Medium Density Residential, Moderate Density Residential, Neighborhood Park, Mobile Home, Community Park, and General Commercial designations along Tierra Rejada Road (City of Simi Valley 2021; County of Ventura 2022).

11. Other Public Agencies Whose Approval is Required

The proposed project would require permits from the following agencies:

- City of Camarillo
- County of Ventura Transportation Department
- California Department of Transportation
- Ventura County Watershed Protection District
- City of Moorpark
- City of Simi Valley

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

Calleguas has not received any formal requests for consultation from any Native American tribes traditionally and culturally affiliated with the project area pursuant to Assembly Bill (AB) 52; however, Calleguas provided courtesy notifications to such tribes on December 8, 2022. This included distributing letters to tribes with known traditional and cultural affiliations with the project area to request review and input on the proposed project. One tribe, the Fernandeño Tataviam Band of Mission Indians, responded and requested formal consultation. At the time of this Initial Study, the consultation is ongoing and the results will inform the analysis that will be prepared for the EIR.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on 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 to 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 “less than significant with mitigation incorporated” 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 potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or

Calleguas Municipal Water District
Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

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

Date

Printed Name

Title

Environmental Checklist

1. Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project have a substantial adverse effect on a scenic vista?*

Scenic vistas are viewpoints that provide expansive views of highly valued landscape for the public benefit. The project alignment would be primarily located within existing roadways in Camarillo, Thousand Oaks, Moorpark, and Simi Valley, as well as unincorporated Ventura County.

The Community Design Element of the City of Camarillo’s General Plan references Calleguas Creek as open space area, but does not explicitly identify scenic vistas within the city (City of Camarillo 2012). Phase 3 of the proposed project would cross Calleguas Creek along Upland Road. Within unincorporated Ventura County along Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road, the project alignment is not adjacent to or visible from County-designated Scenic Protection Overlay Zones (County of Ventura 2020b). The Natural Resources Element of the City of Simi Valley’s General Plan identifies hills, ridgelines, canyons, bluffs, significant rock outcroppings, and open space areas surrounding the city as visual resources (City of Simi Valley 2012). The Natural Resources Element indicates features comprising scenic resources are present in the vicinity of the

project alignment, specifically the portion within Simi Valley traversing Tierra Rejada Road with adjacent open space. The proposed pipeline would be constructed within Upland Road and Santa Rosa Road in Camarillo, both of which are designated as local scenic corridors in the City of Camarillo General Plan (City of Camarillo 2012). In Moorpark, the pipeline would be constructed within Moorpark Road, which is designated as a local scenic corridor in the City of Moorpark General Plan (City of Moorpark 1986).

Visual resources in the vicinity of the pipeline alignment generally consist of views of urban development, residential neighborhoods, agricultural lands, and open space areas located on either side of the public ROW. During construction activities, the existing scenic character of the project site's roadways would be temporarily affected by the staging and operation of construction equipment, which would be visible from the Upland Road, Santa Rosa Road, and Moorpark Road scenic corridors.

During construction of the proposed pipeline, scenic vistas visible to travelers on Upland Road, Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road would be temporarily impaired by the staging and operation of construction equipment. Once construction of the pipeline is complete, the pipeline would not result in permanent aesthetic changes that would alter scenic vistas from their existing conditions because it would be mostly underground, except for small air vents that would be painted beige to be visually unobtrusive. Operational activities would not obstruct views of scenic vistas along the project alignment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The nearest designated state scenic highway to the project is State Route 27, approximately 15 miles southeast of the project's alignment along Tierra Rejada Road (California Department of Transportation [Caltrans] 2019). A portion of State Route 118, approximately 1.3 miles north of the project's alignment on Tierra Rejada Road, is eligible for designation as a state scenic highway (Caltrans 2019).

The project alignment is not located on a state scenic highway and is not visible from a state scenic highway (Caltrans 2019). The proposed project would therefore not damage scenic resources within a state scenic highway. No impact would occur.

NO IMPACT

- c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project alignment is primarily bounded by residential, agricultural, and open space land uses. Because the project traverses both urbanized and non-urbanized areas, this analysis evaluates both potential degradation of existing visual character and potential conflicts with zoning and other regulations governing scenic quality.

The proposed project would extend the CRSMP underground primarily within existing roadway ROW. A portion of the alignment would extend under private property at the northeast corner of

the intersection of Las Posas Road and Upland Road. The project would temporarily stage construction equipment on site and consist of open-cut trench and trenchless pipeline construction activities; however, these impacts would be temporary and would be limited to the project construction period. Upon completion of construction, ground surfaces would be restored to pre-project conditions. The proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. In addition, because the pipeline would not change surface land uses, the project would not conflict with applicable zoning of land uses along the alignment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

Construction would generally occur during the daytime hours and would not require the use of lighting. If evening or nighttime work is required to install trenchless portions of the pipeline or due to traffic control requirements, construction lighting would be needed. In this case, lights may be visible from surrounding roadways and residences. Per the project's construction BMPs, in the event nighttime lighting is needed, the lighting would be directed downwards towards construction activities and would be shielded so as to minimize visibility from adjacent land uses. Furthermore, during installation of the proposed pipeline, the active construction area and any associated lighting would move along the alignment as each segment of pipeline is installed, making construction lighting impacts not only temporary but also short-term at any individual light receiver. The proposed pipeline would not create a new source of light or glare once construction is complete because the proposed pipeline would be underground.

Thus, the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the vicinity of the project alignment, and there would be a less than significant impact.

LESS THAN SIGNIFICANT IMPACT

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2. Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No portion of the project alignment is mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The proposed pipeline alignment is located primarily within existing roadways. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production and designated as “Other Land” by the California Department of Conservation’s (DOC) Farmland Mapping and Monitoring Program (DOC 2022). The project alignment is situated adjacent to mapped Farmland as identified by the DOC (DOC 2022).

Because no portion of the project alignment is mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, the project would not convert mapped Farmland to non-agricultural use. Project construction activities along public ROW would be restricted to the roadway corridors and would not extend onto adjacent mapped farmland. Construction activities at the private property located at the intersection of Las Posas Road and Upland Road, classified as “Other Land,” would temporarily interrupt agricultural production at the site. However, upon completion of construction, the ground surface would be restored to pre-project conditions. As such, the project would not convert mapped Farmland to non-agricultural use. There would be no impact.

NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently zoned Rural Exclusive Residential and does not have a Williamson Act contract. As such, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project alignment and surrounding vicinity are not designated or zoned for forest land, timberland, or timberland zoned Timberland Production. The proposed project would consist of a pipeline for excess recycled water and brine concentrate conveyance and would not change the land uses on the project alignment or facilitate off-site loss of forest land or conversion of forest land to non-forest use. Therefore, implementation of the proposed project would not convert any forest land to non-forest use, nor would it conflict with existing zoning for such lands. As such, no impact to forests or timberland would occur.

NO IMPACT

- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

As previously discussed under thresholds (a) through (d) above, the proposed project would not result in the conversion of Farmland or forest land to non-agricultural or non-forest uses. Proposed project activities would be limited to pipeline installation and operational activities and would not result in other changes to the existing environment that could result in conversion of Farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

NO IMPACT

3. Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The analysis in this section relies on the Air Quality and Greenhouse Gas Study prepared for the project in January 2023 and appended to this Initial Study as Appendix A.

Air Quality Standards and Attainment

The project site is located in the South Central Coast Air Basin (SCCAB), which is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). VCAPCD is required to monitor air pollutant levels to ensure the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the SCCAB is classified as being in “attainment.” If the standards are not met, the SCCAB is classified as being in “nonattainment” and VCAPCD is required to develop strategies to meet the standards. According to the California Air Resources Board (CARB) Area Designation Maps, the project site is located in a region identified as being in nonattainment for the ozone NAAQS and CAAQS and non-attainment for the particulate matter 10 microns or less in diameter (PM₁₀) CAAQS (CARB 2022). Table 3 provides a summary of air pollutants for which the SCCAB has nonattainment status along with associated impacts to health. VCAPCD ~~has adopted~~ is currently planning to adopt the 2022 Ventura County Air Quality Management Plan (AQMP), which provides a strategy for the attainment of the 2015 federal 8-hour ozone standard (VCAPCD 2022).

Table 3 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹

¹ More detailed discussion on the health effects associated with exposure to suspended particulate matter can be found in the following documents: United States Environmental Protection Agency (USEPA), Air Quality Criteria for Particulate Matter, October 2004.
 Source: USEPA 2016

Air Pollutant Emission Thresholds

VCAPCD’s Ventura County Air Quality Assessment Guidelines (2003) recommend specific air criteria pollutant emission thresholds for determining whether a project may have a significant adverse impact on air quality within the Basin. VCAPCD identifies separate ozone significance thresholds for (1) the Ojai Planning Area, (2) the City of Simi Valley, and (3) the remainder of Ventura County. The proposed project is a linear pipeline that traverses across two of these geographic areas: the city of Simi Valley and the remainder of Ventura County (outside of the Ojai Planning Area). As such, both of those ozone significance thresholds are applicable to the proposed project.

VCAPCD recommends a 25 pounds per day significance threshold for ozone precursor emissions (ROC and NO_x) in Ventura County for areas outside of the Ojai Planning Area and the City of Simi Valley. For development projects in the City of Simi Valley, VCAPCD notes that the City of Simi Valley uses a significance threshold of 13.7 tons per year for ozone precursors, as directed by the City of Simi Valley City Council. Exceedance of the thresholds would indicate that a development project could jeopardize the attainment of the ozone standard. Both the Ventura County and Simi Valley thresholds are applicable to the project, and they represent different time scales. Therefore, this analysis adopts both significance thresholds for the project. Impacts would be considered significant if the project’s emissions exceed 25 pounds per day or 13.7 tons per year for ozone precursors. VCAPCD BMPs are required if project emissions exceed the ozone precursor thresholds.

VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. VCAPCD indicates a project generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during grading and excavation activities. The 2003 VCAPCD guidelines require fugitive dust mitigation measures be applied to all dust-generating activities. Such measures include minimizing a project’s disturbance area, watering a site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less on unpaved surfaces.

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

A project may be inconsistent with the applicable air quality plan if the project would generate population, housing, or employment growth exceeding the forecasts used in the development of the plan. This analysis examines the proposed project's consistency with the VCAPCD's ~~2016~~ 2022 Ventura County AQMP. The ~~2016~~ 2022 Ventura County AQMP relies on the Southern California Association of Governments' 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasts of regional population growth in its projections for managing Ventura County's air quality (Southern California Association of Governments 2016).

As discussed in Environmental Checklist Section 14, *Population and Housing*, no direct growth would occur as a result of the project because it does not propose new homes, businesses, or other land uses that would generate population growth. As discussed in the 2014 SEIR for Phase 2 of the CRSMP, any additional water supply projects facilitated by the extended CRSMP would improve the reliability of local water supplies and reduce the region's reliance on imported supplies. These projects have likely been identified already in planning documents such as Urban Water Management Plans (UWMPs). For example, the Camrosa Water District's 2020 UWMP identifies a potential groundwater desalter project to treat for nitrates in the Santa Rosa Basin. If developed, the desalter would discharge brine from the treatment process to the CRSMP. According to the UWMP, the purpose of the desalter would be to improve water quality in the Santa Rosa Basin and increase Camrosa Water District's self-reliance (Camrosa Water District 2021). The project would therefore not generate population, housing, or employment growth exceeding the forecasts used in the development of the plan.

As such, the project would not conflict with or obstruct implementation of the applicable air quality plans. No impact would occur.

NO IMPACT

b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The proposed project would generate short-term emissions associated with project construction and negligible operational emissions associated with worker trips for maintenance and inspection of the pipeline. Construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0. This analysis conservatively compares total project emissions against the VCAPCD recommended threshold for Ventura County (outside of the Ojai Planning Area) and Simi Valley, rather than a subset of emissions matching project activities within each individual area.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy-duty construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. As shown in Table 4 and Table 5, based on the duration of construction activities and the equipment to be utilized on site, the proposed project's short-term construction-related emissions of ROC or NO_x would not exceed the VCAPCD threshold of 13.7 tons per year in Simi Valley and 25 pounds per day for elsewhere in Ventura County. In addition, the project would include BMPs to control fugitive dust consistent with Ventura County Air Quality Assessment

Guidelines, Section 7.4.1. Therefore, construction-related project emissions would not violate air quality standards, and impacts would be less than significant.

Table 4 Estimated Maximum Daily Construction Emissions (lbs/day)

	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
2024	2	17	21	<1	2	1
2025	1	9	13	<1	1	1
Phases 4						
2025	2	18	22	<1	3	1
2026	2	18	20	<1	3	1
2027	1	9	14	<1	1	1
2028	1	9	14	<1	1	1
Maximum Emissions	2	18	22	<1	3	1
VCAPCD Thresholds ¹	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹ VCAPCD Threshold for Ventura County outside of Ojai Planning Area.

Notes: This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap.

See Appendix A for modeling details and CalEEMod results.

Some totals may not add up due to rounding. Emissions data is sourced from “Table 2.1 Construction Emission” results in Appendix A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Table 5 Estimated Annual Construction Emissions (tons/year)

	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
2024	<1	1	1	<1	<1	<1
2025	<1	1	1	<1	<1	<1
Phases 4						
2025	<1	1	1	<1	<1	<1
2026	<1	1	2	<1	<1	<1
2027	<1	1	2	<1	<1	<1
2028	<1	<1	<1	<1	<1	<1
Maximum Emissions	<1	1	2	<1	<1	<1
VCAPCD Thresholds ¹	13.7	13.7	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Simi Valley.

Notes: This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap. See Appendix A for modeling details and CalEEMod results.

Some totals may not add up due to rounding. Emissions data is sourced from “Table 2.1 Construction Emission” results in Appendix A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., off-gassing of repaved roadways and roadway striping) and mobile sources. The project’s operational mobile emissions would include annual site visits to the pipeline alignment for visual inspection, maintenance activities, and as-needed repairs. Table 6 and Table 7 summarize the project’s maximum daily operational emissions. As shown therein, operational emissions would not exceed VCAPCD’s threshold of 13.7 tons per year in Simi Valley and 25 pounds per day for Ventura County. Therefore, impacts associated with operational emissions would be less than significant.

Table 6 Estimated Maximum Daily Operational Emissions (lbs/day)

Emissions Source	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
Area	<1	<1	<1	<1	<1	<1
Phase 4						
Area	<1	<1	<1	<1	<1	<1
Phase 3 & 4 Combined Mobile Emissions						
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
VCAPCD Thresholds ¹	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Ventura County outside of Ojai Planning Area.

See Appendix A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from “Table 2.2 Operational Emission” results in Appendix A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Table 7 Estimated Annual Operational Emissions (tons/year)

Emissions Source	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
Area	<1	<1	<1	<1	<1	<1
Phase 4						
Area	<1	<1	<1	<1	<1	<1
Phase 3 & 4 Combined Mobile Emissions						
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
VCAPCD Thresholds ¹	13.7	13.7	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Simi Valley.

See Appendix A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from “Table 2.2 Operational Emission” results in Appendix A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

VCAPCD defines sensitive receptors as facilities or land uses that include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors listed in the VCAPCD Guidelines (2003) include schools, hospitals, and daycare centers; sensitive receptors also typically include residences. The project alignment would be constructed adjacent to sensitive receptors, including residences along Upland Road, Santa Rosa Road, and Tierra Rejada Road and the Santa Rosa Technology Magnet School along Santa Rosa Road.

The potential for project construction to expose sensitive receptors to substantial pollutant concentrations is discussed in the following subsection. The proposed project does not include any stationary sources of air pollutant emissions.

Toxic Air Contaminants

Health impacts associated with toxic air contaminants (TACs) are generally associated with long-term exposure. The greatest potential for TAC emissions would be during construction, which may result in a short-term increase of TAC emissions.

Construction

The greatest potential for TAC emissions during construction would be from heavy equipment operations that generate diesel particulate matter (DPM) emissions. Generation of DPM from construction projects typically occurs in a single area for a short period. As discussed under item (b), project construction would result in emissions of criteria pollutants, including PM₁₀, ROC, and NO_x. The construction emissions for the proposed project would move linearly along the Phase 3 and 4 pipeline alignment. The project would install approximately 80 feet of pipeline per day and would expose sensitive receivers to construction TAC emissions for approximately 25 days.¹ Therefore, exposure at a given sensitive receptor within 1,000 feet of heavy equipment use would occur for less than two months. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

Operational

Sources of operational TACs typically include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The proposed project is not one of these uses. In addition, the proposed project would not require any new or additional stationary sources of air pollutant emissions. Therefore, no impact would occur.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Valley Fever is known to occur in Ventura County soils, and exposure risk is highest from ground-disturbing agricultural and construction activities. The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. Soils along the project's pipeline alignment are already disturbed from construction of roadways, commercial structures, and residences, as well as

¹ CARB recommends siting sensitive receptors 1,000 feet from TAC emitting sources (CARB 2005). A sensitive receptor would be exposed to the project construction approaching from 1,000 feet away and project construction located 1,000 feet away. Therefore, a sensitive receptor would be exposed for 25 days = (2,000 feet divided by 80 feet installation per day). Construction would occur on 5 working days per week.

activities associated with agricultural production. Due to the previous amount of disturbance on the project alignment, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection of Valley Fever to people in the project area. Standard construction measures incorporated as part of the proposed project would reduce fugitive dust generation, which would further minimize the potential risk of infection. Therefore, construction of the proposed project would not substantially increase the risk to public health above existing background levels, and impacts related to Valley Fever would be less than significant.

Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of a given receptor. The proposed pipeline would be installed below ground and would not create objectionable odors during project operation. With respect to operation, CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of odors (e.g., sewage treatment plants, landfills, recycling facilities, biomass operations, autobody shops, fiberglass manufacturing, and livestock operations). Excess recycled water and/or brine discharge pipeline operations are not identified on this list. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4. Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	■	□	□	□
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	■	□	□	□
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	■	□	□	□
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	■	□	□	□
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	■	□	□	□
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	□	□	□	■

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*
- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The project alignment is primarily located within roadways surrounded by numerous mature trees and mature vegetation. In addition, the alignment crosses multiple waterways, including Calleguas Creek and smaller drains and barrancas. Therefore, the project alignment may be located near sensitive natural communities and/or special-status species that could potentially be significantly impacted by the proposed project. The project alignment along Tierra Rejada Road is located in critical habitat for the Coastal California gnatcatcher (*Polioptila californica californica*) as designated by the United States Fish and Wildlife Service (2022). Additionally, Moorpark Road, Sunset Valley Road, and Tierra Rejada Road are identified as wildlife corridors (County of Ventura Resource Management Agency 2022). Further review is necessary to determine if the project could potentially significantly impact special-status species, sensitive natural communities, wetlands, and wildlife movement, or conflict with biological resource policies or ordinances. Potential impacts to such biological resources will be analyzed further in a Biological Resources Assessment and an EIR for the project.

POTENTIALLY SIGNIFICANT IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project alignment is not within an area of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any such provisions, and no impact would occur.

NO IMPACT

5. Cultural Resource

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At the time of this Initial Study, a Phase I Cultural Resources Study is currently being developed for the proposed project. Preliminary background research and desktop research conducted for the Phase I Cultural Resources Study was used to inform this preliminary environmental analysis.

a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

According to CEQA Guidelines §15064.5, a historical resource includes those listed in or determined eligible for listing in the California Register of Historical Resources or a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant.

According to preliminary background research and aerial desktop review conducted for the Phase I Cultural Resources Study, which is in progress, three structures are situated within the pipeline corridor, which traverses public ROW and a private property. The public ROW includes Santa Rosa Road, which is depicted on historical topographic maps and aerial images dating to 1921; the Union Pacific Railroad, constructed before 1904; and the Upland Road Bridge, constructed sometime between 1986 and 1989 (NETR 2022). Preliminary research indicates none of these structures are currently historical resources pursuant to Section 15064.5(a) of the CEQA Guidelines, nor have they been subject to previous evaluation.

Although Santa Rosa Road, the Upland Road Bridge, and the Union Pacific Railroad all meet the 45-year age threshold that generally triggers the need for historical resources evaluation per the California Office of Historic Preservation, the project would not adversely impact these structures regardless of their potential historical resource eligibility. The project would involve trenching within Santa Rosa Road, but it would restore the ground surface to pre-project conditions and replace road materials in kind. The roadway has been repaved periodically since its original construction; roadway paving and restoration after pipeline installation would consist of modern materials. The project would install pipeline within an existing utility cell in the Upland Road Bridge and would not damage or substantially alter the bridge. The project would also be installed via a trenchless

construction method under the Union Pacific Railroad; however, it would not physically demolish or alter any of the physical characteristics of this linear resource.

As such, the project would not result in a substantial adverse change in the significance of any known or potential historical resource pursuant to §15064.5. No impact would occur.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The project alignment has been previously disturbed by development of existing roadways and compacted roadway shoulders. Where the project alignment crosses private property, soil has been previously disturbed due to existing agricultural activities. Despite previous development, construction activities associated with the proposed project could involve ground disturbance below the level of previous ground disturbance along the project alignment. Therefore, there is a potential for discovery of archaeological resources. These impacts are potentially significant and will be discussed further in a Cultural Resources Study and an EIR.

POTENTIALLY SIGNIFICANT IMPACT

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The discovery of human remains is always a possibility during ground-disturbing activities, which would be required for the proposed project. Despite previous development, construction activities associated with the proposed project could involve ground disturbance below the level of previous ground disturbance along the project alignment. Therefore, there is potential for discovery of human remains. These impacts are potentially significant and will be discussed further in a Cultural Resources Study and an EIR.

POTENTIALLY SIGNIFICANT IMPACT

6. Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

California has one of the lowest per capita energy use rates in the United States due to its energy efficiency programs and mild climate (United States Energy Information Administration 2022). Project operation would not require the consumption of electricity or natural gas; therefore, this analysis focuses solely on the consumption of transportation fuels consumed during construction. Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 11.6 billion gallons sold in 2021 (California Energy Commission [CEC] 2022). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.6 billion gallons sold in 2021 (CEC 2022). Table 8 summarizes the petroleum fuel consumption for Ventura County, where the project site is located, as compared to statewide consumption.

Table 8 2021 Annual Gasoline and Diesel Consumption

Fuel Type	Ventura County (millions of gallons)	California (millions of gallons)	Proportion of Statewide Consumption ¹
Gasoline	294	11,618	2.5%
Diesel	35	1,611	2.1%

¹ For reference, the population of Ventura County (833,652 persons) is approximately 2.1 percent of the population of California (39,185,605 persons) (California Department of Finance [DOF] 2022).
Source: CEC 2022

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project’s energy consumption are discussed in detail in Environmental Checklist Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road heavy-duty vehicles and equipment on the project site, worker travel to and from the project site, and vehicles used to deliver materials to the site. Information provided by Calleguas and the CalEEMod outputs for the air pollutant and GHG emissions modeling (Appendix A) were used to estimate energy consumption associated with the proposed project. As shown in Table 9, construction activities would require approximately 37,819 gallons of gasoline and approximately 159,762 gallons of diesel fuel. These construction energy estimates are conservative because they assume the construction equipment used in each phase of construction is operating every day of construction.

Table 9 Estimated Fuel Consumption during Construction

Source	Fuel Consumption (gallons)	
	Gasoline	Diesel
Construction Equipment & Hauling Trips	N/A	159,762
Construction Worker Vehicle Trips	37,819	N/A

N/A = not applicable
 See Appendix B for energy calculation sheets.

Energy use during construction would be temporary in nature and heavy-duty equipment used would be typical of similar-sized construction projects in the region. In addition, project contractors and Calleguas staff would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Heavy-duty equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These practices would result in efficient use of energy necessary to perform construction of the project. In the interest of cost-efficiency, project contractors and Calleguas staff also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, construction would not involve the inefficient, wasteful, and unnecessary use of energy. No impact would occur.

Operation of the proposed project would involve vehicle trips for maintenance and inspection activities. Operation of the proposed project is anticipated to require approximately two gallons of gasoline per year for vehicle trips (Appendix B). The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands. Thus, operation of the proposed project would also have no impact regarding the inefficient, wasteful, and unnecessary use of energy.

NO IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Calleguas has not adopted specific renewable energy or energy efficiency plans. The Ventura County Regional Energy Alliance, in partnership with the cities of Thousand Oaks and Moorpark, has prepared specific Energy Action Plans (EAPs) for Thousand Oaks, Moorpark, and remaining

jurisdictions within unincorporated Ventura County (VCREA 2023). Simi Valley and Camarillo do not have adopted EAPs. Therefore, the project is analyzed for consistency with the EAPs for unincorporated Ventura County, Thousand Oaks, and Moorpark.

As discussed above under threshold (a), project construction would not involve the inefficient, wasteful, and unnecessary use of energy, and project operation would not introduce new electricity demands. The project would have no impact regarding the wasteful or inefficient use of energy, and thus would be consistent with objectives of respective EAPs within the jurisdiction of the County of Ventura County, the City of Thousand Oaks, and the City of Moorpark.

Therefore, the project would result in no impacts to state or local energy efficiency plans.

NO IMPACT

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7. Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Like all of Southern California, the project site is subject to strong ground shaking associated with active and/or potentially active faults in the region. As depicted in Figure 7, the project alignment crosses the Simi-Santa Rosa fault zone, as mapped by the California DOC, in several locations, including along Upland Road, Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road (DOC 2021). The Simi-Santa Rosa fault zone is identified as an Alquist-Priolo Earthquake Fault Zone (DOC 2021). While the project may be subject to strong ground shaking in the event of an earthquake, it would not be subject to unusual levels of ground shaking as compared to the rest of the region. Although the project site is located in a seismically active area, the project would not expose people to seismically-induced risk. Proposed project activities would consist of pipeline installation and operation, which would not alter existing potential for the Simi-Santa Rosa fault zone to cause substantial adverse effects related to risk of loss, injury, or death, involving the rupture of the Simi-Santa Rosa fault zone.

The engineering design of the pipeline would consider the seismic environment and would comply with applicable seismic design standards. A portion of the Phase 3 pipeline would be installed in the deck of the Upland Road Bridge. The pipeline would be installed with seismic fittings on both ends where it enters and exits the bridge deck, allowing the pipe to move without failing during a seismic event. As discussed in Initial Study Section 9, *Project Description*, in the event an earthquake compromised any project component during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible. Therefore, while the project is located within a seismically active area and would place new infrastructure in an area that could be affected by seismic activity, the project would not directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death, involving rupture of a known earthquake fault or seismic ground shaking. Potential impacts would be less than significant.

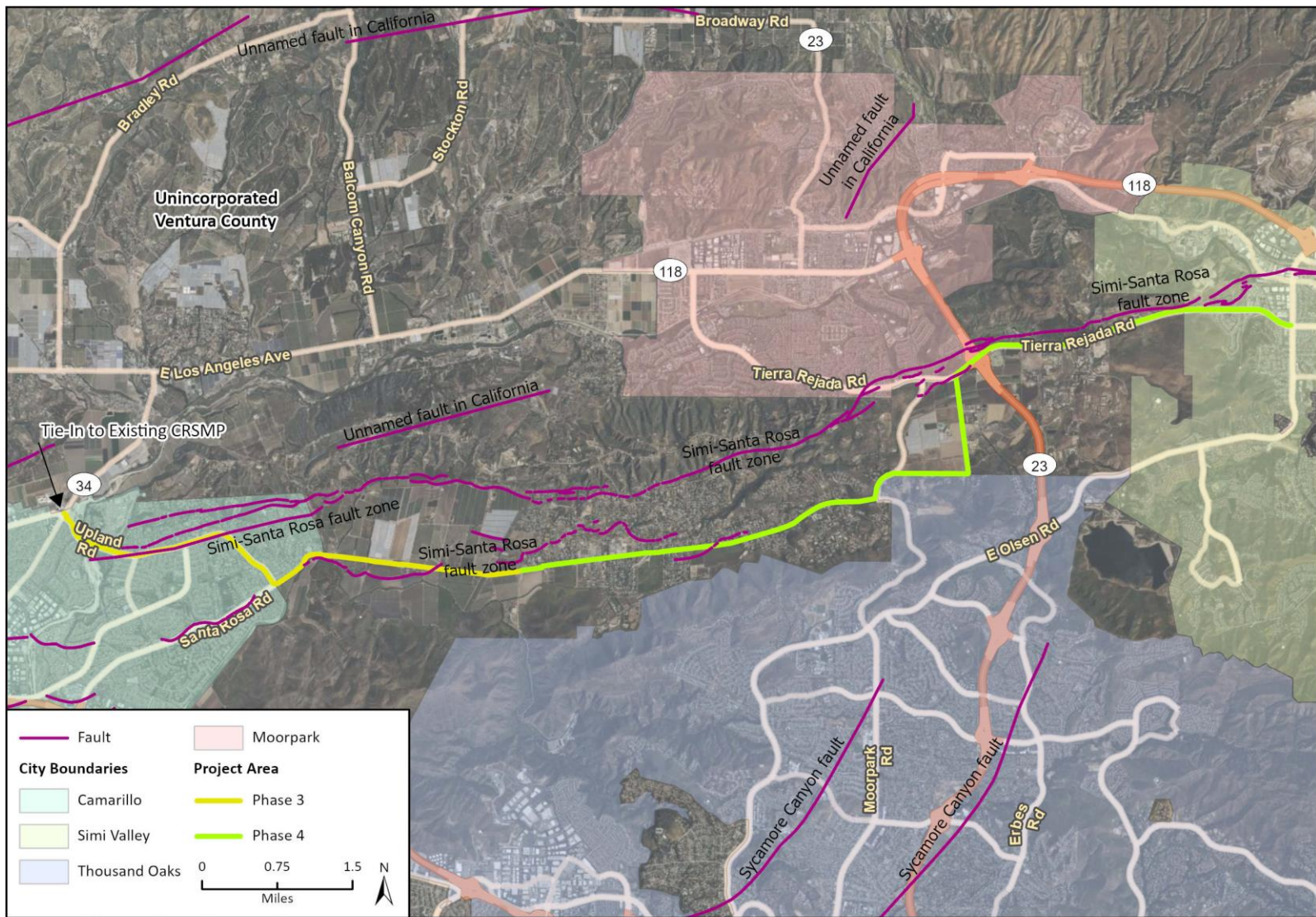
LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

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 project alignment along Santa Rosa Road and the adjacent hillside areas are mapped as liquefaction zones by the California DOC (DOC 2021).

As discussed under items (a.1) and (a.2), the project would comply with all applicable seismic design standards. In the event seismically-induced liquefaction compromises the pipeline during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible. In addition, the project involves construction of water infrastructure and would not involve placement of habitable structures within a liquefaction-prone area, thereby minimizing the potential to result in loss, injury, or death involving seismic-related ground failure due to liquefaction. As a result, the proposed project would not directly or indirectly cause potential

Figure 7 Regional Fault Line Map with Project Alignment



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 Additional data provided by USGS and the County of Ventura, 2022.

EPS Proj., Regional, Phase 3 Local
 Fig X Fault Zones

substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4 Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project alignment is adjacent to hillside areas identified as Landslide Zones along Upland Road, Santa Rosa Road, and Tierra Rejada Road (DOC 2021). In general, a landslide event may be triggered by removing material down-slope of potentially unstable materials that would otherwise support such materials; placing fill or heavy structures upslope of potentially unstable materials; or applying substantial amounts of water to the surface or subsurface such that it decreases the strength of potentially unstable geologic areas.

The proposed project would not include habitable structures and would not expose people to loss, injury, or death involving landslides. The project alignment is located primarily within previously disturbed soil developed with existing roadways. Although portions of the project alignment are adjacent to hillside areas, the proposed project would not involve activities that would disturb or burden potentially unstable geologic areas. As discussed above, all project activities would be constructed in compliance with applicable standards for seismic integrity and safety, which includes the potential for landslides. The proposed project would not have the potential to cause substantial adverse effects involving landslides. Impacts involving landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project alignment. Construction of the proposed pipeline would primarily require trenching within existing paved roadways, which have been previously disturbed. As the proposed project's disturbance area is greater than one acre, the project would be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (typically called the Construction General Permit). The Construction General Permit requires development and implementation of a project-specific Stormwater Pollution Prevention Plan (SWPPP). Implementation of the SWPPP would minimize the amount of sediment and other pollutants associated with construction sites that are discharged in stormwater runoff, through BMPs to control erosion and sedimentation. Such BMPs typically include the use of stabilized construction entrances and exits, construction vehicle maintenance in staging areas to avoid leaks, and installation of silt fences and erosion control blankets. BMPs required by the SWPPP would be included in the design of the project and do not serve as mitigation measures.

No substantial erosion or loss of topsoil would occur from pipeline operation because the project would restore ground surfaces to pre-project conditions and would implement BMPs designed to control erosion and sedimentation. Impacts regarding substantial soil erosion or the loss of topsoil would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Unstable soils are those soils which are physically unsuitable to support buildings, roads, utilities, or other development-related improvements, or which have the potential for slope failure, erosion, or subsidence. Expansive soils are those soils which can undergo substantial changes in volume (i.e., shrink-or-swell potential), due to variations in moisture content.

Although the proposed project would be located in a seismically active area, the project is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides or liquefaction. During construction, trench spoils would be temporarily stockpiled within the construction staging and storage area, then used to backfill the trench after pipeline placement; backfilling would be conducted to meet proper compaction requirements. Depending on applicable requirements at the time of construction, slurry backfill may be used. The project would not include habitable structures and would therefore not create substantial direct or indirect risks to life or property beyond existing conditions.

The project would not compromise soil stability and there would be no impact involving unstable or expansive soils.

NO IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The proposed project would not include the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows). Paleontological resources are not found in “soil” but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction.

According to the SVP (2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological

resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. Based on published geologic maps, Rincon assessed whether high sensitivity geologic units potentially underlie the project alignment.

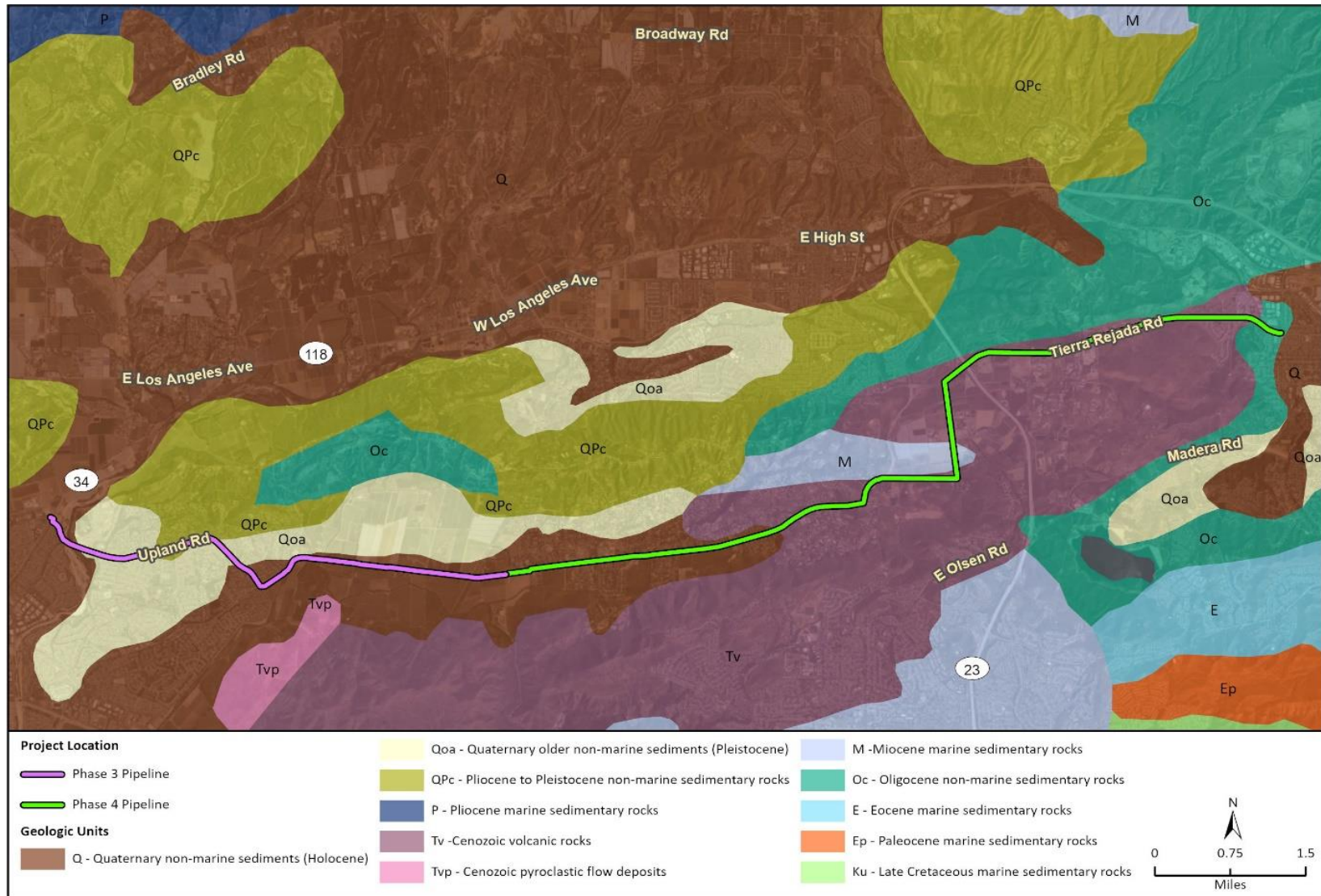
According to the geologic map of Jennings et al. (2010), the project alignment is underlain by marine and non-marine sedimentary rocks from Holocene, Pleistocene, Pliocene, Miocene, and Oligocene age (i.e., late Cenozoic) and volcanic rocks of Cenozoic age.

Figure 8 shows the pipeline alignment and underlying geologic units. Volcanic rocks have no paleontological sensitivity because the nature of their formation, being formed from cooling molten rock, generally precludes fossil preservation. Late Cenozoic marine and non-marine sedimentary rocks have produced significant paleontological resources throughout California (Jefferson 2010; Paleobiology Database 2022), but specific geologic formations have different potentials to produce such resources due to their various ages and lithologies. Therefore, further analysis is needed to assess the paleontological sensitivity of the late Cenozoic marine and non-marine sedimentary rocks underlying the project alignment.

Considering the proposed project alignment is underlain by late Cenozoic marine and non-marine sedimentary rocks which may have high paleontological sensitivity, impacts to paleontological resources may be potentially significant. This impact will be further analyzed in the EIR for the project.

POTENTIALLY SIGNIFICANT IMPACT

Figure 8 Regional Geology Map with Project Alignment



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8. Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

This analysis evaluates the proposed project against the goals of the ~~2017~~ 2022 Scoping Plan. Approximately 2 percent of total energy usage in California is used for the conveyance, treatment, and distribution of water (CARB ~~2017~~ 2022). One of the goals of the ~~2017~~ 2022 Scoping Plan is to “develop and support more reliable water supplies for people, agriculture, and the environment, provided by a more resilient, diversified, sustainably managed water resources system with a focus on actions that provide direct GHG reductions” (CARB ~~2017~~ 2022). The proposed project would facilitate the utilization of local water sources by providing a mechanism to efficiently dispose of the concentrate generated during treatment of these water sources. Therefore, although the project would generate temporary construction and minimal operational emissions, the project would ultimately be consistent with the goals of CARB’s ~~2017~~ 2022 Scoping Plan.

The proposed project would not conflict with any applicable plans, policies, or regulations for the purpose of reducing GHG emissions. Therefore, impacts related to GHG emissions would be less than significant.

Project construction would generate minimal GHG emissions from the operation of heavy machinery for the pipeline, and equipment and materials haul truck trips and construction worker trips to and from the project site. Construction GHG emissions were estimated using CalEEMod version 2020.4.0. Operation of the proposed project would generate GHG emissions associated with the area and mobile sources, such as off-gassing of paved roads and pipeline maintenance and inspection trips. The pipeline itself would not generate new demand for electricity, water supply, or natural gas. Maintenance activities would occur annually from the District’s office along the pipeline alignment. Quantification of GHG emissions from construction and operational activities are provided for informational purposes.

Construction Emissions

As shown in Table 10, construction of the proposed project would generate an estimated total of 1,784 metric tons (MT) of carbon dioxide equivalent (CO₂e).² The Association of Environmental Professionals (2016) recommends GHG emissions from construction be amortized over 30 years³ and added to operational GHG emissions to determine the overall impact of a project. The construction of the proposed project would generate an estimated 59 MT CO₂e per year over a 30-year period.

Table 10 Estimated Construction Emissions of Greenhouse Gases

Construction	Project Emissions MT CO ₂ e
Construction Emissions	
Phase 3	
2024	354
2025	292
Phase 4	
2025	183
2026	483
2027	437
2028	35
Total Construction Emissions	1,612
Amortized Construction Emissions (over 30 years)	59

MT CO₂e = metric tons of carbon dioxide equivalent
 Source: Appendix A CalEEMod worksheets

Table 11 combines the estimated construction and operational GHG emissions associated with development of the project. Operation of the project would generate an estimated one maintenance vehicle trip per year, resulting in negligible annual mobile GHG emissions. As shown in Table 11, annual emissions from the proposed project would be approximately 59 MT of CO₂e per year with amortized construction emissions. Impacts related to GHG emissions would be less than significant.

² A carbon dioxide equivalent (CO₂e) is a measurement used to compare the emissions from various GHGs by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

³ The lifetime of the project is anticipated to be longer than 30 years; therefore, the analysis is conservative.

Table 11 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT CO₂e)
Construction¹	59
Operations Phase 3	
Area	<1
Energy	<1
Mobile	<1
Solid Waste	<1
Water, Wastewater	<1
Operations Phase 4	
Area	<1
Energy	<1
Mobile	<1
Solid Waste	<1
Water, Wastewater	<1
Total	59

MT CO₂e = metric tons of carbon dioxide equivalent
¹Amortized construction related GHG emissions over 30 years
 Source: Appendix A CalEEMod worksheets.

LESS THAN SIGNIFICANT IMPACT

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9. Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction of the proposed project would temporarily increase the transport and use of hazardous materials along the project alignment through the operation of vehicles and equipment, consistent with other pipeline construction projects in the region. Such substances include diesel fuel, oil, solvents, and other similar materials brought onto the construction site for use and storage during the construction period. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities which would pose a significant hazard to the public or construction workers. Furthermore, project construction would require the excavation and transport of paving materials and soils which could possibly be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). All such paving and soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations to minimize potential hazards to construction workers and the surrounding community.

Operation of the proposed project would involve the conveyance of brine concentrate and excess recycled water and would not require the use, storage, or disposal of hazardous materials. The contents of the Phases 3 and 4 pipeline alignments would be similar to the contents of the existing CRSMP. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The use, transport, and storage of hazardous materials during construction of the proposed project (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for an accidental spill or release to occur. As discussed under item (a), operation and maintenance of the project would not involve the routine transport, use, or disposal of hazardous materials. Therefore, potential impacts are limited to the construction period.

The presence of hazardous materials during project construction activities could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. However, hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations. Additionally, the proposed project would adhere to BMPs required by the SWPPP, which include hazardous material management measures. Therefore, construction impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest school to the project alignment is Santa Rosa Technology Magnet School, located immediately adjacent to the project alignment on Santa Rosa Road in unincorporated Ventura County. As discussed above for item (a), potential impacts of project construction associated with the routine transport, handling, and use of hazardous materials would be less than significant. In addition, BMPs included as part of the project would minimize the potential for an accidental spill or

release of hazardous or potentially hazardous materials to result in adverse impacts. The proposed project would not introduce a new stationary source of hazardous emissions, and operation of the project would not require the handling of hazardous materials, substances, or waste. Emissions from project construction would be limited to those associated with the operation of construction vehicles and equipment, which are addressed under Environmental Checklist Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, and would be less than significant.

Although project construction activities would involve the routine transport, handling, and use of hazardous materials within 0.25 mile of an existing school, those materials would be consistent with other standard pipeline construction projects in the region, and BMPs would be implemented to minimize associated risks. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Hazardous Waste and Substances Sites List, also known as the Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List; other state and local government agencies are also required to provide additional hazardous material release information for the Cortese List. The analysis for this section included a review of the following resources on October 11, 2022, to provide hazardous material release information:

- SWRCB GeoTracker database (SWRCB 2022a)
- DTSC EnviroStor database (DTSC 2022)

Based upon review of these databases, there are no active hazardous material sites mapped along or in the vicinity of the project alignment. According to GeoTracker's interactive mapping platform, there are five closed Leaking Underground Storage Tank (LUST) cleanup sites mapped within the project alignment within Santa Rosa Road and Tierra Rejada Road. Although GeoTracker's interactive mapping platform locates these points within the roadways, the LUST cleanup sites themselves are likely associated with land uses adjacent to and outside of the roadways, with the site points coarsely mapped at the facility site address along the roadway.

Table 12 identifies each LUST site mapped within the project alignment. Where site-specific mapping was available through GeoTracker, the table also identifies the location of the underground tank(s) in relation to the roadway.

Table 12 Hazardous Material Sites Mapped Within Project Alignment

GeoTracker Site Name/Number	Site Address	Site Type (Potential Contaminant of Concern)	Cleanup Status	Site-Specific Mapping Notes
Camrosa Water District ¹ (T0611100153)	7385 Santa Rosa Road, Camarillo, CA 93010	LUST Cleanup Site (Diesel)	Completed – Case Closed as of 6/6/1990	The underground tank was located north of the existing building at the Camrosa Water District site, approximately 150 feet north of Santa Rosa Road. ²
Hill Canyon Treatment Plant ³ (T061113035)	9600 Santa Rosa Road, Camarillo, CA 93012	LUST Cleanup Site (Diesel)	Completed – Case Closed as of 6/2/2004	The underground storage tanks were located at the Hill Canyon Treatment Plant, which is situated approximately 1.5 miles south of Santa Rosa Road. ⁴
Nicholson Property ⁵ (T0611113948)	11226 Santa Rosa Road, Camarillo, CA 93012	LUST Cleanup Site (Gasoline)	Completed – Case Closed as of 11/7/2005	The underground tank was situated outside the roadway on the adjacent property, approximately 200 feet south of Santa Rosa Road. ⁶
Santa Rosa School ⁷ (T0611100715)	13282 Santa Rosa Road, Camarillo, CA 93012	LUST Cleanup Site (Gasoline)	Completed – Case Closed as of 7/22/1996	Underground tanks were located on the Santa Rosa School site, approximately 120 feet southeast of Santa Rosa Road. ⁸
ARCO #6119 ⁹ (T0611100327)	25 Tierra Rejada Road, Simi Valley, CA 93065	LUST Cleanup Site (Gasoline)	Completed – Case Closed as of 4/12/2010	The tanks were located outside of the roadway, at the ARCO gas station on the corner of Tierra Rejada Road and Madera Road.

¹ SWRCB 2022b

² Ventura County Resource Management Agency 1990

³ SWRCB 2022c

⁴ SWRCB 2004a

⁵ SWRCB 2022d

⁶ SWRCB 2004b

⁷ SWRCB 2022e

⁸ Ventura County Resource Management Agency 1996

⁹ SWRCB 2022f

As shown in Table 12, all five LUST sites have the status “Completed—Case Closed,” indicating applicable regulatory requirements were met at the time of closure. In addition, site-specific mapping from closure records confirmed the underground tanks were all located outside of Santa Rosa Road.

As such, the proposed project would not create a significant hazard to the public or the environment due to these listed cleanup sites. Impacts would be less than significant. Therefore, proposed project impacts regarding hazardous materials sites compiled pursuant to Government Code Section 65962.5 would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The project alignment is not located within an airport land use plan or within two miles of a public or private airport (Ventura County Airport Land Use Commission 2000). The nearest airport is the Camarillo Airport, approximately 4.6 miles to the southwest of the alignment at its closest point. As a result, the proposed project would have no impact related to safety hazards for people residing or working in the project area due to proximity to an airport.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Proposed pipeline construction would mostly occur within the existing roadways of Upland Road, Santa Rosa Road, Read Road, Sunset Valley Road, Moorpark Road, and Tierra Rejada Road. A portion of the pipeline would be constructed on private property in the northeast corner of the intersection of Upland Road and Las Posas Road. Other than a short segment of the alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

City and County General Plan Safety Elements do not identify roadways along the project alignment to be major evacuation routes. In addition, traffic control plans would be prepared as part of the encroachment permitting process. Impacts related to emergency response plans and emergency evacuation plans during project construction would be less than significant.

Project operation and maintenance would not introduce new activities that could impede or interfere with emergency plans. Therefore, no impact related to emergency response plans and emergency evacuation plans during project operation would occur.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Portions of the project alignment along Upland Road, Moorpark Road, Read Road, and Tierra Rejada Road are located in Local Responsibility Areas designated as Very High Fire Hazard Severity Zones (California Department of Forestry and Fire Protection [CAL FIRE] 2022).

Project construction would involve the use of heavy equipment and machinery along the project alignment, portions of which are near vegetated hillside areas. However, the project would comply with regulations related to fire hazards and wildfire safety, including mandatory use of spark arrestors (PRC Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). Therefore, although portions of the project alignment are located within an area susceptible to wildfire, the proposed project would not increase fire risks on the project alignment or surrounding areas. Potential construction impacts associated with wildland fire would be less than significant.

Following the completion of project construction, operational activities would not pose a substantial risk of wildfire ignition. No operational impact would occur.

LESS THAN SIGNIFICANT IMPACT

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10. Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The federal Clean Water Act establishes the framework for regulating discharges to waters of the U.S. in order to protect their beneficial uses. The Porter-Cologne Water Quality Act (Division 7 of the California Water Code) regulates water quality within California and establishes the authority of the SWRCB and the nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs and SWRCB issue NPDES permits to regulate specific water discharges, including a Construction General Permit for projects that disturb more than one acre, and the discharge permit for the Hueneme Outfall to the CRSMP.

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project site is located in the South Coast hydrological region (California Department of Water Resources [DWR] 2022a). The project alignment crosses Calleguas Creek, St. John's Drain, Upland Road Drain, Quito Drain, Camrosa Drain, Hilltop Lane Drain, Barbara Drive Drain, Santa Rosa Creek, and Sycamore Canyon Creek. Trenchless construction methods would be used to cross below existing drainage channels.

Excavation, grading, and construction activities associated with project construction would result in soil disturbance. As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals, and transport them to receiving water bodies. The proposed project would require coverage under the Construction General Permit and development and implementation of a SWPPP. The SWPPP would minimize the amount of sediment and other pollutants associated with the construction site discharged in stormwater runoff (SWRCB 2023). As such, the proposed project would be consistent with water quality standards and waste discharge requirements. As discussed in the impact analyses for Environmental Checklist Section 7, *Geology and Soils*, and Environmental Checklist Section 9, *Hazards and Hazardous Materials*, implementation of SWPPP BMPs would minimize or avoid potentially adverse impacts, including those associated with earthwork activities that could lead to water quality degradation. Therefore, project construction activities would not substantially degrade surface water quality.

The CRSMP was designed to manage the use of high salinity surface water and groundwater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The proposed project would extend the CRSMP inland, enabling an expansion of its use. Similar to the original project, by collecting and disposing of high salinity concentrate, the proposed project would result in a beneficial impact to freshwater surface and groundwater quality in the region.

The CRSMP has an existing NPDES permit for ocean outfall discharges associated with the pipeline (NPDES CA0064521), which would also cover discharges that enter the CRSMP in Phases 3 and 4. Each individual discharger would be required to comply with the water quality criteria pollutant limitations in the NPDES permit for the ocean outfall. As a result, the proposed project would not exceed the limitations in the existing NPDES permit, and would not substantially degrade water quality in the Pacific Ocean at the outfall location. Therefore, no adverse operational impact would occur.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

In September 2014, the California Legislature enacted comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout the state. Known as the Sustainable Groundwater Management Act (SGMA), the legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention when necessary to protect the resource. The project alignment extends over the Pleasant Valley Groundwater Basin (Basin #4-006), the Arroyo Santa Rosa Valley Groundwater Basin (Basin #4-007), and the Tierra Rejada Groundwater Basin (Basin #4-015) (DWR 2022b). The Arroyo Santa Rosa Valley and Tierra Rejada Groundwater Basins are designated as “very low priority” and are therefore not required by SGMA to be managed by a Groundwater Sustainability Agency through implementation of a Groundwater Sustainability Plan (DWR 2022b). The Pleasant Valley Groundwater Basin is designated as a “high priority” basin and is managed by the Pleasant Valley Groundwater Sustainability Agency (DWR 2022b).

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be trucked off-site for reuse for dust control and irrigation. Dewatering during project construction would not substantially decrease groundwater supplies or degrade water quality. Construction of the proposed pipeline would not increase impervious surfaces along the pipeline alignment because ground surfaces would be restored to pre-project conditions. Therefore, the project would not substantially interfere with groundwater recharge occurring along the project alignment. Potential impacts would be less than significant.

During operation, the pipeline would convey brine and excess recycled water. As discussed in Initial Study Section 8, *Description of Project*, the CRSMP is intended to facilitate the utilization of surface water and groundwater sources otherwise unavailable due to poor water quality. As discussed in Environmental Checklist Section 14, *Population and Housing*, the proposed project would facilitate the use of water supplies currently identified in planning documents such as UWMPs, and there would be no significant impacts related to substantial unplanned population growth. The proposed project would not introduce a demand for groundwater supplies, and any new infrastructure associated with new dischargers (e.g., groundwater desalters, wastewater treatment facilities) would be subject to separate CEQA review. As such, the proposed project would not impede sustainable groundwater management, or conflict with a water quality control plan. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The proposed project would not alter the course of a stream or river and would not introduce new impervious surfaces that could result in substantial erosion, siltation, or flooding on or off the site. Construction of the pipeline would not increase impervious surfaces along the project alignment because the pipeline would be mostly installed under existing roadways, other than the portion of alignment that would extend through private property at the northeastern corner of the Upland Road and Las Posas Road intersection. When crossing through private property, the proposed project would restore the site to pre-project conditions following completion of construction activities, and thus would not add impervious surfaces. Therefore, pipeline construction would not alter the existing drainage pattern along the project alignment as compared to existing conditions.

In addition, as discussed for threshold (a) above, the project would not result in water quality degradation as the project would not introduce a source of polluted runoff. The proposed project would not exceed the capacity of existing or planned stormwater drainage systems and would not provide substantial additional sources of polluted runoff. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

As discussed above for thresholds (c.ii) and (c.iii), potential impacts related to drainage pattern alterations from the proposed project would be less than significant. The proposed project would not substantially alter existing drainage patterns along project alignment or in the surrounding area as the proposed project would not increase impervious surface area or alter the course of a stream or river. The project would restore roadways along the project alignment to pre-project conditions upon completion of construction. No impact would occur.

NO IMPACT

- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project alignment is located approximately 11 miles inland (measured by the nearest proposed pipeline segment to the Pacific Ocean) and is not in a tsunami inundation zone (DOC 2022). The nearest large surface water body is Lake Bard, located approximately 1.3 miles southeast of the

project alignment's intersection at Read Road and Sunset Valley Road. In the event of a dam failure at Lake Bard, the easternmost portion of the Phase 4 alignment and westernmost portion of the Phase 3 alignment would be inundated (Calleguas 2019). In addition, portions of the project alignment along Upland Road, Santa Rosa Road, Sunset Valley Road, and Tierra Rejada Road are located in Special Flood Hazard Areas as designated by the Federal Emergency Management Agency (FEMA) (FEMA 2022).

An extreme flood event could inundate the area where the project alignment occurs, but the underground pipeline would be unaffected. Furthermore, implementation of spill response BMPs from the project's SWPPP would provide a rapid clean-up of any accidentally released materials to prevent pollutant release in a subsequent storm or flooding event. Therefore, the project alignment would not be subject to potential inundation and would not risk release of pollutants due to inundation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11. Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The proposed pipeline would be located entirely below the ground surface, primarily within existing roadway public ROW. A portion of the project alignment would extend through private property located at the northeastern corner of the intersection of Upland Road and Las Posas Road. This private property is currently designated as Agriculture and zoned as Rural Exclusive Residential by the City of Camarillo. The site would be restored to pre-project conditions once construction has completed, and the proposed pipeline would be located underground. The proposed project would not have the potential to physically divide an established community. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Per California Government Code Section 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. The proposed project would extend the pre-existing CRSMP, and is thus exempt from local building and zoning ordinances. In addition, the proposed pipeline would be constructed entirely underground, primarily below existing roadway ROW, and would not change surface land uses along the project alignment.

The project would be in furtherance of General Plan goals and policies from respective jurisdictions along the project alignment that pertain to water supply reliability and wastewater infrastructure. Applicable goals and policies are identified below:

City of Camarillo

- **Health Policy:** The city will protect the watershed, groundwater sources, freshwater treatment, storage and distribution system, and wastewater collection and treatment system from contamination and damage.

City of Thousand Oaks

- **Policy CO-17:** Continue to ensure the provision of water in quantities sufficient to satisfy current and projected demand.

City of Moorpark

- **Policy 4.2:** Conserve and protect water quality supplies through cooperative efforts with the Ventura County Water Conservation Plan and any future regional water quality and water supply plans and programs that may be instrumental in reducing water quality-related problems.

City of Simi Valley

- **Policy NR-4.8: Infrastructure Upgrades:** Continue to upgrade the City's water infrastructure to minimize water leakage and ensure adequate supply for residents and businesses.

County of Ventura

- **Policy WR-C: Regional Collaboration on Water Issues and Sustainability:** The County shall continue to provide data and staff resources to support collaboration on climate change and sustainability, and for planning and implementing projects that address local and regional water issues.

The proposed project would enable development of local water supplies such as treated groundwater and recycled water, thereby reducing the region's reliance on imported water supplies. As such, the project would represent an improvement to the region's water infrastructure and regional supply reliability.

The proposed project would be consistent with the goals and policies outlined in the Ventura County 2040 General Plan, City of Camarillo General Plan, City of Thousand Oaks General Plan, City of Moorpark General Plan, and City of Simi Valley General Plan. The proposed project would not conflict with land use plans, policies, or regulations, and no impact would occur.

NO IMPACT

12. Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

Mineral resources in Ventura County consist of aggregate resources, more commonly known as construction grade sand and gravel, as well as petroleum resources in the form of oil and gas deposits. The project alignment is adjacent to Mineral Resource Zones known or inferred to have mineral deposits, as identified by the State Geologist (County of Ventura 2020).

The proposed project would not involve mineral extraction or changes in land use that could affect the availability of mineral resources. The proposed project would not require a supply of mineral resources beyond sand and gravel used to conduct road resurfacing and provide fill materials. Therefore, the project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13. Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Project Noise Setting

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Along the project alignment, noise-sensitive land uses are generally considered to include residences, schools, hospitals and care facilities, recreation and open space areas, hotels and motels, and places of worship (City of Moorpark 1998; City of Thousand Oaks 2000; City of Simi Valley 2012; City of Camarillo 2015; County of Ventura 2020).

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The proposed project would generate temporary noise increases during construction. Nearby noise sensitive receptors include single-family residences surrounding the project alignment along Upland Road and Tierra Rejada Road, the Santa Rosa Technology Magnet School located along Santa Rosa Road, and Strathearn Historical Park on Tierra Rejada Road. Potential noise sources from ground disturbance, installation, and paving activities of the project would be associated with construction vehicles and operation of construction machinery that could result in noise levels above applicable standards. Therefore, impacts associated with construction of the proposed project may be potentially significant and will be analyzed further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The proposed project would involve standard construction activities that would generate vibration that may exceed applicable standards at single-family residences surrounding the project alignment along Upland Road and Tierra Rejada Road, the Santa Rosa Technology Magnet School located along Santa Rosa Road, and Strathearn Historical Park on Tierra Rejada Road. Impacts may be potentially significant and will be analyzed further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The airport nearest to the project site, Camarillo Airport, is located approximately 4.6 miles to the southwest. The project site is not located within the airport land use plan (Ventura County Land Use Commission 2000). Therefore, no substantial noise exposure from airport noise would occur to construction workers and no impact would occur.

NO IMPACT

14. Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would involve extension of an existing brine and excess recycled water pipeline. No direct growth would occur as a result of the project because it does not propose new homes, businesses, or other land uses that would generate population growth.

The proposed project would extend the CRSMP inland to connect to additional dischargers. The project would facilitate the treatment and use of local water supplies which are currently unusable due to brine concentrate discharge obstacles. As discussed in the 2014 SEIR for Phase 2 of the CRSMP, any additional water supply projects facilitated by the extended CRSMP would improve the reliability of local water supplies and reduce the region’s reliance on imported supplies. These projects have likely been identified already in planning documents such as UWMPs. For example, Camrosa Water District’s 2020 UWMP identifies a potential groundwater desalter project to treat for nitrates in the Santa Rosa Basin. If developed, the desalter would discharge brine from the treatment process to the CRSMP. According to the UWMP, the purpose of the desalter would be to improve water quality in the Santa Rosa Basin and increase Camrosa Water District’s self-reliance (Camrosa Water District 2021). As discussed in Environmental Checklist Section 3, *Air Quality*, the project would not generate population, housing, or employment growth exceeding the forecasts used in the development of the ~~2016~~ 2022 Ventura County AQMP.

Impacts related to substantial unplanned population growth would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would construct an underground pipeline. Ground surfaces would be restored to pre-project conditions. The proposed project would not demolish existing housing or displace

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

existing people, and would not necessitate the construction of replacement housing. No impact would occur.

NO IMPACT

15. Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

a.1. *Fire protection?*

a.2. *Police protection?*

a.3. *Schools?*

a.4. *Parks?*

a.5. *Other public facilities?*

As listed above, for the purposes of this analysis, public services include fire and police protection, as well as schools, parks, and other public facilities such as libraries and community-based resources. As discussed in Environmental Checklist Section 14, *Population and Housing*, the proposed project would not induce population growth. Considering the proposed project would not increase population, it also would not increase existing demands for public facilities, including parks and schools. The proposed project would not introduce any features or facilities requiring additional or unusual fire or police protection or response. The proposed project would not change existing

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

demand for fire or police protection services because it would not cause or contribute to population growth and would not introduce new land use designations along the project alignment. No impact would occur.

NO IMPACT

16. Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

The project alignment on Tierra Rejada Road is located adjacent to Stargaze Park and Strathearn Historical Park in Simi Valley, and is visible from both of these parks as well as Tierra Rejada Park in Moorpark (City of Simi Valley 2012; County of Ventura 2020). Construction activities would result in short-term, temporary impacts to recreational users through the introduction of construction noise and dust. Such impacts may result in people avoiding parks along the project alignment in favor of other local parks. As the project is a linear construction project, and an estimated 80 feet of pipeline would be installed each day, impacts from construction at any one point along the alignment would be short-term and evenly distributed along the project alignment. Overall construction impacts would be temporary and limited to the construction period, and are not anticipated to substantially increase the use of other existing neighborhood and regional parks or other recreational facilities. As such, the project would not increase use of recreational facilities such that substantial deterioration of the facilities would occur. Construction-related impacts to recreational facilities would be less than significant.

Upon completion of construction, the project would consist of an underground pipeline. No operational impact would occur.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As discussed in Environmental Checklist Section 14, *Population and Housing*, the project would not induce population growth or directly increase the use of existing neighborhood and regional parks or other recreational facilities. The proposed project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities. No impact would occur.

NO IMPACT

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17. Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	■	□	□	□
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	□	□	□	■
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	□	□	□	■
d. Result in inadequate emergency access?	□	□	■	□

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Construction of the proposed project would temporarily increase traffic associated with project roadways. Project-generated traffic during construction would include worker-related commuter trips, trucks used for delivering construction equipment, and trucks used for delivering and hauling construction materials and wastes. Trenchless construction methods would be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts. However, lane closures during pipeline construction activities would be necessary. Project construction would result in temporary disruption to the existing circulation system.

As described in Initial Study Section 9, *Project Description*, other than a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property. In addition, traffic control plans would be prepared as part of the encroachment permitting process for all work within the public ROW.

Project-generated traffic during operation would be limited to annual employee-related vehicle trips to exercise valves for pipeline maintenance. Operational transportation-related impacts would be less than significant.

Considering the proposed project’s anticipated lane closures during construction activities, impacts regarding conflict with existing circulation system programs, plans, ordinances, or policies may be potentially significant. This impact will be further analyzed in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts and states that vehicle miles traveled (VMT) exceeding a specific threshold may indicate a significant impact. A VMT calculation is typically conducted on a daily or annual basis to determine operational usage of a project. In accordance with Section 15064.3(b)(3) of the State CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic.

As discussed under threshold (a), traffic on local roadways may be temporarily increased during project construction due to the presence of construction vehicles and equipment. Increases in VMT from construction would be short-term and temporary. Following the completion of construction activities, operation and maintenance activities would be infrequent and would not substantially contribute to VMT along project roadways. Therefore, because VMT from construction would be temporary and limited to the active construction period, and operation and maintenance activities would be negligible, no impact associated with VMT would occur and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).

NO IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The proposed project would not introduce new roadway design features or land uses incompatible with the surrounding area. The project would not involve reconfiguration of any roadways or intersections that could result in a substantial increase in traffic hazards. Pipeline construction activities would require temporary lane closures and the staging and operation of construction equipment on public roadways and roadway shoulders. Traffic control plans would be prepared for work within the public ROW as part of the encroachment permitting process, which would minimize the potential for construction-related traffic hazards. As such, the project would not substantially increase hazards due to a geometric design feature or incompatible use, and no impact would occur.

NO IMPACT

- d. *Would the project result in inadequate emergency access?*

Emergency access to the project alignment would be maintained throughout construction and operation. A segment of alignment along Santa Rosa Road and in front of certain driveways would require flagger-controlled traffic controls, and a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property.

Although temporary lane closures during project construction would be necessary, emergency access would be maintained at all times. The project would also implement traffic control plans, where necessary, to detour traffic lanes around the work area.

Project operation and maintenance would not introduce new activities or traffic with the potential to result in inadequate emergency access, and the proposed project would not increase demand for

emergency services along the project alignment. The proposed project would have a less than significant impact regarding inadequate emergency access.

LESS THAN SIGNIFICANT IMPACT

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18. Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|---|---|---|---|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p> | ■ | □ | □ | □ |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (l) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | ■ | □ | □ | □ |

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

Tribal cultural resources are defined in PRC 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

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Calleguas circulated AB 52 consultation letters to Native American tribes on December 8, 2022. AB 52 consultation is in progress. Until AB 52 consultation is concluded, there is potential for significant impacts to tribal cultural resources under the proposed project. Such impacts will be analyzed further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

19. Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental Effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Water

The proposed project would involve the extension of the CRSMP through construction of the Phase 3 and 4 pipelines. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the Calleguas Creek Watershed to an existing ocean outfall. The proposed project would not introduce new potable water demands, or require the construction

or expansion of water supply infrastructure. As previously discussed, any new or expanded water treatment projects seeking to discharge to the CRSMP, as well as any infrastructure needed for the connections, would be subject to separate CEQA review. As such, no impact would occur.

Wastewater Treatment

The proposed project would involve installation of a brine and excess recycled water discharge pipeline, the environmental effects of which are analyzed in this Initial Study, and which will be continued in the EIR. As previously discussed, any new or expanded wastewater infrastructure seeking to discharge to the CRSMP, as well as any infrastructure needed for the connections, would be subject to separate CEQA review. As such, no impact would occur.

Stormwater Drainage

As discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, construction of the proposed pipeline would not increase impervious surfaces along the project alignment because the pipeline would be installed underground, and ground surfaces would be restored to pre-project conditions. Therefore, the proposed pipeline would not alter stormwater flow such that new or expanded stormwater drainage systems would be necessary. As such, the project would not create or contribute runoff water such that new or expanded stormwater drainage systems would be necessary, and there would be no impact.

Electric Power

The project would require temporary power for equipment during construction of the proposed pipeline. The project would not require new or relocated energy facilities as a result of the proposed project. There would be no impact related to electric power.

Natural Gas

The project would not involve any components requiring natural gas service and is not anticipated to involve the relocation of existing natural gas facilities. Therefore, no impact related to natural gas facilities would occur.

Telecommunications

The project would not require the construction or relocation of telecommunication facilities. No cell towers or wireless equipment are located within the project alignment such that they would need to be demolished or relocated as a result of the project. No impact would occur.

NO IMPACT

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The proposed project consists of the construction and operation of a brine and excess recycled water pipeline. Construction of the project would require a temporary water supply for dust suppression during ground disturbing activities, in accordance with standard construction BMPs. Water for dust suppression would be provided from existing sources, or from water obtained through dewatering activities, and would not affect water supply availability.

Operation of the project would not require a water supply, but rather, the project is intended to improve the availability of existing water supplies. The project would facilitate the treatment and use of local water supplies which are currently unusable. As previously discussed, water supply projects facilitated by the extended CRSMP would improve the reliability of local water supplies and reduce the region's reliance on imported supplies. As such, the project would have a beneficial impact on water supplies. No adverse impact would occur.

NO IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The proposed project would not introduce a new source of wastewater, but would rather extend the existing CRSMP so that brine and excess recycled water may be conveyed from farther distances to the ocean outfall. The CRSMP has an existing NPDES permit for ocean outfall discharges associated with the pipeline (NPDES CA0064521). The project would not introduce a new demand for wastewater treatment, as it would discharge pipeline contents to the ocean outfall. Therefore, the project would not result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No impact would occur.

NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

During construction of the proposed project, solid waste would be limited to trench spoils that cannot be used for backfilling and other pavement/demolition material that cannot be reused. Following the completion of project construction, operation and maintenance activities are not anticipated to generate solid waste.

It is anticipated solid waste disposal would likely be serviced by the Simi Valley Landfill and Recycling Center (SVLRC) located approximately 0.9 mile northeast of the project's alignment on Tierra Rejada Road. The SVLRC, as of January 2019, has a total remaining capacity of 82,954,873 tons (CalRecycle 2022). Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the total daily regional permitted capacity available at SVLRC. Therefore, waste generated by demolition and construction activities would not exceed the available capacity at the landfill serving the project area that would accept debris generated by the project, and impacts would be less than significant.

The project would be required to comply with all applicable laws and regulations related to solid waste generation, collection, and disposal. The project would result in a short-term and temporary increase in solid waste generation during construction but would not substantially affect standard solid waste operations of any landfill accepting waste. Recycling and reuse activities during construction would comply with the California Integrated Waste Management Act of 1989 (AB 939).

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Once operational, the project would include unstaffed facilities that would not generate solid waste. Therefore, solid waste impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20. Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a Wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

CAL FIRE evaluates fire hazards based on fuel, slope, and weather, and identifies hazard areas as Moderate, High, or Very High, which are mapped on Fire Hazard Severity Zone (FHSZ) maps. These maps reflect “hazard” not “risk,” where hazards are based on the physical conditions that create a likelihood and expected fire behavior over a 30- to 50-year period without consideration to modifications such as fuel reduction efforts (CAL FIRE 2022b). In comparison, “risk” is the potential damage a fire could do to an area under existing conditions, including consideration for fuel reduction efforts and other modifications such as the maintenance of defensible space and ignition resistant building construction (CAL FIRE 2022b). FHSZ designations are used for planning purposes, including to designate areas where California’s defensible space standards and wildland urban interface building codes are required.

Portions of the project alignment along Santa Rosa Road, Moorpark Road, and Tierra Rejada Road are within State Responsibility Areas (SRA) designated as Very High FHSZ. Additionally, portions of the project alignment along Santa Rosa Road, Moorpark Road, Read Road, and Tierra Rejada Road are located within Local Responsibility Areas (LRA) designated as Very High FHSZs (CAL FIRE 2022a).

As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials*, and Environmental Checklist Section 17, *Transportation*, neither construction nor operation of the proposed project would impair or conflict with an adopted emergency response or evacuation plan and the project would not result in inadequate access for emergency response vehicles. City and County General Plan Safety Elements do not identify roadways along the project alignment as major evacuation routes.

As such, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impact would occur.

NO IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

As discussed under threshold (a) above, portions of the project alignment are located within Very High FHSZs, indicating slope, winds, and fuel availability around the project alignment create a high potential for fire, absent any fuel modification efforts.

Construction of the proposed project would include the use of heavy-duty equipment; in accordance with PRC Section 4442, equipment including earth-moving and portable construction equipment with internal combustion engines would be equipped with spark arrestors to prevent the emission of flammable debris from exhaust, when operating on any forest-covered, brush-covered, or grass-covered land. In addition, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land.

The proposed project would extend the CRSMP through existing roadways, which are paved; however, the open space areas along Santa Rosa Road and Tierra Rejada Road could be characterized as grass-covered land. Therefore, the fire precautions prescribed by PRC Section 4442, 4427, 4428, and 4431 would be implemented during project construction activities. Through compliance with applicable PRC provisions, project construction would not exacerbate wildfire risk. Following completion of the construction period, operation and maintenance activities would be comparable to existing conditions. The project would not introduce habitable structures or expose individuals to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The proposed project would not exacerbate fire risks and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As noted above, portions of the project alignment are located within a Very High FHSZ in both SRAs and LRAs (CAL FIRE 2022a). However, the project would not require roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk. Upon completion of construction, the ground surface would be restored to pre-project conditions. Annual operation and maintenance activities to exercise pipeline valves would not exacerbate fire risk.

Construction would occur within previously developed roadways and public ROW, as well as under private agricultural property at the northeast corner of the intersection of Las Posas Road and Upland Road, and would not disturb adjacent open space or hillside areas. Additionally, as discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, the proposed project would not alter existing drainage patterns or stormwater runoff rates or patterns, and would include the use of stormwater BMPs to avoid causing or contributing to increased runoff or drainage changes. As such, the project would not expose people or structures to significant downslope or downstream flooding or landslide risks resulting from runoff or drainage changes. No impact would occur.

NO IMPACT

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21. Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- | | | | | |
|--|---|---|---|---|
| <p>a. Have the potential to substantially 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, substantially 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?</p> | ■ | □ | □ | □ |
| <p>b. 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)?</p> | ■ | □ | □ | □ |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | ■ | □ | □ | □ |

a. *Does the project have the potential to substantially 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, substantially 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?*

As discussed in Environmental Checklist Sections 4, *Biological Resources*, 5, *Cultural Resources*, and 18, *Tribal Cultural Resources*, impacts related to biological and cultural resources are potentially significant and will be analyzed further in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- 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)?*

Cumulative impacts are defined as two or more individual (and potentially less than significant) project effects which, when considered together or in concert with other projects, combine to result in a significant impact within an identified geographic area. For a project to contribute to cumulative impacts, it must result in some level of impact on a project-specific level. A number of the environmental topic areas would experience “No Impact” as a result of the proposed project, and would therefore have no potential to result in cumulative impacts. These environmental topics include the following, which are not addressed further herein:

- Agriculture and Forestry Resources
- Energy
- Land Use and Planning
- Mineral Resources
- Public Services

The following discussion describes only those effects for which some level of potential impact was identified, which includes topics for which a “Less than Significant Impact” was identified, as well as those for which the threshold question assumed some level of impact (i.e., those for which consideration of a potential “significant” effect was considered, per CEQA Guidelines Section 15382; in this case, threshold questions which assumed impacts would be “Less than Significant with Mitigation Incorporated”).

This analysis considers high-level potential cumulative development within the project area, which spans approximately 14 miles and multiple jurisdictions. Active and planned projects within the proposed project’s area include residential development along Upland Road in the City of Camarillo (City of Camarillo 2022), a new telecommunications facility on Tierra Rejada Road in the City of Simi Valley (City of Simi Valley 2022), and telecommunications improvements on Santa Rosa Road in Ventura County (County of Ventura 2022).

In addition to unrelated projects that may be developed within the same regional vicinity as the proposed project, other cumulative projects may include development required to construct and/or connect additional discharger facilities to the CRSMP.

Potential regional cumulative effects were considered for the remaining environmental topics, for which the project was found to result in less than significant impacts (without or with project mitigation):

- **Aesthetics:** Temporary aesthetic impacts may occur from the presence and use of equipment and machinery at and around the project site that may be visible from public access points and coincide with construction of planned projects along Upland Road, Santa Rosa Road, or Tierra Rejada Road. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality or create a significant new source of light and glare when considered in conjunction with other cumulative development. Therefore, the project would not result in a cumulatively considerable contribution to a cumulative impact, significant or otherwise.

- **Air Quality:** Because the SCCAB is designated as being in nonattainment for the ozone NAAQS and CAAQS and nonattainment for the PM₁₀ CAAQS, significant cumulative air quality impacts currently exist for these pollutants. As discussed in Environmental Checklist Section 3, *Air Quality*, the proposed project would not generate emissions of these air pollutants which exceed the VCAPCD significance thresholds, which are intended to assess whether a project's contribution to existing cumulative air quality impacts is considerable. Therefore, the project's contribution to significant cumulative air quality impacts would not be cumulatively considerable.
- **Greenhouse Gas Emissions:** GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Environmental Checklist Section 8, *Greenhouse Gas Emissions*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more frequent large wildfires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed in Environmental Checklist Section 8, *Greenhouse Gas Emissions*, project emissions would be consistent with adopted plans and would therefore not be cumulatively considerable.
- **Hazards and Hazardous Materials:** Similar to the proposed project, cumulative projects would be required to comply with regulations applicable to the use, disposal, and transportation of hazardous materials during construction activities, and compliance with applicable regulations would reduce potential cumulative impacts to less-than-significant levels. With respect to the use and accidental release of hazardous materials in the environment during construction, effects are generally limited to site-specific conditions. Therefore, cumulative impacts related to accidental release of hazardous materials would not be significant.
- **Hydrology and Water Quality:** As discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, the project's construction-related water quality impacts would be less than significant with regulatory compliance. Cumulative development projects would be subject to the same requirements. In addition, as previously discussed, additional discharges to the CRSMP would be required to comply with water quality criteria pollutant limitations in the NPDES permit for the ocean outfall. As such, cumulative development, including potential development associated with discharger facilities, would not result in significant cumulative hydrology and water quality impacts.
- **Population and Housing:** The project would not result in direct or indirect substantial unplanned population growth, and would not displace existing people or housing. Therefore, the project would not result in a cumulatively considerable contribution to cumulative impacts, significant or otherwise, related to population and housing.
- **Recreation:** The project would not induce population growth and would not result in the substantial deterioration of or need for recreational facilities. Impacts to existing recreational facilities would be short-term and temporary and would not be cumulatively considerable.
- **Utilities and Service Systems:** The project involves improvements to utility infrastructure, and would therefore not result in cumulatively considerable adverse impacts to utilities and service systems.
- **Wildfire:** As described in Environmental Checklist Section 20, *Wildfire*, potential wildfire impacts associated with the project would be limited to heavy-duty construction equipment possibly producing sparks to ignite vegetation, which would be less than significant with compliance with applicable law. Project operation would not involve potentially flammable activities. In addition,

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the proposed project would not introduce habitable structures, and therefore, would not expose new residents to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Since there would be no long-term operational wildfire impacts and any construction-related wildfire impacts would be short-term, the project's contribution to any cumulative impact, significant or otherwise, would not be considerable.

The cumulative effects of the project for the remaining environmental topics for which the project was found to result in a "Potentially Significant Impact" including biological resources, cultural resources, geology and soils, noise, transportation, and tribal cultural resources, will be evaluated in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with issues such as air quality, hazards and hazardous materials, and noise. As discussed in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 9, *Hazards and Hazardous Materials*, the project would not result in significant impacts associated with air quality and hazards or hazardous materials. As detailed under Environmental Checklist Section 13, *Noise*, the project could potentially result in significant impacts associated with noise. Potential noise impacts will be evaluated in an EIR.

POTENTIALLY SIGNIFICANT IMPACT

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Appendix A

Air Quality and Greenhouse Gas Study



Calleguas Regional Salinity Management Pipeline, Phases 3 & 4

Air Quality and Greenhouse Gas Study

prepared for

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1 Project Description

1.1 Introduction

This study analyzes the air quality, greenhouse gas (GHG) emissions, and potential health risk impacts related to the proposed Calleguas Regional Salinity Management Pipeline (CRSMP), Phases 3 & 4 located within Ventura County, extending from the northeast portion of Camarillo to the western portion of Simi Valley. Rincon Consultants, Inc. (Rincon) prepared this study for Calleguas Municipal Water District (Calleguas) for use in support of environmental documentation pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project's air quality and GHG impacts related to both temporary construction activity and long-term operation of the project. The conclusions of this study are summarized in Table 1.

Table 1 Summary of Impacts

Impact Statement	Proposed Project's Level of Significance	Applicable Regulations
Air Quality		
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant Impact	None
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard?	Less than significant impact	VCAPCD Rule 55
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact	None
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant impact	VCAPCD Rule 55
Greenhouse Gas Emissions		
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant impact	None
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant impact	None

Project Location

The proposed pipeline alignment would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the city of Camarillo to the western boundary of the city of Simi Valley. The alignment would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County.

The pipeline alignment would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignment include Upland Road, Santa Rosa Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Regional access would be provided by Somis Road (State

Route 34), State Route 23, State Route 118, and United States 101. Figure 1 shows the regional location of the project site and Figure 2 shows the alignments of both phases of the proposed project.

Project Description

The proposed project would install an underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials. The proposed project would consist of two phases, Phase 3 and Phase 4, that would connect additional dischargers to the CRSMP. Discharges to these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the ocean outfall. Phase 3 would install 5.1 miles (27,000 feet) of pipeline starting at the eastern end of the existing CRSMP on the west side of Somis Road and would terminate just past Hill Canyon Road on Santa Rosa Road. Phase 4 would install 9.3 miles (49,000 feet) of pipeline from the end point of Phase 3 to the intersection of Tierra Rejada Road and Madera Road.

Construction

Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. Phases 3 and 4 of the CRSMP would typically be installed in 20- to 40-foot sections. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The typical construction sequence for the proposed project would include the following pipeline installation phases:

- **Open-cut trench pipeline installation** typically consists of trench excavation (including saw cutting of pavement where applicable), pipe bedding stabilization, pipe installation, and backfill. The construction crew would typically operate a backhoe and/or excavator, compaction equipment (attachment on an excavator and hand-operated equipment), dump trucks for stockpiling of soils and delivery of backfill material, utility trucks (with truck-mounted or towed generator and hand tools), and water trucks/water buffalos. Where required by the jurisdictional agency to backfill with sand cement slurry, concrete trucks would deliver slurry to the project site.
- **Trenchless installation** typically consists of excavation of launching and receiving pits (including saw cutting of pavement where applicable), installation of shoring system and boring equipment, installation of steel casing and pipeline, removal of equipment, and backfill. This step typically includes the excavation and backfill of the pits using an excavator, dump truck, and potentially a second mini excavator inside the pits. The trenchless installation would be performed by operating a crane to lower and remove equipment and materials.
- **Paving and ground restoration** typically is performed at the completion of each segment of pipeline and then at the end of a project once all excavation and backfill operations have been completed.

The maximum depth of excavation typically would be 8 feet. Where the pipeline would need to cross below an existing utility or drainage channel, the depths may be greater and would depend on the characteristics of the utility or channel.

Based on an installation rate of 80 feet per day¹ and a 4-foot-wide trench, the average amount of excess spoils requiring removal would be approximately 60 cubic yards per day and would require approximately 7 haul roundtrips per day. The average daily number of heavy-duty trucks hauling material to and from the construction site (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 haul roundtrips per day.

Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal at an appropriately licensed landfill. Storage of materials and equipment would be dependent upon the location of the contractor and subcontractors. If the contractors are local, they may store equipment and materials in their own yards.

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be trucked off-site for reuse for dust control and irrigation.

During construction of the proposed project, Calleguas' construction contractor would implement best management practices (BMPs) in accordance with the project's specifications, including the following measures for the protection of air quality: dust control would be conducted during ground-disturbing activities using an approved method such as water application; no substantial ground-disturbing activities would be conducted during periods of high winds; on-site construction vehicles would not travel at speeds greater than 15 miles per hour in unpaved areas; and trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard.

Operation

Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. Valves on the appurtenances would be exercised roughly once per year and the pipeline alignment would be marked as needed in response to DigAlert (utility marking) requests.

The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands.

In the event any project component is compromised during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible; emergency response and repairs are part of Calleguas' normal operations to maintain system integrity and reliability and are not a new or increased activity associated with the project.

¹ The project would install multiple sections per day at a rate of 20 to 40 feet of pipeline per section.

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
 Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

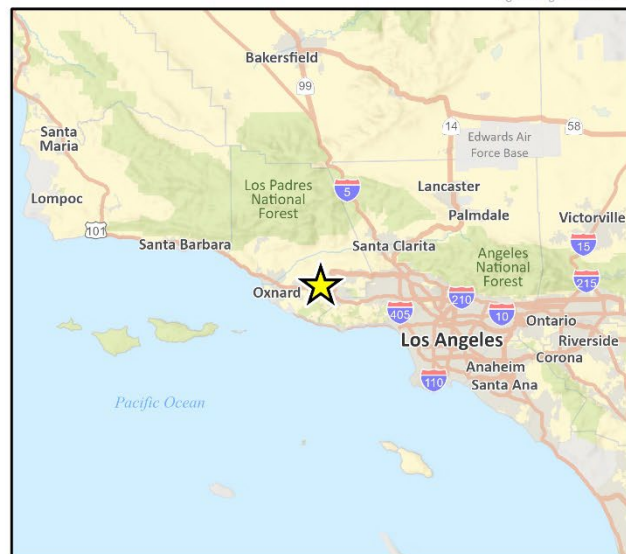
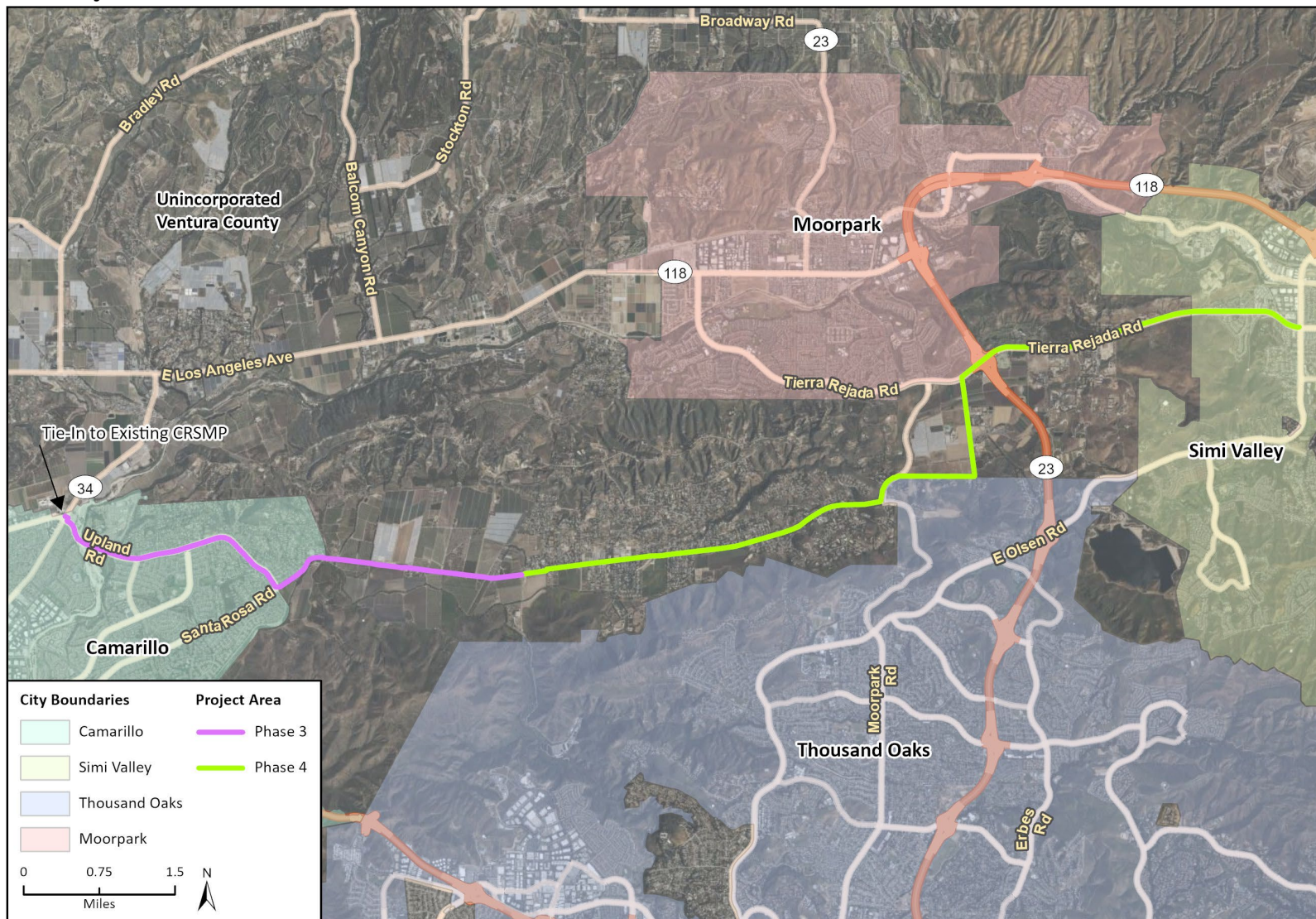


Figure 2 Project Site Location



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Additional data provided by the County of Ventura.

Proj. Regional, Phase 3 Locn
Fig 2.2 Project Location

2 Background

2.1 Local Climate and Meteorology

The project area is part of the South Central Coast Air Basin (SCCAB) which includes San Luis Obispo, Santa Barbara, and Ventura counties. The climate of the Ventura County area and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semi-permanent high-pressure cell in the northeastern Pacific Ocean. The Mediterranean climate of the region produces moderate average temperatures, although slightly more extreme temperatures can be reached in the winter and summer. The warmest months in the project area are August and September, with an average maximum temperature of 77 degrees Fahrenheit (°F), while the coldest month of the year are December, January, and February, with an average minimum temperature of 42°F. Typically, the project area’s annual average maximum temperature is 71°F, and the annual average minimum temperature is 50°F. The climate is semi-arid, with rainfall concentrated in the winter months. Table 2 summarizes local climatic conditions.

Table 2 Climatic Conditions in the Project Area

Weather Condition	Value
Average annual rainfall	15.22 inches
Average maximum temperature (annual)	71°F
Average minimum temperature (annual)	50°F
Warmest month(s)	August and September
Coolest month(s)	December, January, and February

Source: United States Climate Data 2022.

California’s weather is heavily influenced by a semi-permanent high-pressure system west of the Pacific coast. The Mediterranean climate of the region and the coastal influence produce moderate temperatures year-round, with rainfall concentrated in the winter months. The sea breeze, which is the predominant wind, is a primary factor in creating this climate and typically flows from the west-southwest in a day-night cycle with speeds generally ranging from 5 to 15 miles per hour.

Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high-pressure area to the low-pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Radiational, or surface, inversions are formed by the more rapid cooling of air near the ground at night, especially during winter. This type of inversion is typically lower and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

2.1.1 Air Quality

Air Pollutants of Concern

The federal and State Clean Air Acts mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for criteria air pollutants that are a threat to public health and welfare. Criteria pollutants that are a concern in the SCCAB are described below.

Ozone

Ozone is a highly oxidative unstable gas produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic compounds (ROC)/volatile organic compounds (VOC).² ROC is composed of non-methane hydrocarbons (with specific exclusions), and NO_x is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide (NO_2). NO_x is formed during the combustion of fuels, while ROC is formed during the combustion and evaporation of organic solvents. As a highly reactive molecule, ozone readily combines with many different atmosphere components. Consequently, high ozone levels tend to exist only while high ROC and NO_x levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant. In addition, because ozone requires sunlight to form, it mainly occurs in concentrations considered serious between April and October. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors (USEPA 2022a). Depending on the level of exposure, ozone can cause coughing and a sore or scratchy throat; make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; and aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.

Nitrogen Dioxide

Nitrogen dioxide (NO_2) is a by-product of fuel combustion. The primary sources are motor vehicles, industrial boilers, and furnaces. The principal form of NO_x produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO_2 , creating the mixture of NO and NO_2 , commonly called NO_x . NO_2 is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Breathing air with a high concentration of NO_2 can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma and children and the elderly are generally at greater risk for the health effects of NO_2 (USEPA 2022a). NO_2 absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of ozone/smog and acid rain.

² CARB defines VOC and ROC similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROC and VOC are considered comparable in terms of mass emissions, and the term ROC is used in this report.

Carbon Monoxide

Carbon monoxide (CO) is a localized pollutant found in high concentrations only near its source. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic's incomplete combustion of petroleum fuels. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability to get oxygenated blood to their hearts in situations where they need more oxygen than usual. As a result, they are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain, also known as angina (USEPA 2022a).

Particulate Matter

Particulates less than 10 microns in diameter (PM₁₀) and less than 2.5 microns in diameter (PM_{2.5}) are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM₁₀ and PM_{2.5} are emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. The atmosphere, through chemical reactions, can form particulate matter. The characteristics, sources, and potential health effects of PM₁₀ and PM_{2.5} can be very different. PM₁₀ is generally associated with dust mobilized by wind and vehicles. In contrast, PM_{2.5} is generally associated with combustion processes and formation in the atmosphere as a secondary pollutant through chemical reactions. PM₁₀ can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, and surface soiling. For PM_{2.5}, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases (CARB 2022a).

Sulfur Dioxide

Sulfur dioxide (SO₂) is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of SO₂ emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO₂ emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO₂ (USEPA 2022a).

Lead

Lead (Pb) is a metal found naturally in the environment, as well as in manufacturing products. The major sources of Pb emissions historically have been mobile and industrial. However, due to the USEPA's regulatory efforts to remove lead from gasoline, atmospheric Pb concentrations have declined substantially over the past several decades. The most dramatic reductions in Pb emissions occurred with the permanent phase-out of leaded gasoline, controls on emissions of Pb compounds through EPA's air toxics program, and other national and State regulations. The result was a decrease of airborne Pb concentrations by 98 percent between 1980 and 2005 (USEPA 2022a). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest Pb level in the air is generally found near Pb smelters. Other stationary sources include waste

incinerators, utilities, and Pb-acid battery manufacturers. Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system depending on exposure. Pb exposure also affects the oxygen-carrying capacity of the blood. The Pb effects most likely encountered in current populations are neurological in children. Infants and young children are susceptible to Pb exposures, contributing to behavioral problems, learning deficits, and lowered intelligence quotient (USEPA 2022a).

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are airborne substances that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM_{2.5}. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2022a). TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. People exposed to TACs at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (USEPA 2020).

Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. According to VCAPCD, the following factors may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches).
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

Common health effects from *Coccidioides* can include fatigue, fever, headache, rashes, and cough. In extremely rare cases, the fungal spores can enter the skin through a cut, wound, or splinter and cause a skin infection (Centers for Disease Control and Prevention 2020).

Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with a margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14, the elderly over 65, people engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. VCAPCD defines sensitive receptors as facilities or land uses which include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Sensitive receptors listed in the VCAPCD Guidelines include residences, schools, hospitals, and daycare centers (VCAPCD 2003). Potential sensitive receptors within 100 feet of the project site include numerous single-family residences. The nearest sensitive receptors to the proposed pipeline alignment are residences immediately north and south of the Phase 3 and Phase 4 pipeline alignment.

2.1.2 Greenhouse Gas

Gases that trap heat in the atmosphere are known as GHGs. GHGs allow sunlight to enter the atmosphere but trap a portion of the outward-bound infrared radiation that warms the air. The process is similar to the effect greenhouses have in raising the internal temperature of the structure. Both natural processes and human activities emit GHGs. The accumulation of GHGs in the atmosphere regulates the Earth's temperature, but emissions from human activities (such as fossil fuel-based electricity production and the use of motor vehicles) have elevated the concentration of GHGs in the atmosphere. Scientists agree that this accumulation of GHGs has contributed to an increase in the temperature of the Earth's atmosphere and to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most scientists agree there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are usually by-products of fossil fuel combustion, and CH₄ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30

times greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).³

Greenhouse Gases

Carbon Dioxide

Carbon dioxide (CO₂) is the primary GHG emitted through human activities. In 2020, CO₂ accounted for about 79 percent of all United States GHG emissions from human activities. CO₂ is naturally present in the atmosphere as part of the Earth's carbon cycle (the natural circulation of carbon among the atmosphere, oceans, soil, plants, and animals). Human activities are altering the carbon cycle – both by adding more CO₂ to the atmosphere, and by influencing the ability of natural sinks, like forests and soils, to remove and store CO₂ from the atmosphere. While CO₂ emissions come from a variety of natural sources, human-related emissions are responsible for the increase that has occurred in the atmosphere since the industrial revolution (USEPA 2022b).

Methane

Methane (CH₄) is a colorless, odorless gas and is the major component of natural gas. In 2020, methane accounted for about 11 percent of all United States GHG emissions from human activities. Human activities emitting methane include leaks from natural gas systems and the raising of livestock. Methane is also emitted by natural sources such as natural wetlands. In addition, natural processes in soil and chemical reactions in the atmosphere help remove CH₄ from the atmosphere. Methane's lifetime in the atmosphere is much shorter than CO₂, but CH₄ is more efficient at trapping radiation than CO₂. Pound for pound, the comparative impact of CH₄ is 25 times greater than CO₂ over a 100-year period (USEPA 2022b).

Nitrous Oxide

Nitrous oxide (N₂O) is a clear, colorless gas with a slightly sweet odor. In 2020, nitrous oxide accounted for about seven percent of all United States GHG emissions from human activities. Human activities, such as agriculture, fuel combustion, wastewater management, and industrial processes, are increasing the amount of N₂O in the atmosphere. Nitrous oxide is also naturally present in the atmosphere as part of the Earth's nitrogen cycle and has a variety of natural sources. Nitrous oxide molecules stay in the atmosphere for an average of 114 years before being removed by a sink or destroyed through chemical reactions. The impact of one pound of N₂O on warming the atmosphere is almost 300 times that of one pound of carbon dioxide (USEPA 2022b).

Greenhouse Gas Emissions Inventory

Global Emissions Inventory

In 2015, worldwide anthropogenic GHG emissions totaled 47,000 billion metric tons (MT) of CO₂e, which is a 43 percent increase from 1990 GHG levels (USEPA 2022c). Specifically, 34,522 million metric tons (MMT) of CO₂e of CO₂, 8,241 MMT of CO₂e of CH₄, 2,997 MMT of CO₂e of N₂O, and 1,001 MMT of CO₂e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy

³ The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes the GWPs from the Fourth Assessment Report.

production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agricultural uses and industrial processes contributed 12 percent and 6 percent, respectively. Waste sources contributed for 3 percent and 2 percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change and forestry. (USEPA 2022c).

United States Emissions Inventory

United States GHG emissions were 5,222 MMT of CO₂e in 2020. Emissions decreased by 9 percent from 2019 to 2020; since 1990, Total United States emissions have decreased by 11 percent from 1990 to 2020. The sharp decline in emissions from 2019 to 2020 is largely due to the impacts of the coronavirus (COVID-19) pandemic on travel and economic activity; however, the decline also reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices. In 2020, transportation activities accounted for the largest portion (27 percent) of total United States greenhouse gas emissions. Emissions from electric power accounted for the second largest portion (25 percent), while emissions from industry accounted for the third largest portion (24 percent) of total United States greenhouse gas emissions in 2020 (USEPA 2022d).

California Emissions Inventory

Based on the CARB California Greenhouse Gas Inventory for 2000-2020, California produced 369.2 MMT of CO₂e in 2019, which is 35.3 MMT of CO₂e lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the State's GHG emissions while electric power accounts for approximately 16 percent (CARB 2022b). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO₂e (CARB 2022a). The annual 2030 statewide target emissions level is 260 MT of CO₂e (CARB 2017).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources though impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been warmer than all the previous decades in the instrumental record, with 2013 to 2021 among the warmest years from 1880 to 2021. The average global land and ocean surface temperature for January to December 2021 was 0.84°C (1.51 °F) above the 20th century average of 13.9°C (57.0°F) (National Oceanic and Atmospheric Administration 2022a). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature obtained from station observations jointly indicate that Land-Surface Air Temperature and sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014, 2018).

Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (California Natural Resource Agency 2019). *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the State and regionally specific climate change case studies. However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy (California Natural Resource Agency 2019). A summary follows of some of the potential effects that climate change could generate in California.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C (4.3°F to 5.8°F) in the next 50 years and by 3.1 to 4.9°C (5.6°F to 8.8°F) in the next century (California Natural Resource Agency 2019). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (California Natural Resource Agency 2019). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State. With increasing temperatures, shifting weather patterns, longer dry seasons, and more dry fuel loads, the frequency of large wildfires and area burned is expected to continue to increase. (California Natural Resources Agency 2021).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (California Natural Resource Agency 2019). The Sierra Nevada Mountains snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack. Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (California Natural Resource Agency 2019).

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (California Natural Resource Agency 2019). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2022, observed by satellites, is approximately 3.4 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2022). Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (National Oceanic and Atmospheric Administration 2022b). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise ranging between 0.25 to 1.01 meters by 2100 with the sea level ranges dependent on a low, intermediate, or high GHG emissions scenario (IPCC 2021). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (California Natural Resource Agency 2019). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has an over \$50 billion annual agricultural industry that produces over a third of the Country's vegetables and two-thirds of the Country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (California Natural Resource Agency 2019). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions with higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; California Natural Resource Agency 2019).

2.2 Regulatory Setting

2.2.1 Air Quality

Federal and State

The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) establish ambient air quality standards and regulatory authorities to attain those standards. As required by the CAA, the USEPA has

identified criteria pollutants and has established NAAQS to protect public health and welfare. NAAQS have been established for ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb.

Under the CCAA, California has adopted the CAAQS, which are more stringent than the NAAQS for certain pollutants and averaging periods. Table 3 presents the current attainment status for each regulated pollutant and the federal and State standards for regulated pollutants. California also has established State ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride.

As required by the federal CAA and the CCAA, air basins or portions thereof have been classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether the standards have been achieved. The air quality in an attainment area meets or is better than the NAAQS or CAAQS. A non-attainment area has air quality that is worse than the NAAQS or CAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS.

VCAPCD is the designated air quality control agency for Ventura County. Ventura County currently meets the NAAQS for all criteria air pollutants except ozone. Ventura County is classified an attainment/maintenance area for CO and attainment for PM₁₀. Ventura County is currently classified as a nonattainment area under the CAAQS for ozone and PM₁₀ (VCAPCD 2022). Characteristics of ozone, CO, NO₂, and suspended particulates are described in the subsequent sections.

Table 3 Federal and State Ambient Air Quality Standards

Pollutant	Federal Attainment Status	State Attainment Status
Ozone	Non-attainment (8-hr)	Non-attainment (8-hr)/ Non-attainment (1-hr)
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Particulate Matter 10 (PM ₁₀)	Attainment	Nonattainment
Particulate Matter 2.5 (PM _{2.5})	Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
Lead	No Designation/Classification	Attainment

Sources: Ventura County Air Pollution Control District, United States Environmental Protection Agency 2022e.

Existing Ambient Air Quality

VCAPCD maintains the ambient air monitoring network and records air quality readings throughout Ventura County. The monitoring stations aim to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. Current air quality information is obtained from the nearest monitoring station to the project site in SCCAB. The monitoring station closest to the project site is the Thousand Oaks-Moorpark station (located at 2323 Moorpark Road, Thousand Oaks), approximately 2 and 8 miles south of the Phase 3 and 4 pipeline alignments. This station collects 8-hour ozone, hourly ozone, and PM_{2.5} measurements. The nearest monitoring station with NO₂, and PM₁₀ measurements is the Simi Valley-Cochran Street monitoring station (located at 5400 Cochran Street, Simi Valley), approximately 6 and 19 miles west of the Phase 3

and 4 pipeline alignments. Table 4 indicates the number of days each federal and State standard was exceeded at the Thousand Oaks-Moorpark Road and Simi Valley-Cochran Street monitoring stations. As shown therein, 2019, 2020, and 2021 ozone measurements exceeded the federal and State eight-hour standard. The State 1-hr ozone standard was exceeded in 2020. PM₁₀ State standards in 2019, 2020, and 2021 were exceeded and the PM_{2.5} federal standards were exceeded in 2020. No other State or federal standards were exceeded at the monitoring stations. Since CO and SO₂ are in attainment within Ventura County region, they are not monitored at the nearest air monitoring stations and therefore ambient air quality is not reported for these two pollutants.

Table 4 Ambient Air Quality at the Nearest Monitoring Station

Pollutant	2019	2020	2021
Ozone (ppm), 8-Hr Average ¹	0.074	0.084	0.073
Number of Days of State exceedances (>0.070 ppm)	1	7	1
Number of days of federal exceedances (>0.070 ppm)	1	7	1
Ozone (ppm), Worst Hour ¹	0.082	0.097	0.077
Number of days of State exceedances (>0.09 ppm)	0	1	0
Number of days of federal exceedances (>0.112 ppm)	0	0	0
Nitrogen Dioxide (ppm), Worst Hour ²	0.045	0.042	0.035
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
Particulate Matter 10 microns, mg/m ³ , Worst 24 Hours ²	127.9	90.5	103.7
Number of days of State exceedances (>50 mg/m ³)	4	6	3
Number of days above federal standard (>150 mg/m ³)	0	0	0
Particulate Matter <2.5 microns, mg/m ³ , Worst 24 Hours ¹	24.5	36.3	20.1
Number of days above federal standard (>35 mg/m ³)	0	1	0

ppm = parts per million; mg = microgram; m³ = meters cubed
¹Measurements were taken at Thousand Oaks-Moorpark Road
²Measurements were taken at Simi Valley-Cochran Street
 Source: California Air Resources Board 2022c

Regional

Air Quality Management Plans

The federal Clean Air Act Amendments of 1990 set a schedule for the attainment of the NAAQS. States are required to prepare a SIP to develop strategies to achieve attainment of the standards. In addition, the California Clean Air Act of 1988 requires areas that exceed the California ambient air quality standards to plan for the eventual attainment of the CAAQS. VCAPCD monitors and regulates local air quality in Ventura County and implements Air Quality Management Plans (AQMPs).

The ~~2016-2022~~ AQMP is the most recent attainment plan adopted by VCAPCD in ~~2017-2022~~. The ~~2016~~ ~~2022~~ AQMP presents a combined local and State clean air strategy based on concurrent ROC and NO_x emission reductions to bring Ventura County into attainment of the ~~2008~~ ~~2015~~ federal 8-hour ozone standard. The ~~2016~~ ~~2022~~ AQMP was prepared to satisfy federal Clean Air Act planning requirements for areas designated as

serious federal 8-hour ozone nonattainment areas, including, but not limited to, updated air quality information, an updated emissions inventory, local and State air pollutant control measures, new emission forecasts and projections, a new federal conformity budget for transportation projects, a reasonable further progress demonstration for precursors of ozone (ROC and NO_x), a demonstration that Ventura County will attain the 2008 federal 8-hour ozone standard, and contingency measures (VCAPCD ~~2017~~ 2022).

APPLICABLE VCAPCD RULES

VCAPCD implements rules and regulations for emissions generated by various uses and activities. The rules and regulations detail pollution-reduction measures to be implemented during construction and operation of projects. This section discusses the rules and regulations relevant to the project.

RULE 50 (OPACITY)

This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the proposed project.

RULE 51 (NUISANCE)

This rule prohibits any person from discharging air contaminants or any other material from a source which would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public. The rule would apply during construction and operational activities.

RULE 55 (FUGITIVE DUST)

This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities. The rule would apply during construction and operational activities.

RULE 55.1 (PAVED ROADS AND PUBLIC UNPAVED ROADS)

This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road. This rule would apply throughout all construction activities.

RULE 55.2 (STREET SWEEPING EQUIPMENT)

This rule requires the use of PM₁₀ efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. This rule would apply during all construction activities.

RULE 74.4 (CUTBACK ASPHALT)

This rule sets limits on the type of application and ROC content of cutback and emulsified asphalt. The proposed project is required to comply with the type of application and ROC content standards set forth in this rule.

2.2.2 Greenhouse Gas

Federal Regulations

Federal Clean Air Act

The United States Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 United States 05-1120) that the USEPA has the authority to regulate motor vehicle GHG emissions under the federal CAA. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the United States Supreme Court held the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the USEPA and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the USEPA and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO₂ emissions standards for passenger cars and trucks of model years 2021-2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors on June 26, 2020 to adjust GHG emissions outputs from the EMFAC model⁴ (CARB 2020).

State Regulations

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. There are numerous regulations aimed at reducing the State's GHG emissions. These initiatives are summarized below.

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles, beginning with the

⁴ The EMFAC (short for Emission FACTor) model estimates the emissions inventories of on-road mobile sources in California. The model is developed and used by CARB to assess emissions from on-road vehicles including cars, trucks, and buses in California, and to support CARB's regulatory and air quality planning efforts.

2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the USEPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as “LEV (Low Emission Vehicle) III GHG,” regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles, and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)

The “California Global Warming Solutions Act of 2006” (AB 32) outlines California’s major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO₂e which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan’s approval.

CARB approved the 2013 Scoping Plan update in May 2014. The update defined CARB’s climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State’s longer term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100. The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of 6 MT of CO₂e by 2030 and 2 MT of CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

The ~~Draft~~ 2022 Scoping Plan ~~Update~~ has been prepared to assess the progress towards the 2030 target as well as to outline a plan to achieve carbon neutrality no later than 2045. CARB adopted the 2022 Scoping Plan on November 16, 2022. The 2022 Scoping Plan ~~Update~~ focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State’s long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022d).

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the State’s ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPO) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG) was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020⁵ and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

Senate Bill 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

Executive Order B-55-18

On September 10, 2018, Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

Executive Order N-79-20

On September 23, 2020, Governor Newsom issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-State to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the State to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

⁵ SCAG met 2020 GHG reduction but confirmation from CARB is still pending.

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the California Energy Commission, the California Department of Transportation, and other state agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

The California Climate Crisis Act (Assembly Bill 1279)

AB 1279 was passed on September 16, 2022 and declares the State would achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045. In addition, it requires that the State achieve and maintain net negative greenhouse gas emissions and ensure that, by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below 1990 levels. The bill would require updates to the Scoping Plan (once every five years) to implement various policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies.

Regional Regulations

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development, and the environment. On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

3 Impact Analysis

3.1 Methodology

Criteria pollutant and GHG emissions for proposed project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. VCAPCD identifies separate ozone significance thresholds for the following three geographic areas within Ventura County: (1) the Ojai Planning Area, (2) the city of Simi Valley, and (3) the remainder of Ventura County. The proposed project is a linear pipeline that traverses across two of these geographic areas: the city of Simi Valley and the remainder of Ventura County (outside of the Ojai Planning Area). As such, both of those ozone significance thresholds are applicable to the proposed project. The remainder of Ventura County (outside of the Ojai Planning Area) thresholds are expressed in pounds per day, while the city of Simi Valley thresholds are expressed in tons per year.

This analysis conservatively compares total project emissions against both sets of applicable ozone significance thresholds. In reality, a subset of project emissions would occur within the city of Simi Valley geographic area and another subset would occur within the remainder of Ventura County (outside of the Ojai Planning Area) geographic area.

CalEEMod output files for the projects are included in Attachment A.

Construction Emissions

Construction emissions modeled include on-site construction equipment and vehicle trips, such as worker and truck hauling trips. CalEEMod estimates construction emissions by multiplying the time equipment is in operation by emission factors.

The proposed project's construction was analyzed based on the construction duration, equipment list, and construction-related vehicle trips provided by Calleguas. The construction for Phases 3 and 4 would have an area of disturbance of 108,000 and 196,000 square feet,⁶ respectively.

Due to uncertainties about the anticipated timing of dischargers, duration of permitting and design, and other considerations, there is currently no planned start date. For the purposes of air quality modeling, the construction start date for Phase 3 was conservatively assumed to begin in June 2024, and Phase 4 construction was assumed to start at the end of Phase 3. Project construction was therefore calculated to conclude in February 2028. Realistically, construction would likely begin later than June 2024. However, this calculated start date offers a realistically conservative estimate of air quality emissions, as it is assumed a later start date would yield equal or decreased emissions due to a number of factors including increasing equipment efficiency standards. Open-cut trench and trenchless construction schedules were estimated based on pipeline installation rates provided by Calleguas.

Phase 3 construction is estimated to consist of 460 linear feet of trenchless construction and 25,740 linear feet of open-cut trench construction. Based on a trenchless pipeline installation rate of

⁶ Pipeline would be installed inside a 4-foot-wide trench. Therefore, Phase 3 (27,000 linear feet) and Phase 4 (49,000 linear feet) pipeline would disturb 108,000 square feet (27,000 linear feet x 4 feet) and 196,000 square feet (49,000 linear feet x 4 feet), respectively.

100 feet per 24 days, trenchless construction would occur for approximately 111 working days.⁷ In addition, assuming a pipeline installation rate of 80 feet per day, open-cut trench construction would last approximately 322 days.⁸ In addition, it was assumed pipeline installation across the Upland Road bridge would be performed in approximately two weeks. Paving and ground restoration activity would occur after pipeline installation. CalEEMod default assumptions are used to estimate the paving and ground restoration schedule.

Phase 4 construction is estimated to consist of 400 linear feet of trenchless construction and 48,600 linear feet of open-cut trench construction. Based on a trenchless pipeline installation rate of 100 feet of pipeline installation every 24 working days, trenchless construction would occur for approximately 96 working days.⁹ In addition, assuming an open-cut trench pipeline installation rate of 80 feet per day, open-cut trench construction was assumed to last approximately 608 days.¹⁰ Paving and ground restoration activity would occur after pipeline installation. CalEEMod default assumptions are used to estimate the paving and ground restoration schedule.

The analysis assumes construction equipment would not be operating continually. Each piece of construction equipment is estimated to be operated up to five hours per day. In addition, construction equipment is assumed to be diesel-powered. It was also assumed the project would comply with all applicable regulatory standards. In particular, it was assumed the project would comply with VCAPCD Rule 55 for fugitive dust control measures, which are discussed under Section 2.3, *Air Quality Regulation*. Construction activities were assumed to include 14 daily hauling round trips to transport material to and from the site with heavy-duty trucks.

Operational Emissions

Maintenance activities would occur annually and on an as-needed basis. Approximately one vehicle trip by maintenance staff per year would occur. It was assumed routine maintenance and inspection vehicle trips would occur from the District's office to and along the Phase 3 and 4 pipeline alignments, which is approximately 40 vehicle miles total. Operational area sources were assumed to include off-gassing of repaved roadways and painted roadway striping.

CO Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. The entire Basin is in conformance with State and federal CO standards, and most air quality monitoring stations no longer report CO levels. There are no representative air monitoring stations near the project site measuring CO levels. The project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour – or 24,000 vehicles per hour where vertical and/or horizontal air does not mix – in order to generate a significant CO impact (BAAQMD 2017). The construction and operations of this project would generate negligible long-term traffic volumes and would not emit the levels of CO necessary to result in a localized hot spot. Therefore, CO hotspots are not discussed further in this document.

⁷ The project would install approximately 100 feet of pipeline per 24 days. Trenchless construction = 111 days (460 linear feet/100 linear feet then multiply by 24 days)

⁸ The project would install approximately 80 feet of pipeline per day. Open-cut trench = 322 days (25,740 linear feet/80 feet per day).

⁹ The project would install approximately 100 feet of pipeline per 24 days. Trenchless construction = 96 days (400 linear feet/100 linear feet then multiply by 24 days)

¹⁰ The project would install approximately 80 feet of pipeline per day. Open-cut trench = 608 days (48,600 linear feet/80 feet per day).

3.2 Significance Thresholds

Based on the *CEQA Guidelines*, the project would have a significant impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project site's region is in non-attainment under an applicable federal or State ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

3.2.1 Air Quality

VCAPCD's Ventura County Air Quality Assessment Guidelines (2003) recommend specific air criteria pollutant emission thresholds for determining whether a project may have a significant adverse impact on air quality within the Basin. VCAPCD identifies separate ozone significance thresholds for (1) the Ojai Planning Area, (2) the city of Simi Valley, and (3) the remainder of Ventura County. The proposed project is a linear pipeline that traverses across two of these geographic areas: the city of Simi Valley and the remainder of Ventura County (outside of the Ojai Planning Area). As such, both of those ozone significance thresholds are applicable to the proposed project.

VCAPCD recommends a 25 pounds per day (lbs/day) significance threshold for ozone precursor emissions (ROC and NO_x) in Ventura County for areas outside of the Ojai Planning Area and Simi Valley. For development projects in Simi Valley, VCAPCD notes a significance threshold of 13.7 tons per year for ozone precursors is used, as directed by the City of Simi Valley City Council. These thresholds indicate if a project would jeopardize the attainment of the ozone standard. Both Ventura County and Simi Valley thresholds are applicable to the project, and they represent different time scales. Therefore, this analysis adopts both of these significance thresholds for the project. Impacts would be considered significant if the project's emissions exceed 25 lbs/day or 13.7 tons per year for ozone precursors. VCAPCD BMPs are required if project emissions exceed the ozone precursor thresholds.

VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. VCAPCD indicates a project generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during grading and excavation activities. The 2003 VCAPCD guidelines require fugitive dust mitigation measures be applied to all dust-generating activities. Such measures include minimizing a project's disturbance area, watering a site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

3.2.2 Greenhouse Gas Emissions

The significance criteria used to evaluate the project impacts to GHG emissions are based on the recommendations provided in Appendix G of the CEQA Guidelines (14 California Code of Regulations 15000 et seq.). For the purposes of the GHG analysis, a significant impact would occur if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines*, Section 15064[h][1]).

According to the State CEQA Guidelines, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions.

The County of Ventura developed an integrated approach to address climate change in the Ventura County 2040 General Plan, which serves as the County's CAP. The 2040 General Plan is a qualified GHG emissions reduction plan that future projects can tier from the cumulative GHG analysis in the 2040 General Plan Draft EIR. However, the 2040 General Plan does not establish a quantitative significance threshold for evaluating GHG emissions in CEQA analyses. The City of Simi Valley CAP aims to reduce emissions attributable to Simi Valley to levels at or below 1990 GHG emissions by the year 2020, consistent with the target reductions of AB 32. However, the Simi Valley CAP does not address post-2020 target reduction, intending to adopt a new plan by January 1, 2020. The City of Simi Valley has yet to adopt a new plan post-2020; therefore, the City of Simi Valley does not have an established significance threshold for evaluating GHG emissions. The Cities of Camarillo, Moorpark, and Thousand Oaks do not have adopted CAPs or numeric GHG thresholds. In addition, Calleguas does not have a formal CAP or GHG reduction plan. In the absence of any adopted numeric threshold, the significance of the project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b) by considering whether the project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. For this project, the most directly applicable adopted regulatory plan to reduce GHG emissions is the 2017 Scoping Plan. GHG emissions from the construction and operation of the project are provided for informational purposes.

3.3 Project-Level Air Quality Project Impacts

Threshold 1: Conflict with or obstruct implementation of the applicable air quality plan?

Impact AQ-1 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT THE IMPLEMENTATION OF THE VCAPCD ~~2016~~ 2022 AIR QUALITY MANAGEMENT PLAN. NO IMPACT WOULD OCCUR.

A project may be inconsistent with the applicable air quality plan if the project would generate population, housing, or employment growth exceeding the forecasts used in the development of the plan. This analysis examines the proposed project’s consistency with VCAPCD’s ~~2016~~ 2022 Ventura County AQMP. The ~~2016~~ 2022 Ventura County AQMP relies on SCAG’s 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasts of regional population growth in its projections for managing Ventura County’s air quality (SCAG 2016).

The proposed project would involve construction of a brine and recycled water pipeline. No direct growth would occur as a result of the project because it does not propose new homes, businesses, or other land uses that would generate population growth. As discussed in the 2014 Supplemental Environmental Impact Report for Phase 2 of the CRSMP, any additional water supply projects facilitated by the extended CRSMP would improve the reliability of local water supplies and reduce the region’s reliance on imported supplies. These projects have likely been identified already in planning documents such as Urban Water Management Plans (UWMPs). For example, the Camrosa Water District’s 2020 UWMP identifies a potential groundwater desalter project to treat for nitrates in the Santa Rosa Basin. If developed, the desalter would discharge brine from the treatment process to the CRSMP. According to the UWMP, the purpose of the desalter would be to improve water quality in the Santa Rosa Basin and increase Camrosa Water District’s self-reliance (Camrosa Water District 2021). The project would therefore not generate population, housing, or employment growth exceeding the forecasts used in the development of the plan.

Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plans. No impact would occur.

Threshold 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the site’s project region is in non-attainment under an applicable federal or State ambient air quality standard?

Impact AQ-2 THE PROJECT WOULD NOT VIOLATE ANY AIR QUALITY STANDARDS OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION OR RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT SITE’S REGION IS IN NONATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The proposed project would generate short-term emissions associated with project construction and negligible operational emissions associated with worker trips for maintenance and inspection of the pipeline. Construction and operational emissions were estimated using the CalEEMod version 2020.4.0.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy-duty construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. As

shown in Table 5 and Table 6, based on the duration of construction activities and the equipment to be utilized on site, the proposed project's short-term construction-related emissions of ROC or NO_x would not exceed the VCAPCD threshold of 13.7 tons per year in Simi Valley and 25 lbs/day for elsewhere in Ventura County. In addition, the project would include BMPs to control fugitive dust consistent with Ventura County Air Quality Assessment Guidelines, Section 7.4.1. Therefore, construction-related project emissions would not violate air quality standards, and impacts would be less than significant.

Table 5 Estimated Maximum Daily Construction Emissions (lbs/day)

	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
2024	2	17	21	<1	2	1
2025	1	9	13	<1	1	1
Phases 4						
2025	2	18	22	<1	3	1
2026	2	18	20	<1	3	1
2027	1	9	14	<1	1	1
2028	1	9	14	<1	1	1
Maximum Emissions	2	18	22	<1	3	1
VCAPCD Thresholds ¹	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Ventura County outside of Ojai Planning Area.

Notes: This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap. See Attachment A for modeling details and CalEEMod results.

Some totals may not add up due to rounding. Emissions data is sourced from "Table 2.1 Construction Emission" results in Attachment A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Table 6 Estimated Annual Construction Emissions (tons/year)

	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
2024	<1	1	1	<1	<1	<1
2025	<1	1	1	<1	<1	<1
Phases 4						
2025	<1	1	1	<1	<1	<1
2026	<1	1	2	<1	<1	<1
2027	<1	1	2	<1	<1	<1
2028	<1	<1	<1	<1	<1	<1
Maximum Emissions	<1	1	2	<1	<1	<1
VCAPCD Thresholds ¹	13.7	13.7	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Simi Valley.

Notes: This table provides a conservative analysis and presents the maximum daily emissions when the construction phases overlap. See Attachment A for modeling details and CalEEMod results.

Some totals may not add up due to rounding. Emissions data is sourced from “Table 2.1 Construction Emission” results in Attachment A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., off-gassing of repaved roadways and roadway striping) and mobile sources. The project’s operational mobile emissions would include annual site visits to the pipeline alignment for visual inspection, maintenance activities, and as-needed repairs. Table 7 and Table 8 summarizes the project’s maximum daily operational emissions. As shown therein, operational emissions would not exceed VCAPCD guideline of 13.7 tons per year in Simi Valley and 25 lbs/day for elsewhere in Ventura County. Therefore, impacts associated with operational emissions would be less than significant.

Table 7 Estimated Maximum Daily Operational Emissions (lbs/day)

Emissions Source	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
Area	<1	<1	<1	<1	<1	<1
Phase 4						
Area	<1	<1	<1	<1	<1	<1
Phase 3 & 4 Combined Mobile Emissions						
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
VCAPCD Thresholds ¹	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Ventura County outside of Ojai Planning Area.

See Attachment A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from "Table 2.2 Operational Emission" results in Attachment A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Table 8 Estimated Annual Operational Emissions (tons/year)

Emissions Source	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Phase 3						
Area	<1	<1	<1	<1	<1	<1
Phase 4						
Area	<1	<1	<1	<1	<1	<1
Phase 3 & 4 Combined Mobile Emissions						
Mobile	<1	<1	<1	<1	<1	<1
Total	<1	<1	<1	<1	<1	<1
VCAPCD Thresholds ¹	13.7	13.7	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

VCAPCD = Ventura County Air Pollution Control District; ROC = reactive organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

¹VCAPCD Threshold for Simi Valley.

See Attachment A for modeling details and CalEEMod results.

Notes: Some totals may not add up due to rounding. Emissions data is sourced from "Table 2.2 Operational Emission" results in Attachment A, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-3 THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS RELATED TO TACS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Toxic Air Contaminants

Health impacts associated with TACs are generally associated with long-term exposure. The greatest potential for TAC emissions would be during construction, which may result in a short-term increase of TAC emissions.

Construction

The greatest potential for TAC emissions during construction would be from heavy equipment operations that generate DPM emissions. Generation of DPM from construction projects typically occurs in a single area for a short period. As discussed under Impact AQ-2, project construction would result in emissions of criteria pollutants, including PM₁₀, ROC, and NO_x. The construction emissions for the proposed project would move linearly along the Phase 3 and 4 pipeline alignments. The project would install approximately 80 feet of pipeline per day and would expose sensitive receivers to construction TAC emissions for approximately 25 days.¹¹ Therefore, exposure at a given sensitive receptor within 1,000 feet of heavy equipment use would occur for less than two months. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

Operational

Sources of operational TACs typically include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The proposed project is not one of these uses. In addition, the proposed project would not require any new or additional stationary sources of air pollutant emissions. Therefore, no impact would occur.

Threshold 4: Would the project result in other emissions (such as those leading to odors) adversely a substantial number of people?

Impact AQ-4 THE PROJECT WOULD NOT SUBSTANTIALLY INCREASE THE RISK OF VALLEY FEVER OR GENERATE ODORS ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE DURING CONSTRUCTION OR OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Valley Fever is known to occur in Ventura County soils, and exposure risk is highest from agricultural and construction activities. The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. Soils along the project's pipeline alignment are already disturbed from construction of roadways, commercial structures, and residences, as well as activities associated with agricultural production. Due to the previous amount of disturbance on the project alignment, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection of Valley Fever to construction workers or people residing or working in the project area. Standard construction measures

¹¹ CARB recommends siting sensitive receptors 1,000 feet from TAC emitting sources (CARB 2005). A sensitive receptor would be exposed to the project construction approaching from 1,000 feet away and project construction residing 1,000 feet away. Therefore, a sensitive receptor would be exposed for 25 days = (2,000 feet divided by 80 feet installation per day).

incorporated as part of the proposed project would reduce fugitive dust generation, which would further minimize the potential risk of infection. Therefore, construction of the proposed project would not substantially increase the risk to public health above existing background levels, and impacts related to Valley Fever would be less than significant.

Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of a given receptor. The proposed pipeline would be installed below ground and would not create objectionable odors during project operation. With respect to operation, CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of odors (e.g., sewage treatment plants, landfills, recycling facilities, biomass operations, autobody shops, fiberglass manufacturing, and livestock operations). Recycled water and/or brine discharge pipeline operations are not identified on this list. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people, and impacts would be less than significant.

3.4 Project-Level Greenhouse Gas Project Impacts

Threshold 1:	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Threshold 2:	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-1 THE PROPOSED PROJECT WOULD BE CONSISTENT WITH THE COUNTY OF VENTURA 2040 GENERAL PLAN, CITY OF CAMARILLO GENERAL PLAN, CITY OF THOUSAND OAKS GENERAL PLAN, CITY OF MOORPARK GENERAL PLAN, CITY OF SIMI VALLEY GENERAL PLAN, AND THE ~~2017~~ 2022 SCOPING PLAN. THEREFORE, THE PROJECT WOULD NOT GENERATE GREENHOUSE GAS EMISSIONS THAT WOULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

This analysis evaluates the proposed project against the goals of the ~~2017~~ 2022 Scoping Plan. Approximately 2 percent of total energy usage in California is used for the conveyance, treatment, and distribution of water (CARB ~~2017~~ 2022d). One of the goals of the ~~2017~~ 2022 Scoping Plan is to “develop and support more reliable water supplies for people, agriculture, and the environment, provided by a more resilient, diversified, sustainably managed water resources system with a focus on actions that provide direct GHG reductions” (CARB ~~2017~~ 2022). The proposed project would facilitate the utilization of local water sources by providing a mechanism to efficiently dispose of the concentrate generated during treatment of these water sources. Therefore, although the project would generate temporary construction and minimal operational emissions, the project would ultimately be consistent with the goals of CARB's ~~2017~~ 2022 Scoping Plan.

The proposed project would not be in conflict with any applicable plans, policies, or regulations for the purpose of reducing GHG emissions. Therefore, impacts related to GHG emissions would be less than significant.

Project construction would generate GHG emissions from the operation of heavy machinery for the pipeline, and equipment and materials haul truck trips and construction worker trips to and from the project site. Construction GHG emissions were estimated using CalEEMod version 2020.4.0. Operation of the proposed project would generate minimal GHG emissions associated with the area and mobile

sources, such as off-gassing of paved roads and pipeline maintenance and inspection trips. The pipeline itself would not generate new demand for electricity, water supply, or natural gas. Maintenance activities would occur annually from the District’s office along the pipeline alignment length. Quantification of GHG emissions from construction and operational activities are provided for informational purposes.

Construction Emissions

As shown in Table 9, construction of the proposed project would generate an estimated total of 1,784 MT CO₂e. The Association of Environmental Professionals (2016) recommends GHG emissions from construction be amortized over 30 years¹² and added to operational GHG emissions to determine the overall impact of a project. The construction of the proposed project would generate an estimated 59 MT CO₂e per year over a 30-year period.

Table 9 Estimated Construction Emissions of Greenhouse Gases

Construction	Project Emissions MT CO ₂ e
Construction Emissions	
Phase 3	
2024	354
2025	292
Phase 4	
2025	183
2026	483
2027	437
2028	35
Total Construction Emissions	1,612
Amortized Construction Emissions (over 30 years)	59
MT CO ₂ e = metric tons of carbon dioxide equivalent Source: Attachment A CalEEMod worksheets	

Table 10 combines the estimated construction and operational GHG emissions associated with development of the project. Operation of the project would generate an estimated one maintenance vehicle trip per year, resulting in negligible annual mobile GHG emissions. As shown in Table 10, annual emissions from the proposed project would be approximately 59 MT of CO₂e per year with amortized construction emissions. Impacts related to GHG emissions would be less than significant.

¹² The lifetime of the project is anticipated to be longer than 30 years; therefore, the analysis is conservative.

Table 10 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (MT CO₂e)
Construction¹	59
Operations Phase 3	
Area	<1
Energy	<1
Mobile	<1
Solid Waste	<1
Water, Wastewater	<1
Operations Phase 4	
Area	<1
Energy	<1
Mobile	<1
Solid Waste	<1
Water, Wastewater	<1
Total	59

MT CO₂e = metric tons of carbon dioxide equivalent

¹ Amortized construction related GHG emissions over 30 years

Source: Attachment A CalEEMod worksheets.

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Attachment A

CalEEMod Outputs

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Calleguas SMP Phase 3- AQ
Ventura County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	108.00	1000sqft	2.48	108,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (27,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant provided information, 80 feet installation per day would occur. Based on project details, Phase 3 would have 460 LF of trenchless activity, crossing upland road bridge would take 2 weeks, and the remainder would be open-cut trench.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading -

Vehicle Trips - Based on applicant provided information. Maintenance and inspection work trips would occur annually for one day with one worker vehicle that would travel from the District's office to the pipeline and back.

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	220.00	33.00
tblConstructionPhase	NumDays	220.00	322.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	6.00	79.00
tblConstructionPhase	NumDays	6.00	322.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	140.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,095.00
tblTripsAndVMT	HaulingTripNumber	0.00	451.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,505.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblVehicleTrips	CW_TL	9.50	0.11
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1258	1.1017	1.3712	3.8200e-003	0.0770	0.0388	0.1158	0.0207	0.0374	0.0581	0.0000	347.8838	347.8838	0.0503	0.0173	354.3033
2025	0.1086	0.8579	1.2148	3.1700e-003	0.0657	0.0295	0.0952	0.0176	0.0284	0.0460	0.0000	287.6403	287.6403	0.0431	0.0119	292.2578
Maximum	0.1258	1.1017	1.3712	3.8200e-003	0.0770	0.0388	0.1158	0.0207	0.0374	0.0581	0.0000	347.8838	347.8838	0.0503	0.0173	354.3033

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1258	1.1017	1.3711	3.8200e-003	0.0770	0.0388	0.1158	0.0207	0.0374	0.0581	0.0000	347.8836	347.8836	0.0503	0.0173	354.3031
2025	0.1086	0.8579	1.2148	3.1700e-003	0.0657	0.0295	0.0952	0.0176	0.0284	0.0460	0.0000	287.6401	287.6401	0.0431	0.0119	292.2575
Maximum	0.1258	1.1017	1.3711	3.8200e-003	0.0770	0.0388	0.1158	0.0207	0.0374	0.0581	0.0000	347.8836	347.8836	0.0503	0.0173	354.3031

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2024	9-2-2024	0.5292	0.5292
2	9-3-2024	12-2-2024	0.5668	0.5668
3	12-3-2024	3-2-2025	0.3463	0.3463
4	3-3-2025	6-2-2025	0.3418	0.3418
5	6-3-2025	9-2-2025	0.3408	0.3408
6	9-3-2025	9-30-2025	0.0519	0.0519
		Highest	0.5668	0.5668

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.9000e-004	9.0000e-005	7.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0273	0.0273	2.0000e-005	1.0000e-005	0.0299
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.7600e-003	1.0000e-004	1.7800e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0292	0.0292	3.0000e-005	1.0000e-005	0.0320

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.9000e-004	9.0000e-005	7.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0273	0.0273	2.0000e-005	1.0000e-005	0.0299
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.7600e-003	1.0000e-004	1.7800e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0292	0.0292	3.0000e-005	1.0000e-005	0.0320

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Pipe-in-a-Bridge	Grading	6/3/2024	6/14/2024	5	10	
2	Installation - Pipe-in-a-Bridge	Building Construction	6/3/2024	6/14/2024	5	10	
3	Excavation - Trenchless	Grading	6/17/2024	10/3/2024	5	79	

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4	Installation - Trenchless	Building Construction	10/4/2024	11/19/2024	5	33
5	Installation/Backfill - Open Trench	Building Construction	6/17/2024	9/9/2025	5	322
6	Excavation - Open Trench	Grading	6/17/2024	9/9/2025	5	322
7	Paving - Open Trench	Paving	9/10/2025	9/23/2025	5	10

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Pipe-in-a-Bridge	Excavators	1	4.00	158	0.38
Excavation - Pipe-in-a-Bridge	Graders	0	8.00	187	0.41
Excavation - Pipe-in-a-Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	0	4.00	97	0.37
Excavation - Trenchless	Bore/Drill Rigs	0	8.00	221	0.50
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Cranes	0	8.00	231	0.29
Excavation - Trenchless	Dumpers/Tenders	0	8.00	16	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Excavation - Trenchless	Welders	0	8.00	46	0.45
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Plate Compactors	0	8.00	8	0.43
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Pipe-in-a-Bridge	Cranes	0	8.00	231	0.29
Installation - Pipe-in-a-Bridge	Forklifts	0	7.00	89	0.20
Installation - Pipe-in-a-Bridge	Generator Sets	0	8.00	84	0.74
Installation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Installation - Pipe-in-a-Bridge	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38
Installation - Trenchless	Forklifts	0	7.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Installation/Backfill - Open Trench	Cranes	0	8.00	231	0.29
Installation/Backfill - Open Trench	Forklifts	0	7.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30
Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Pipe-in-a-Bridge	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Trenchless	4	10.00	0.00	1,095.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Pipe-in-a-Bridge	1	45.00	0.00	140.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	45.00	0.00	451.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	45.00	0.00	4,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.5100e-003	8.1600e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.6000e-004	1.6000e-004	0.0000	1.1346	1.1346	3.7000e-004	0.0000	1.1438
Total	4.5000e-004	3.5100e-003	8.1600e-003	1.0000e-005	0.0000	1.7000e-004	1.7000e-004	0.0000	1.6000e-004	1.6000e-004	0.0000	1.1346	1.1346	3.7000e-004	0.0000	1.1438

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0927
Total	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0927

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.5100e-003	8.1600e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.6000e-004	1.6000e-004	0.0000	1.1346	1.1346	3.7000e-004	0.0000	1.1438
Total	4.5000e-004	3.5100e-003	8.1600e-003	1.0000e-005	0.0000	1.7000e-004	1.7000e-004	0.0000	1.6000e-004	1.6000e-004	0.0000	1.1346	1.1346	3.7000e-004	0.0000	1.1438

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0927
Total	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0919	0.0919	0.0000	0.0000	0.0927

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Installation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6000e-004	3.6200e-003	5.5900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.6844	0.6844	2.2000e-004	0.0000	0.6899
Total	3.6000e-004	3.6200e-003	5.5900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.6844	0.6844	2.2000e-004	0.0000	0.6899

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	8.6800e-003	2.4800e-003	4.0000e-005	1.2000e-003	6.0000e-005	1.2600e-003	3.3000e-004	6.0000e-005	3.9000e-004	0.0000	3.9107	3.9107	2.8000e-004	6.2000e-004	4.1034
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.0000e-004	5.2300e-003	1.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3784	1.3784	4.0000e-005	4.0000e-005	1.3910
Total	7.4000e-004	9.0800e-003	7.7100e-003	5.0000e-005	3.0100e-003	7.0000e-005	3.0800e-003	8.1000e-004	7.0000e-005	8.8000e-004	0.0000	5.2892	5.2892	3.2000e-004	6.6000e-004	5.4944

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3.3 Installation - Pipe-in-a-Bridge - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6000e-004	3.6200e-003	5.5900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.6844	0.6844	2.2000e-004	0.0000	0.6899
Total	3.6000e-004	3.6200e-003	5.5900e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.6844	0.6844	2.2000e-004	0.0000	0.6899

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	8.6800e-003	2.4800e-003	4.0000e-005	1.2000e-003	6.0000e-005	1.2600e-003	3.3000e-004	6.0000e-005	3.9000e-004	0.0000	3.9107	3.9107	2.8000e-004	6.2000e-004	4.1034
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.0000e-004	5.2300e-003	1.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3784	1.3784	4.0000e-005	4.0000e-005	1.3910
Total	7.4000e-004	9.0800e-003	7.7100e-003	5.0000e-005	3.0100e-003	7.0000e-005	3.0800e-003	8.1000e-004	7.0000e-005	8.8000e-004	0.0000	5.2892	5.2892	3.2000e-004	6.6000e-004	5.4944

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3.4 Excavation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1899	0.2933	5.8000e-004		8.3500e-003	8.3500e-003		8.1200e-003	8.1200e-003	0.0000	49.9009	49.9009	8.5300e-003	0.0000	50.1141
Total	0.0241	0.1899	0.2933	5.8000e-004	0.0000	8.3500e-003	8.3500e-003	0.0000	8.1200e-003	8.1200e-003	0.0000	49.9009	49.9009	8.5300e-003	0.0000	50.1141

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0700e-003	0.0679	0.0194	3.0000e-004	9.4100e-003	4.9000e-004	9.8900e-003	2.5800e-003	4.6000e-004	3.0500e-003	0.0000	30.5874	30.5874	2.1800e-003	4.8800e-003	32.0947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.1000e-004	9.1800e-003	3.0000e-005	3.1800e-003	2.0000e-005	3.2000e-003	8.5000e-004	2.0000e-005	8.6000e-004	0.0000	2.4199	2.4199	7.0000e-005	7.0000e-005	2.4419
Total	2.1300e-003	0.0686	0.0285	3.3000e-004	0.0126	5.1000e-004	0.0131	3.4300e-003	4.8000e-004	3.9100e-003	0.0000	33.0073	33.0073	2.2500e-003	4.9500e-003	34.5367

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Excavation - Trenchless - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0241	0.1899	0.2933	5.8000e-004		8.3500e-003	8.3500e-003		8.1200e-003	8.1200e-003	0.0000	49.9009	49.9009	8.5300e-003	0.0000	50.1141
Total	0.0241	0.1899	0.2933	5.8000e-004	0.0000	8.3500e-003	8.3500e-003	0.0000	8.1200e-003	8.1200e-003	0.0000	49.9009	49.9009	8.5300e-003	0.0000	50.1141

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0700e-003	0.0679	0.0194	3.0000e-004	9.4100e-003	4.9000e-004	9.8900e-003	2.5800e-003	4.6000e-004	3.0500e-003	0.0000	30.5874	30.5874	2.1800e-003	4.8800e-003	32.0947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.1000e-004	9.1800e-003	3.0000e-005	3.1800e-003	2.0000e-005	3.2000e-003	8.5000e-004	2.0000e-005	8.6000e-004	0.0000	2.4199	2.4199	7.0000e-005	7.0000e-005	2.4419
Total	2.1300e-003	0.0686	0.0285	3.3000e-004	0.0126	5.1000e-004	0.0131	3.4300e-003	4.8000e-004	3.9100e-003	0.0000	33.0073	33.0073	2.2500e-003	4.9500e-003	34.5367

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7800e-003	0.0748	0.0591	1.9000e-004		2.8200e-003	2.8200e-003		2.6500e-003	2.6500e-003	0.0000	16.3212	16.3212	4.7300e-003	0.0000	16.4394
Total	8.7800e-003	0.0748	0.0591	1.9000e-004		2.8200e-003	2.8200e-003		2.6500e-003	2.6500e-003	0.0000	16.3212	16.3212	4.7300e-003	0.0000	16.4394

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4000e-004	0.0280	7.9700e-003	1.2000e-004	3.8700e-003	2.0000e-004	4.0700e-003	1.0600e-003	1.9000e-004	1.2500e-003	0.0000	12.5981	12.5981	9.0000e-004	2.0100e-003	13.2189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9800e-003	1.3400e-003	0.0173	5.0000e-005	5.9900e-003	3.0000e-005	6.0200e-003	1.5900e-003	3.0000e-005	1.6200e-003	0.0000	4.5489	4.5489	1.4000e-004	1.3000e-004	4.5902
Total	2.4200e-003	0.0293	0.0252	1.7000e-004	9.8600e-003	2.3000e-004	0.0101	2.6500e-003	2.2000e-004	2.8700e-003	0.0000	17.1469	17.1469	1.0400e-003	2.1400e-003	17.8092

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7800e-003	0.0748	0.0591	1.9000e-004		2.8200e-003	2.8200e-003		2.6500e-003	2.6500e-003	0.0000	16.3212	16.3212	4.7300e-003	0.0000	16.4394
Total	8.7800e-003	0.0748	0.0591	1.9000e-004		2.8200e-003	2.8200e-003		2.6500e-003	2.6500e-003	0.0000	16.3212	16.3212	4.7300e-003	0.0000	16.4394

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4000e-004	0.0280	7.9700e-003	1.2000e-004	3.8700e-003	2.0000e-004	4.0700e-003	1.0600e-003	1.9000e-004	1.2500e-003	0.0000	12.5981	12.5981	9.0000e-004	2.0100e-003	13.2189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9800e-003	1.3400e-003	0.0173	5.0000e-005	5.9900e-003	3.0000e-005	6.0200e-003	1.5900e-003	3.0000e-005	1.6200e-003	0.0000	4.5489	4.5489	1.4000e-004	1.3000e-004	4.5902
Total	2.4200e-003	0.0293	0.0252	1.7000e-004	9.8600e-003	2.3000e-004	0.0101	2.6500e-003	2.2000e-004	2.8700e-003	0.0000	17.1469	17.1469	1.0400e-003	2.1400e-003	17.8092

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1700e-003	0.0754	0.1085	1.6000e-004		3.3800e-003	3.3800e-003		3.1500e-003	3.1500e-003	0.0000	13.5360	13.5360	4.0700e-003	0.0000	13.6379
Total	8.1700e-003	0.0754	0.1085	1.6000e-004		3.3800e-003	3.3800e-003		3.1500e-003	3.1500e-003	0.0000	13.5360	13.5360	4.0700e-003	0.0000	13.6379

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9400e-003	0.1231	0.0351	5.5000e-004	0.0171	8.8000e-004	0.0179	4.6800e-003	8.4000e-004	5.5200e-003	0.0000	55.4951	55.4951	3.9500e-003	8.8500e-003	58.2300
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5300e-003	5.7500e-003	0.0742	2.1000e-004	0.0258	1.4000e-004	0.0259	6.8400e-003	1.3000e-004	6.9700e-003	0.0000	19.5739	19.5739	5.8000e-004	5.5000e-004	19.7519
Total	0.0105	0.1289	0.1094	7.6000e-004	0.0428	1.0200e-003	0.0438	0.0115	9.7000e-004	0.0125	0.0000	75.0690	75.0690	4.5300e-003	9.4000e-003	77.9819

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1700e-003	0.0754	0.1085	1.6000e-004		3.3800e-003	3.3800e-003		3.1500e-003	3.1500e-003	0.0000	13.5360	13.5360	4.0700e-003	0.0000	13.6378
Total	8.1700e-003	0.0754	0.1085	1.6000e-004		3.3800e-003	3.3800e-003		3.1500e-003	3.1500e-003	0.0000	13.5360	13.5360	4.0700e-003	0.0000	13.6378

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9400e-003	0.1231	0.0351	5.5000e-004	0.0171	8.8000e-004	0.0179	4.6800e-003	8.4000e-004	5.5200e-003	0.0000	55.4951	55.4951	3.9500e-003	8.8500e-003	58.2300
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5300e-003	5.7500e-003	0.0742	2.1000e-004	0.0258	1.4000e-004	0.0259	6.8400e-003	1.3000e-004	6.9700e-003	0.0000	19.5739	19.5739	5.8000e-004	5.5000e-004	19.7519
Total	0.0105	0.1289	0.1094	7.6000e-004	0.0428	1.0200e-003	0.0438	0.0115	9.7000e-004	0.0125	0.0000	75.0690	75.0690	4.5300e-003	9.4000e-003	77.9819

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6900e-003	0.0892	0.1373	2.0000e-004		3.5900e-003	3.5900e-003		3.3500e-003	3.3500e-003	0.0000	17.1731	17.1731	5.1700e-003	0.0000	17.3023
Total	9.6900e-003	0.0892	0.1373	2.0000e-004		3.5900e-003	3.5900e-003		3.3500e-003	3.3500e-003	0.0000	17.1731	17.1731	5.1700e-003	0.0000	17.3023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4300e-003	0.1534	0.0456	6.8000e-004	0.0216	1.1100e-003	0.0228	5.9400e-003	1.0600e-003	7.0000e-003	0.0000	68.9464	68.9464	5.1600e-003	0.0110	72.3532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.5700e-003	0.0880	2.6000e-004	0.0327	1.6000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	24.1980	24.1980	6.7000e-004	6.5000e-004	24.4088
Total	0.0126	0.1600	0.1336	9.4000e-004	0.0543	1.2700e-003	0.0556	0.0146	1.2100e-003	0.0158	0.0000	93.1444	93.1444	5.8300e-003	0.0117	96.7620

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6900e-003	0.0892	0.1373	2.0000e-004		3.5900e-003	3.5900e-003		3.3500e-003	3.3500e-003	0.0000	17.1731	17.1731	5.1700e-003	0.0000	17.3023
Total	9.6900e-003	0.0892	0.1373	2.0000e-004		3.5900e-003	3.5900e-003		3.3500e-003	3.3500e-003	0.0000	17.1731	17.1731	5.1700e-003	0.0000	17.3023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.4300e-003	0.1534	0.0456	6.8000e-004	0.0216	1.1100e-003	0.0228	5.9400e-003	1.0600e-003	7.0000e-003	0.0000	68.9464	68.9464	5.1600e-003	0.0110	72.3532
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.5700e-003	0.0880	2.6000e-004	0.0327	1.6000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	24.1980	24.1980	6.7000e-004	6.5000e-004	24.4088
Total	0.0126	0.1600	0.1336	9.4000e-004	0.0543	1.2700e-003	0.0556	0.0146	1.2100e-003	0.0158	0.0000	93.1444	93.1444	5.8300e-003	0.0117	96.7620

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0653	0.5168	0.7006	1.4900e-003		0.0221	0.0221		0.0214	0.0214	0.0000	129.1778	129.1778	0.0241	0.0000	129.7794
Total	0.0653	0.5168	0.7006	1.4900e-003	0.0000	0.0221	0.0221	0.0000	0.0214	0.0214	0.0000	129.1778	129.1778	0.0241	0.0000	129.7794

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	1.9200e-003	0.0247	7.0000e-005	8.5900e-003	5.0000e-005	8.6300e-003	2.2800e-003	4.0000e-005	2.3200e-003	0.0000	6.5246	6.5246	1.9000e-004	1.8000e-004	6.5840
Total	2.8400e-003	1.9200e-003	0.0247	7.0000e-005	8.5900e-003	5.0000e-005	8.6300e-003	2.2800e-003	4.0000e-005	2.3200e-003	0.0000	6.5246	6.5246	1.9000e-004	1.8000e-004	6.5840

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0653	0.5168	0.7006	1.4900e-003		0.0221	0.0221		0.0214	0.0214	0.0000	129.1777	129.1777	0.0241	0.0000	129.7793
Total	0.0653	0.5168	0.7006	1.4900e-003	0.0000	0.0221	0.0221	0.0000	0.0214	0.0214	0.0000	129.1777	129.1777	0.0241	0.0000	129.7793

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	1.9200e-003	0.0247	7.0000e-005	8.5900e-003	5.0000e-005	8.6300e-003	2.2800e-003	4.0000e-005	2.3200e-003	0.0000	6.5246	6.5246	1.9000e-004	1.8000e-004	6.5840
Total	2.8400e-003	1.9200e-003	0.0247	7.0000e-005	8.5900e-003	5.0000e-005	8.6300e-003	2.2800e-003	4.0000e-005	2.3200e-003	0.0000	6.5246	6.5246	1.9000e-004	1.8000e-004	6.5840

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0774	0.5861	0.8843	1.8900e-003		0.0236	0.0236		0.0229	0.0229	0.0000	163.7420	163.7420	0.0303	0.0000	164.4983
Total	0.0774	0.5861	0.8843	1.8900e-003	0.0000	0.0236	0.0236	0.0000	0.0229	0.0229	0.0000	163.7420	163.7420	0.0303	0.0000	164.4983

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3800e-003	2.1900e-003	0.0294	9.0000e-005	0.0109	5.0000e-005	0.0109	2.8900e-003	5.0000e-005	2.9400e-003	0.0000	8.0660	8.0660	2.2000e-004	2.2000e-004	8.1363
Total	3.3800e-003	2.1900e-003	0.0294	9.0000e-005	0.0109	5.0000e-005	0.0109	2.8900e-003	5.0000e-005	2.9400e-003	0.0000	8.0660	8.0660	2.2000e-004	2.2000e-004	8.1363

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0774	0.5861	0.8843	1.8900e-003		0.0236	0.0236		0.0229	0.0229	0.0000	163.7418	163.7418	0.0303	0.0000	164.4981
Total	0.0774	0.5861	0.8843	1.8900e-003	0.0000	0.0236	0.0236	0.0000	0.0229	0.0229	0.0000	163.7418	163.7418	0.0303	0.0000	164.4981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3800e-003	2.1900e-003	0.0294	9.0000e-005	0.0109	5.0000e-005	0.0109	2.8900e-003	5.0000e-005	2.9400e-003	0.0000	8.0660	8.0660	2.2000e-004	2.2000e-004	8.1363
Total	3.3800e-003	2.1900e-003	0.0294	9.0000e-005	0.0109	5.0000e-005	0.0109	2.8900e-003	5.0000e-005	2.9400e-003	0.0000	8.0660	8.0660	2.2000e-004	2.2000e-004	8.1363

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3.8 Paving - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1700e-003	0.0203	0.0288	6.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	5.1265	5.1265	1.6300e-003	0.0000	5.1672
Paving	3.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4200e-003	0.0203	0.0288	6.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	5.1265	5.1265	1.6300e-003	0.0000	5.1672

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.4100e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3884	0.3884	1.0000e-005	1.0000e-005	0.3918
Total	1.6000e-004	1.1000e-004	1.4100e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3884	0.3884	1.0000e-005	1.0000e-005	0.3918

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3.8 Paving - Open Trench - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1700e-003	0.0203	0.0288	6.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	5.1265	5.1265	1.6300e-003	0.0000	5.1671
Paving	3.2500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.4200e-003	0.0203	0.0288	6.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	5.1265	5.1265	1.6300e-003	0.0000	5.1671

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.4100e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3884	0.3884	1.0000e-005	1.0000e-005	0.3918
Total	1.6000e-004	1.1000e-004	1.4100e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3884	0.3884	1.0000e-005	1.0000e-005	0.3918

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9000e-004	9.0000e-005	7.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0273	0.0273	2.0000e-005	1.0000e-005	0.0299
Unmitigated	1.9000e-004	9.0000e-005	7.9000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0273	0.0273	2.0000e-005	1.0000e-005	0.0299

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.08	0.00	0.00	31	31
Total	1.08	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.11	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.553410	0.058491	0.170447	0.127855	0.026791	0.007507	0.012149	0.006212	0.000674	0.000390	0.028812	0.000632	0.006629

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003
Unmitigated	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003
Total	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003
Total	8.5700e-003	1.0000e-005	9.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9300e-003	1.9300e-003	1.0000e-005	0.0000	2.0600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Calleguas SMP Phase 3- AQ
Ventura County APCD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	108.00	1000sqft	2.48	108,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (27,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant provided information, 80 feet installation per day would occur. Based on project details, Phase 3 would have 460 LF of trenchless activity, crossing upland road bridge would take 2 weeks, and the remainder would be open-cut trench.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading -

Vehicle Trips - Based on applicant provided information. Maintenance and inspection work trips would occur annually for one day with one worker vehicle that would travel from the District's office to the pipeline and back.

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	220.00	33.00
tblConstructionPhase	NumDays	220.00	322.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	6.00	79.00
tblConstructionPhase	NumDays	6.00	322.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	140.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,095.00
tblTripsAndVMT	HaulingTripNumber	0.00	451.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,505.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblVehicleTrips	CW_TL	9.50	0.11
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.9246	16.7326	21.4615	0.0577	1.3454	0.5977	1.9037	0.3611	0.5774	0.8944	0.0000	5,793.775 0	5,793.775 0	0.8956	0.2920	5,899.631 5
2025	1.1574	9.3099	13.1842	0.0345	0.7372	0.3174	1.0545	0.1977	0.3058	0.5034	0.0000	3,453.135 1	3,453.135 1	0.5084	0.1457	3,509.264 6
Maximum	1.9246	16.7326	21.4615	0.0577	1.3454	0.5977	1.9037	0.3611	0.5774	0.8944	0.0000	5,793.775 0	5,793.775 0	0.8956	0.2920	5,899.631 5

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.9246	16.7326	21.4615	0.0577	1.3454	0.5977	1.9037	0.3611	0.5774	0.8944	0.0000	5,793.775 0	5,793.775 0	0.8956	0.2920	5,899.631 5
2025	1.1574	9.3099	13.1842	0.0345	0.7372	0.3174	1.0545	0.1977	0.3058	0.5034	0.0000	3,453.135 1	3,453.135 1	0.5084	0.1457	3,509.264 6
Maximum	1.9246	16.7326	21.4615	0.0577	1.3454	0.5977	1.9037	0.3611	0.5774	0.8944	0.0000	5,793.775 0	5,793.775 0	0.8956	0.2920	5,899.631 5

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.4900e-003	7.5000e-004	6.7000e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2324	0.2324	1.4000e-004	7.0000e-005	0.2561
Total	0.0490	8.5000e-004	0.0177	0.0000	9.0000e-005	4.0000e-005	1.4000e-004	2.0000e-005	4.0000e-005	7.0000e-005		0.2561	0.2561	2.0000e-004	7.0000e-005	0.2813

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.4900e-003	7.5000e-004	6.7000e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2324	0.2324	1.4000e-004	7.0000e-005	0.2561
Total	0.0490	8.5000e-004	0.0177	0.0000	9.0000e-005	4.0000e-005	1.4000e-004	2.0000e-005	4.0000e-005	7.0000e-005		0.2561	0.2561	2.0000e-004	7.0000e-005	0.2813

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Pipe-in-a-Bridge	Grading	6/3/2024	6/14/2024	5	10	
2	Installation - Pipe-in-a-Bridge	Building Construction	6/3/2024	6/14/2024	5	10	
3	Excavation - Trenchless	Grading	6/17/2024	10/3/2024	5	79	
4	Installation - Trenchless	Building Construction	10/4/2024	11/19/2024	5	33	
5	Installation/Backfill - Open Trench	Building Construction	6/17/2024	9/9/2025	5	322	
6	Excavation - Open Trench	Grading	6/17/2024	9/9/2025	5	322	
7	Paving - Open Trench	Paving	9/10/2025	9/23/2025	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Pipe-in-a-Bridge	Excavators	1	4.00	158	0.38
Excavation - Pipe-in-a-Bridge	Graders	0	8.00	187	0.41
Excavation - Pipe-in-a-Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	0	4.00	97	0.37

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation - Trenchless	Bore/Drill Rigs	0	8.00	221	0.50
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Cranes	0	8.00	231	0.29
Excavation - Trenchless	Dumpers/Tenders	0	8.00	16	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Excavation - Trenchless	Welders	0	8.00	46	0.45
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48
Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Plate Compactors	0	8.00	8	0.43
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Pipe-in-a-Bridge	Cranes	0	8.00	231	0.29
Installation - Pipe-in-a-Bridge	Forklifts	0	7.00	89	0.20
Installation - Pipe-in-a-Bridge	Generator Sets	0	8.00	84	0.74
Installation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Installation - Pipe-in-a-Bridge	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Installation - Trenchless	Forklifts	0	7.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Installation/Backfill - Open Trench	Cranes	0	8.00	231	0.29
Installation/Backfill - Open Trench	Forklifts	0	7.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42
Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30
Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Pipe-in-a-Bridge	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Trenchless	4	10.00	0.00	1,095.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Pipe-in-a-Bridge	1	45.00	0.00	140.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	45.00	0.00	451.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	45.00	0.00	4,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Excavation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0901	0.7014	1.6325	2.5800e-003		0.0346	0.0346		0.0318	0.0318		250.1327	250.1327	0.0809		252.1551
Total	0.0901	0.7014	1.6325	2.5800e-003	0.0000	0.0346	0.0346	0.0000	0.0318	0.0318		250.1327	250.1327	0.0809		252.1551

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7300e-003	5.6100e-003	0.0706	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1168	20.1168	6.3000e-004	5.8000e-004	20.3061
Total	8.7300e-003	5.6100e-003	0.0706	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1168	20.1168	6.3000e-004	5.8000e-004	20.3061

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0901	0.7014	1.6325	2.5800e-003		0.0346	0.0346		0.0318	0.0318	0.0000	250.1327	250.1327	0.0809		252.1551
Total	0.0901	0.7014	1.6325	2.5800e-003	0.0000	0.0346	0.0346	0.0000	0.0318	0.0318	0.0000	250.1327	250.1327	0.0809		252.1551

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7300e-003	5.6100e-003	0.0706	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1168	20.1168	6.3000e-004	5.8000e-004	20.3061
Total	8.7300e-003	5.6100e-003	0.0706	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1168	20.1168	6.3000e-004	5.8000e-004	20.3061

3.3 Installation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306		150.8834	150.8834	0.0488		152.1033
Total	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306		150.8834	150.8834	0.0488		152.1033

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Installation - Pipe-in-a-Bridge - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0263	1.7357	0.4989	7.7500e-003	0.2444	0.0124	0.2569	0.0670	0.0119	0.0789		862.6329	862.6329	0.0613	0.1375	905.1419
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1572	1.8198	1.5583	0.0107	0.6141	0.0143	0.6284	0.1650	0.0137	0.1787		1,164.3847	1,164.3847	0.0707	0.1463	1,209.7341

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306	0.0000	150.8834	150.8834	0.0488		152.1033
Total	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306	0.0000	150.8834	150.8834	0.0488		152.1033

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Installation - Pipe-in-a-Bridge - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0263	1.7357	0.4989	7.7500e-003	0.2444	0.0124	0.2569	0.0670	0.0119	0.0789		862.6329	862.6329	0.0613	0.1375	905.1419
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1572	1.8198	1.5583	0.0107	0.6141	0.0143	0.6284	0.1650	0.0137	0.1787		1,164.3847	1,164.3847	0.0707	0.1463	1,209.7341

3.4 Excavation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6106	4.8080	7.4244	0.0146		0.2114	0.2114		0.2056	0.2056		1,392.5655	1,392.5655	0.2380		1,398.5156
Total	0.6106	4.8080	7.4244	0.0146	0.0000	0.2114	0.2114	0.0000	0.2056	0.2056		1,392.5655	1,392.5655	0.2380		1,398.5156

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Excavation - Trenchless - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7185	0.4939	7.6700e-003	0.2420	0.0123	0.2543	0.0663	0.0118	0.0781		854.0534	854.0534	0.0607	0.1361	896.1396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0291	0.0187	0.2354	6.5000e-004	0.0822	4.3000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0559	67.0559	2.0900e-003	1.9400e-003	67.6871
Total	0.0551	1.7372	0.7293	8.3200e-003	0.3242	0.0127	0.3369	0.0881	0.0122	0.1002		921.1093	921.1093	0.0628	0.1381	963.8268

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6106	4.8080	7.4244	0.0146		0.2114	0.2114		0.2056	0.2056	0.0000	1,392.5655	1,392.5655	0.2380		1,398.5156
Total	0.6106	4.8080	7.4244	0.0146	0.0000	0.2114	0.2114	0.0000	0.2056	0.2056	0.0000	1,392.5655	1,392.5655	0.2380		1,398.5156

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Excavation - Trenchless - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7185	0.4939	7.6700e-003	0.2420	0.0123	0.2543	0.0663	0.0118	0.0781		854.0534	854.0534	0.0607	0.1361	896.1396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0291	0.0187	0.2354	6.5000e-004	0.0822	4.3000e-004	0.0826	0.0218	3.9000e-004	0.0222		67.0559	67.0559	2.0900e-003	1.9400e-003	67.6871
Total	0.0551	1.7372	0.7293	8.3200e-003	0.3242	0.0127	0.3369	0.0881	0.0122	0.1002		921.1093	921.1093	0.0628	0.1381	963.8268

3.5 Installation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603		1,090.3680	1,090.3680	0.3157		1,098.2608
Total	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603		1,090.3680	1,090.3680	0.3157		1,098.2608

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0257	1.6944	0.4870	7.5700e-003	0.2386	0.0121	0.2508	0.0654	0.0116	0.0770		842.0940	842.0940	0.0598	0.1342	883.5909
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1566	1.7785	1.5464	0.0105	0.6083	0.0141	0.6223	0.1634	0.0134	0.1768		1,143.8458	1,143.8458	0.0692	0.1430	1,188.1831

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603	0.0000	1,090.3680	1,090.3680	0.3157		1,098.2608
Total	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603	0.0000	1,090.3680	1,090.3680	0.3157		1,098.2608

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0257	1.6944	0.4870	7.5700e-003	0.2386	0.0121	0.2508	0.0654	0.0116	0.0770		842.0940	842.0940	0.0598	0.1342	883.5909
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1566	1.7785	1.5464	0.0105	0.6083	0.0141	0.6223	0.1634	0.0134	0.1768		1,143.8458	1,143.8458	0.0692	0.1430	1,188.1831

3.6 Installation/Backfill - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443		210.1538	210.1538	0.0632		211.7347
Total	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443		210.1538	210.1538	0.0632		211.7347

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0263	1.7346	0.4985	7.7400e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		862.0589	862.0589	0.0613	0.1374	904.5396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1572	1.8187	1.5579	0.0107	0.6139	0.0143	0.6283	0.1650	0.0136	0.1786		1,163.8106	1,163.8106	0.0707	0.1462	1,209.1317

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443	0.0000	210.1538	210.1538	0.0632		211.7347
Total	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443	0.0000	210.1538	210.1538	0.0632		211.7347

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0263	1.7346	0.4985	7.7400e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		862.0589	862.0589	0.0613	0.1374	904.5396
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1309	0.0841	1.0594	2.9300e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		301.7517	301.7517	9.4100e-003	8.7400e-003	304.5922
Total	0.1572	1.8187	1.5579	0.0107	0.6139	0.0143	0.6283	0.1650	0.0136	0.1786		1,163.8106	1,163.8106	0.0707	0.1462	1,209.1317

3.6 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7054	0.5104	7.5700e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		844.9193	844.9193	0.0632	0.1348	886.6662
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1228	0.0759	0.9920	2.8200e-003	0.3697	1.8300e-003	0.3715	0.0981	1.6800e-003	0.0997		294.2887	294.2887	8.5700e-003	8.1800e-003	296.9419
Total	0.1488	1.7813	1.5024	0.0104	0.6140	0.0142	0.6282	0.1650	0.0135	0.1785		1,139.2080	1,139.2080	0.0717	0.1430	1,183.6081

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7054	0.5104	7.5700e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		844.9193	844.9193	0.0632	0.1348	886.6662
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1228	0.0759	0.9920	2.8200e-003	0.3697	1.8300e-003	0.3715	0.0981	1.6800e-003	0.0997		294.2887	294.2887	8.5700e-003	8.1800e-003	296.9419
Total	0.1488	1.7813	1.5024	0.0104	0.6140	0.0142	0.6282	0.1650	0.0135	0.1785		1,139.2080	1,139.2080	0.0717	0.1430	1,183.6081

3.7 Excavation - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9200	7.2785	9.8679	0.0210		0.3109	0.3109		0.3011	0.3011		2,005.5518	2,005.5518	0.3736		2,014.8920
Total	0.9200	7.2785	9.8679	0.0210	0.0000	0.3109	0.3109	0.0000	0.3011	0.3011		2,005.5518	2,005.5518	0.3736		2,014.8920

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0280	0.3531	9.8000e-004	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		100.5839	100.5839	3.1400e-003	2.9100e-003	101.5307
Total	0.0436	0.0280	0.3531	9.8000e-004	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		100.5839	100.5839	3.1400e-003	2.9100e-003	101.5307

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9200	7.2785	9.8679	0.0210		0.3109	0.3109		0.3011	0.3011	0.0000	2,005.5518	2,005.5518	0.3736		2,014.8920
Total	0.9200	7.2785	9.8679	0.0210	0.0000	0.3109	0.3109	0.0000	0.3011	0.3011	0.0000	2,005.5518	2,005.5518	0.3736		2,014.8920

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0280	0.3531	9.8000e-004	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		100.5839	100.5839	3.1400e-003	2.9100e-003	101.5307
Total	0.0436	0.0280	0.3531	9.8000e-004	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		100.5839	100.5839	3.1400e-003	2.9100e-003	101.5307

3.7 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806
Total	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806
Total	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806

3.8 Paving - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0837	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0219	0.2866	8.2000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		85.0167	85.0167	2.4700e-003	2.3600e-003	85.7832
Total	0.0355	0.0219	0.2866	8.2000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		85.0167	85.0167	2.4700e-003	2.3600e-003	85.7832

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0837	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0219	0.2866	8.2000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		85.0167	85.0167	2.4700e-003	2.3600e-003	85.7832
Total	0.0355	0.0219	0.2866	8.2000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		85.0167	85.0167	2.4700e-003	2.3600e-003	85.7832

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4900e-003	7.5000e-004	6.7000e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2324	0.2324	1.4000e-004	7.0000e-005	0.2561
Unmitigated	1.4900e-003	7.5000e-004	6.7000e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2324	0.2324	1.4000e-004	7.0000e-005	0.2561

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.08	0.00	0.00	31	31
Total	1.08	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.11	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.553410	0.058491	0.170447	0.127855	0.026791	0.007507	0.012149	0.006212	0.000674	0.000390	0.028812	0.000632	0.006629

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Unmitigated	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Total	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Total	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

7.0 Water Detail

7.1 Mitigation Measures Water

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Calleguas SMP Phase 3- AQ
Ventura County APCD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	108.00	1000sqft	2.48	108,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (27,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant provided information, 80 feet installation per day would occur. Based on project details, Phase 3 would have 460 LF of trenchless activity, crossing upland road bridge would take 2 weeks, and the remainder would be open-cut trench.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Based on applicant provided information

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading -

Vehicle Trips - Based on applicant provided information. Maintenance and inspection work trips would occur annually for one day with one worker vehicle that would travel from the District's office to the pipeline and back.

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	220.00	33.00
tblConstructionPhase	NumDays	220.00	322.00
tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	NumDays	6.00	79.00
tblConstructionPhase	NumDays	6.00	322.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	140.00
tblTripsAndVMT	HaulingTripNumber	0.00	1,095.00
tblTripsAndVMT	HaulingTripNumber	0.00	451.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,505.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblTripsAndVMT	VendorTripNumber	18.00	0.00
tblVehicleTrips	CW_TL	9.50	0.11
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.9050	16.5721	21.4764	0.0579	1.3454	0.5976	1.9037	0.3611	0.5774	0.8944	0.0000	5,813.3598	5,813.3598	0.8940	0.2897	5,918.7063
2025	1.1466	9.2250	13.1976	0.0347	0.7372	0.3173	1.0545	0.1977	0.3057	0.5034	0.0000	3,470.0050	3,470.0050	0.5075	0.1445	3,525.7480
Maximum	1.9050	16.5721	21.4764	0.0579	1.3454	0.5976	1.9037	0.3611	0.5774	0.8944	0.0000	5,813.3598	5,813.3598	0.8940	0.2897	5,918.7063

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.9050	16.5721	21.4764	0.0579	1.3454	0.5976	1.9037	0.3611	0.5774	0.8944	0.0000	5,813.3598	5,813.3598	0.8940	0.2897	5,918.7063
2025	1.1466	9.2250	13.1976	0.0347	0.7372	0.3173	1.0545	0.1977	0.3057	0.5034	0.0000	3,470.0050	3,470.0050	0.5075	0.1445	3,525.7480
Maximum	1.9050	16.5721	21.4764	0.0579	1.3454	0.5976	1.9037	0.3611	0.5774	0.8944	0.0000	5,813.3598	5,813.3598	0.8940	0.2897	5,918.7063

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.6400e-003	6.6000e-004	5.1200e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2319	0.2319	1.2000e-004	6.0000e-005	0.2531
Total	0.0491	7.6000e-004	0.0161	0.0000	9.0000e-005	4.0000e-005	1.4000e-004	2.0000e-005	4.0000e-005	7.0000e-005		0.2556	0.2556	1.8000e-004	6.0000e-005	0.2782

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.6400e-003	6.6000e-004	5.1200e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2319	0.2319	1.2000e-004	6.0000e-005	0.2531
Total	0.0491	7.6000e-004	0.0161	0.0000	9.0000e-005	4.0000e-005	1.4000e-004	2.0000e-005	4.0000e-005	7.0000e-005		0.2556	0.2556	1.8000e-004	6.0000e-005	0.2782

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Pipe-in-a-Bridge	Grading	6/3/2024	6/14/2024	5	10	
2	Installation - Pipe-in-a-Bridge	Building Construction	6/3/2024	6/14/2024	5	10	
3	Excavation - Trenchless	Grading	6/17/2024	10/3/2024	5	79	
4	Installation - Trenchless	Building Construction	10/4/2024	11/19/2024	5	33	
5	Installation/Backfill - Open Trench	Building Construction	6/17/2024	9/9/2025	5	322	
6	Excavation - Open Trench	Grading	6/17/2024	9/9/2025	5	322	
7	Paving - Open Trench	Paving	9/10/2025	9/23/2025	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.48

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Pipe-in-a-Bridge	Excavators	1	4.00	158	0.38
Excavation - Pipe-in-a-Bridge	Graders	0	8.00	187	0.41
Excavation - Pipe-in-a-Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	0	4.00	97	0.37

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation - Trenchless	Bore/Drill Rigs	0	8.00	221	0.50
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Cranes	0	8.00	231	0.29
Excavation - Trenchless	Dumpers/Tenders	0	8.00	16	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Excavation - Trenchless	Welders	0	8.00	46	0.45
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48
Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Plate Compactors	0	8.00	8	0.43
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Pipe-in-a-Bridge	Cranes	0	8.00	231	0.29
Installation - Pipe-in-a-Bridge	Forklifts	0	7.00	89	0.20
Installation - Pipe-in-a-Bridge	Generator Sets	0	8.00	84	0.74
Installation - Pipe-in-a-Bridge	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Installation - Pipe-in-a-Bridge	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Installation - Trenchless	Forklifts	0	7.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Installation/Backfill - Open Trench	Cranes	0	8.00	231	0.29
Installation/Backfill - Open Trench	Forklifts	0	7.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42
Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30
Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Pipe-in-a-Bridge	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Trenchless	4	10.00	0.00	1,095.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Pipe-in-a-Bridge	1	45.00	0.00	140.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	45.00	0.00	451.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	45.00	0.00	4,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Excavation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0901	0.7014	1.6325	2.5800e-003		0.0346	0.0346		0.0318	0.0318		250.1327	250.1327	0.0809		252.1551
Total	0.0901	0.7014	1.6325	2.5800e-003	0.0000	0.0346	0.0346	0.0000	0.0318	0.0318		250.1327	250.1327	0.0809		252.1551

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0700e-003	4.7900e-003	0.0718	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.0250	21.0250	5.8000e-004	5.2000e-004	21.1957
Total	8.0700e-003	4.7900e-003	0.0718	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.0250	21.0250	5.8000e-004	5.2000e-004	21.1957

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0901	0.7014	1.6325	2.5800e-003		0.0346	0.0346		0.0318	0.0318	0.0000	250.1327	250.1327	0.0809		252.1551
Total	0.0901	0.7014	1.6325	2.5800e-003	0.0000	0.0346	0.0346	0.0000	0.0318	0.0318	0.0000	250.1327	250.1327	0.0809		252.1551

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Pipe-in-a-Bridge - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0700e-003	4.7900e-003	0.0718	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.0250	21.0250	5.8000e-004	5.2000e-004	21.1957
Total	8.0700e-003	4.7900e-003	0.0718	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.0250	21.0250	5.8000e-004	5.2000e-004	21.1957

3.3 Installation - Pipe-in-a-Bridge - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306		150.8834	150.8834	0.0488		152.1033
Total	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306		150.8834	150.8834	0.0488		152.1033

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Installation - Pipe-in-a-Bridge - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.6647	0.4925	7.7400e-003	0.2444	0.0124	0.2568	0.0670	0.0119	0.0788		861.8252	861.8252	0.0614	0.1374	904.2973
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1491	1.7365	1.5696	0.0108	0.6141	0.0143	0.6284	0.1650	0.0136	0.1786		1,177.2002	1,177.2002	0.0700	0.1452	1,222.2321

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306	0.0000	150.8834	150.8834	0.0488		152.1033
Total	0.0720	0.7241	1.1178	1.5600e-003		0.0332	0.0332		0.0306	0.0306	0.0000	150.8834	150.8834	0.0488		152.1033

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Installation - Pipe-in-a-Bridge - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.6647	0.4925	7.7400e-003	0.2444	0.0124	0.2568	0.0670	0.0119	0.0788		861.8252	861.8252	0.0614	0.1374	904.2973
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1491	1.7365	1.5696	0.0108	0.6141	0.0143	0.6284	0.1650	0.0136	0.1786		1,177.2002	1,177.2002	0.0700	0.1452	1,222.2321

3.4 Excavation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6106	4.8080	7.4244	0.0146		0.2114	0.2114		0.2056	0.2056		1,392.5655	1,392.5655	0.2380		1,398.5156
Total	0.6106	4.8080	7.4244	0.0146	0.0000	0.2114	0.2114	0.0000	0.2056	0.2056		1,392.5655	1,392.5655	0.2380		1,398.5156

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Excavation - Trenchless - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6481	0.4876	7.6700e-003	0.2420	0.0123	0.2543	0.0663	0.0117	0.0780		853.2537	853.2537	0.0608	0.1360	895.3034
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0269	0.0160	0.2394	6.8000e-004	0.0822	4.3000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.0833	70.0833	1.9200e-003	1.7500e-003	70.6522
Total	0.0547	1.6641	0.7270	8.3500e-003	0.3242	0.0127	0.3368	0.0881	0.0121	0.1002		923.3370	923.3370	0.0627	0.1378	965.9556

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6106	4.8080	7.4244	0.0146		0.2114	0.2114		0.2056	0.2056	0.0000	1,392.5655	1,392.5655	0.2380		1,398.5156
Total	0.6106	4.8080	7.4244	0.0146	0.0000	0.2114	0.2114	0.0000	0.2056	0.2056	0.0000	1,392.5655	1,392.5655	0.2380		1,398.5156

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Excavation - Trenchless - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6481	0.4876	7.6700e-003	0.2420	0.0123	0.2543	0.0663	0.0117	0.0780		853.2537	853.2537	0.0608	0.1360	895.3034
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0269	0.0160	0.2394	6.8000e-004	0.0822	4.3000e-004	0.0826	0.0218	3.9000e-004	0.0222		70.0833	70.0833	1.9200e-003	1.7500e-003	70.6522
Total	0.0547	1.6641	0.7270	8.3500e-003	0.3242	0.0127	0.3368	0.0881	0.0121	0.1002		923.3370	923.3370	0.0627	0.1378	965.9556

3.5 Installation - Trenchless - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603		1,090.3680	1,090.3680	0.3157		1,098.2608
Total	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603		1,090.3680	1,090.3680	0.3157		1,098.2608

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.6250	0.4808	7.5600e-003	0.2386	0.0121	0.2507	0.0654	0.0116	0.0769		841.3056	841.3056	0.0599	0.1341	882.7664
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1484	1.6969	1.5579	0.0106	0.6083	0.0140	0.6223	0.1634	0.0133	0.1768		1,156.6805	1,156.6805	0.0686	0.1420	1,200.7012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603	0.0000	1,090.3680	1,090.3680	0.3157		1,098.2608
Total	0.5322	4.5316	3.5798	0.0116		0.1707	0.1707		0.1603	0.1603	0.0000	1,090.3680	1,090.3680	0.3157		1,098.2608

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.6250	0.4808	7.5600e-003	0.2386	0.0121	0.2507	0.0654	0.0116	0.0769		841.3056	841.3056	0.0599	0.1341	882.7664
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1484	1.6969	1.5579	0.0106	0.6083	0.0140	0.6223	0.1634	0.0133	0.1768		1,156.6805	1,156.6805	0.0686	0.1420	1,200.7012

3.6 Installation/Backfill - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443		210.1538	210.1538	0.0632		211.7347
Total	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443		210.1538	210.1538	0.0632		211.7347

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.6636	0.4922	7.7400e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		861.2517	861.2517	0.0614	0.1373	903.6955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1491	1.7354	1.5693	0.0108	0.6139	0.0143	0.6282	0.1650	0.0136	0.1786		1,176.6266	1,176.6266	0.0700	0.1452	1,221.6303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443	0.0000	210.1538	210.1538	0.0632		211.7347
Total	0.1150	1.0622	1.5288	2.2500e-003		0.0477	0.0477		0.0443	0.0443	0.0000	210.1538	210.1538	0.0632		211.7347

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0281	1.6636	0.4922	7.7400e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		861.2517	861.2517	0.0614	0.1373	903.6955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1210	0.0718	1.0771	3.0600e-003	0.3697	1.9200e-003	0.3716	0.0981	1.7600e-003	0.0998		315.3750	315.3750	8.6300e-003	7.8700e-003	317.9347
Total	0.1491	1.7354	1.5693	0.0108	0.6139	0.0143	0.6282	0.1650	0.0136	0.1786		1,176.6266	1,176.6266	0.0700	0.1452	1,221.6303

3.6 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6353	0.5042	7.5600e-003	0.2443	0.0124	0.2567	0.0669	0.0118	0.0788		844.1088	844.1088	0.0633	0.1347	885.8186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1133	0.0648	1.0068	2.9500e-003	0.3697	1.8300e-003	0.3715	0.0981	1.6800e-003	0.0997		307.5490	307.5490	7.8400e-003	7.3700e-003	309.9402
Total	0.1411	1.7001	1.5109	0.0105	0.6140	0.0142	0.6282	0.1650	0.0135	0.1785		1,151.6578	1,151.6578	0.0711	0.1420	1,195.7588

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Installation/Backfill - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6353	0.5042	7.5600e-003	0.2443	0.0124	0.2567	0.0669	0.0118	0.0788		844.1088	844.1088	0.0633	0.1347	885.8186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1133	0.0648	1.0068	2.9500e-003	0.3697	1.8300e-003	0.3715	0.0981	1.6800e-003	0.0997		307.5490	307.5490	7.8400e-003	7.3700e-003	309.9402
Total	0.1411	1.7001	1.5109	0.0105	0.6140	0.0142	0.6282	0.1650	0.0135	0.1785		1,151.6578	1,151.6578	0.0711	0.1420	1,195.7588

3.7 Excavation - Open Trench - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9200	7.2785	9.8679	0.0210		0.3109	0.3109		0.3011	0.3011		2,005.5518	2,005.5518	0.3736		2,014.8920
Total	0.9200	7.2785	9.8679	0.0210	0.0000	0.3109	0.3109	0.0000	0.3011	0.3011		2,005.5518	2,005.5518	0.3736		2,014.8920

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0403	0.0239	0.3590	1.0200e-003	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		105.1250	105.1250	2.8800e-003	2.6200e-003	105.9782
Total	0.0403	0.0239	0.3590	1.0200e-003	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		105.1250	105.1250	2.8800e-003	2.6200e-003	105.9782

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9200	7.2785	9.8679	0.0210		0.3109	0.3109		0.3011	0.3011	0.0000	2,005.5518	2,005.5518	0.3736		2,014.8920
Total	0.9200	7.2785	9.8679	0.0210	0.0000	0.3109	0.3109	0.0000	0.3011	0.3011	0.0000	2,005.5518	2,005.5518	0.3736		2,014.8920

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0403	0.0239	0.3590	1.0200e-003	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		105.1250	105.1250	2.8800e-003	2.6200e-003	105.9782
Total	0.0403	0.0239	0.3590	1.0200e-003	0.1232	6.4000e-004	0.1239	0.0327	5.9000e-004	0.0333		105.1250	105.1250	2.8800e-003	2.6200e-003	105.9782

3.7 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134
Total	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Excavation - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134
Total	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134

3.8 Paving - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0837	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0327	0.0187	0.2908	8.5000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.8475	88.8475	2.2600e-003	2.1300e-003	89.5383
Total	0.0327	0.0187	0.2908	8.5000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.8475	88.8475	2.2600e-003	2.1300e-003	89.5383

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6498					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0837	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Paving - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0327	0.0187	0.2908	8.5000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.8475	88.8475	2.2600e-003	2.1300e-003	89.5383
Total	0.0327	0.0187	0.2908	8.5000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.8475	88.8475	2.2600e-003	2.1300e-003	89.5383

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6400e-003	6.6000e-004	5.1200e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2319	0.2319	1.2000e-004	6.0000e-005	0.2531
Unmitigated	1.6400e-003	6.6000e-004	5.1200e-003	0.0000	9.0000e-005	0.0000	1.0000e-004	2.0000e-005	0.0000	3.0000e-005		0.2319	0.2319	1.2000e-004	6.0000e-005	0.2531

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.08	0.00	0.00	31	31
Total	1.08	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.11	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.553410	0.058491	0.170447	0.127855	0.026791	0.007507	0.012149	0.006212	0.000674	0.000390	0.028812	0.000632	0.006629

Calleguas SMP Phase 3- AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Unmitigated	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Total	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0383					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252
Total	0.0475	1.0000e-004	0.0110	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	6.0000e-005		0.0252

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	196.00	1000sqft	4.50	196,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (49,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant information, such as 80 feet installation for open trench per day, 400 LF of trenchless activity, and paving would occur after excavation and installation operation. 4 feet trenchless activity per day.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Grading -

Vehicle Trips - Based on applicant provided information, maintenance and inspection trips would occur once per year, one worker trips for one day, and would travel from the district's office to the end of the pipeline and back.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	8.00	68.00
tblConstructionPhase	NumDays	8.00	608.00
tblConstructionPhase	NumDays	230.00	608.00
tblConstructionPhase	NumDays	230.00	28.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	392.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	952.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblVehicleTrips	CW_TL	9.50	0.06
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0659	0.5192	0.7717	1.9800e-003	0.0443	0.0179	0.0622	0.0119	0.0173	0.0292	0.0000	179.8501	179.8501	0.0254	7.1200e-003	182.6067
2026	0.1692	1.3220	1.8890	5.2000e-003	0.1490	0.0440	0.1930	0.0399	0.0423	0.0822	0.0000	475.2136	475.2136	0.0665	0.0213	483.2370
2027	0.1578	1.2101	1.7952	4.7200e-003	0.1334	0.0415	0.1750	0.0357	0.0400	0.0757	0.0000	430.2168	430.2168	0.0610	0.0171	436.8395
2028	0.0190	0.1060	0.1566	3.8000e-004	8.6100e-003	4.0400e-003	0.0127	2.3000e-003	3.8300e-003	6.1300e-003	0.0000	34.4013	34.4013	6.4500e-003	9.8000e-004	34.8533
Maximum	0.1692	1.3220	1.8890	5.2000e-003	0.1490	0.0440	0.1930	0.0399	0.0423	0.0822	0.0000	475.2136	475.2136	0.0665	0.0213	483.2370

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0659	0.5192	0.7717	1.9800e-003	0.0443	0.0179	0.0622	0.0119	0.0173	0.0292	0.0000	179.8499	179.8499	0.0254	7.1200e-003	182.6066
2026	0.1692	1.3220	1.8890	5.2000e-003	0.1490	0.0440	0.1930	0.0399	0.0423	0.0822	0.0000	475.2133	475.2133	0.0665	0.0213	483.2366
2027	0.1578	1.2101	1.7952	4.7200e-003	0.1334	0.0415	0.1750	0.0357	0.0400	0.0757	0.0000	430.2165	430.2165	0.0610	0.0171	436.8392
2028	0.0190	0.1060	0.1566	3.8000e-004	8.6100e-003	4.0400e-003	0.0127	2.3000e-003	3.8300e-003	6.1300e-003	0.0000	34.4013	34.4013	6.4500e-003	9.8000e-004	34.8532
Maximum	0.1692	1.3220	1.8890	5.2000e-003	0.1490	0.0440	0.1930	0.0399	0.0423	0.0822	0.0000	475.2133	475.2133	0.0665	0.0213	483.2366

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-23-2025	12-22-2025	0.5254	0.5254
2	12-23-2025	3-22-2026	0.4738	0.4738
3	3-23-2026	6-22-2026	0.3440	0.3440
4	6-23-2026	9-22-2026	0.3437	0.3437
5	9-23-2026	12-22-2026	0.3432	0.3432
6	12-23-2026	3-22-2027	0.3379	0.3379
7	3-23-2027	6-22-2027	0.3421	0.3421
8	6-23-2027	9-22-2027	0.3418	0.3418

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9	9-23-2027	12-22-2027	0.3412	0.3412
10	12-23-2027	3-22-2028	0.1568	0.1568
		Highest	0.5254	0.5254

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0000e-004	1.4000e-004	1.2700e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0388	0.0388	2.0000e-005	1.0000e-005	0.0430
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0159	1.6000e-004	3.0700e-003	0.0000	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0423	0.0423	3.0000e-005	1.0000e-005	0.0467

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0000e-004	1.4000e-004	1.2700e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0388	0.0388	2.0000e-005	1.0000e-005	0.0430
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0159	1.6000e-004	3.0700e-003	0.0000	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0423	0.0423	3.0000e-005	1.0000e-005	0.0467

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Trenchless	Grading	9/24/2025	12/26/2025	5	68	
2	Excavation - Open Trench	Grading	9/24/2025	1/21/2028	5	608	
3	Installation/Backfill - Open Trench	Building Construction	9/24/2025	1/21/2028	5	608	

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4	Installation - Trenchless	Building Construction	12/29/2025	2/4/2026	5	28
5	Paving - Open Trench	Paving	1/24/2028	2/16/2028	5	18

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Excavators	0	8.00	158	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48
Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Installation/Backfill - Open Trench	Cranes	0	7.00	231	0.29

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Installation/Backfill - Open Trench	Forklifts	0	8.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38
Installation - Trenchless	Forklifts	0	8.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42
Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30
Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Trenchless	4	10.00	0.00	392.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	82.00	0.00	8,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	82.00	0.00	952.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Excavation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.1495	0.2516	5.0000e-004		6.1400e-003	6.1400e-003		5.9700e-003	5.9700e-003	0.0000	42.9489	42.9489	7.2600e-003	0.0000	43.1303
Total	0.0195	0.1495	0.2516	5.0000e-004	0.0000	6.1400e-003	6.1400e-003	0.0000	5.9700e-003	5.9700e-003	0.0000	42.9489	42.9489	7.2600e-003	0.0000	43.1303

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	0.0239	7.1000e-003	1.1000e-004	3.3700e-003	1.7000e-004	3.5400e-003	9.2000e-004	1.7000e-004	1.0900e-003	0.0000	10.7321	10.7321	8.0000e-004	1.7100e-003	11.2624
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	5.5000e-004	7.3900e-003	2.0000e-005	2.7400e-003	1.0000e-005	2.7600e-003	7.3000e-004	1.0000e-005	7.4000e-004	0.0000	2.0314	2.0314	6.0000e-005	5.0000e-005	2.0491
Total	1.2300e-003	0.0244	0.0145	1.3000e-004	6.1100e-003	1.8000e-004	6.3000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	12.7636	12.7636	8.6000e-004	1.7600e-003	13.3116

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.1495	0.2516	5.0000e-004		6.1400e-003	6.1400e-003		5.9700e-003	5.9700e-003	0.0000	42.9488	42.9488	7.2600e-003	0.0000	43.1303
Total	0.0195	0.1495	0.2516	5.0000e-004	0.0000	6.1400e-003	6.1400e-003	0.0000	5.9700e-003	5.9700e-003	0.0000	42.9488	42.9488	7.2600e-003	0.0000	43.1303

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	0.0239	7.1000e-003	1.1000e-004	3.3700e-003	1.7000e-004	3.5400e-003	9.2000e-004	1.7000e-004	1.0900e-003	0.0000	10.7321	10.7321	8.0000e-004	1.7100e-003	11.2624
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	5.5000e-004	7.3900e-003	2.0000e-005	2.7400e-003	1.0000e-005	2.7600e-003	7.3000e-004	1.0000e-005	7.4000e-004	0.0000	2.0314	2.0314	6.0000e-005	5.0000e-005	2.0491
Total	1.2300e-003	0.0244	0.0145	1.3000e-004	6.1100e-003	1.8000e-004	6.3000e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	12.7636	12.7636	8.6000e-004	1.7600e-003	13.3116

3.3 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0305	0.2312	0.3488	7.4000e-004		9.3200e-003	9.3200e-003		9.0300e-003	9.0300e-003	0.0000	64.5871	64.5871	0.0119	0.0000	64.8854
Total	0.0305	0.2312	0.3488	7.4000e-004	0.0000	9.3200e-003	9.3200e-003	0.0000	9.0300e-003	9.0300e-003	0.0000	64.5871	64.5871	0.0119	0.0000	64.8854

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	8.6000e-004	0.0116	3.0000e-005	4.2900e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.1816	3.1816	9.0000e-005	9.0000e-005	3.2093
Total	1.3300e-003	8.6000e-004	0.0116	3.0000e-005	4.2900e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.1816	3.1816	9.0000e-005	9.0000e-005	3.2093

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0305	0.2312	0.3488	7.4000e-004		9.3200e-003	9.3200e-003		9.0300e-003	9.0300e-003	0.0000	64.5871	64.5871	0.0119	0.0000	64.8854
Total	0.0305	0.2312	0.3488	7.4000e-004	0.0000	9.3200e-003	9.3200e-003	0.0000	9.0300e-003	9.0300e-003	0.0000	64.5871	64.5871	0.0119	0.0000	64.8854

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	8.6000e-004	0.0116	3.0000e-005	4.2900e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.1816	3.1816	9.0000e-005	9.0000e-005	3.2093
Total	1.3300e-003	8.6000e-004	0.0116	3.0000e-005	4.2900e-003	2.0000e-005	4.3200e-003	1.1400e-003	2.0000e-005	1.1600e-003	0.0000	3.1816	3.1816	9.0000e-005	9.0000e-005	3.2093

3.3 Excavation - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1122	0.8498	1.2823	2.7300e-003		0.0343	0.0343		0.0332	0.0332	0.0000	237.4259	237.4259	0.0439	0.0000	238.5225
Total	0.1122	0.8498	1.2823	2.7300e-003	0.0000	0.0343	0.0343	0.0000	0.0332	0.0332	0.0000	237.4259	237.4259	0.0439	0.0000	238.5225

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6100e-003	2.8900e-003	0.0401	1.2000e-004	0.0158	8.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.4195	11.4195	3.0000e-004	3.0000e-004	11.5154
Total	4.6100e-003	2.8900e-003	0.0401	1.2000e-004	0.0158	8.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.4195	11.4195	3.0000e-004	3.0000e-004	11.5154

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1122	0.8498	1.2823	2.7300e-003		0.0343	0.0343		0.0332	0.0332	0.0000	237.4256	237.4256	0.0439	0.0000	238.5222
Total	0.1122	0.8498	1.2823	2.7300e-003	0.0000	0.0343	0.0343	0.0000	0.0332	0.0332	0.0000	237.4256	237.4256	0.0439	0.0000	238.5222

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6100e-003	2.8900e-003	0.0401	1.2000e-004	0.0158	8.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.4195	11.4195	3.0000e-004	3.0000e-004	11.5154
Total	4.6100e-003	2.8900e-003	0.0401	1.2000e-004	0.0158	8.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.4195	11.4195	3.0000e-004	3.0000e-004	11.5154

3.3 Excavation - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1122	0.8498	1.2823	2.7300e-003		0.0343	0.0343		0.0332	0.0332	0.0000	237.4259	237.4259	0.0439	0.0000	238.5225
Total	0.1122	0.8498	1.2823	2.7300e-003	0.0000	0.0343	0.0343	0.0000	0.0332	0.0332	0.0000	237.4259	237.4259	0.0439	0.0000	238.5225

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3.3 Excavation - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3300e-003	2.6400e-003	0.0379	1.2000e-004	0.0158	7.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.1699	11.1699	2.7000e-004	2.8000e-004	11.2606
Total	4.3300e-003	2.6400e-003	0.0379	1.2000e-004	0.0158	7.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.1699	11.1699	2.7000e-004	2.8000e-004	11.2606

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1122	0.8498	1.2823	2.7300e-003		0.0343	0.0343		0.0332	0.0332	0.0000	237.4256	237.4256	0.0439	0.0000	238.5222
Total	0.1122	0.8498	1.2823	2.7300e-003	0.0000	0.0343	0.0343	0.0000	0.0332	0.0332	0.0000	237.4256	237.4256	0.0439	0.0000	238.5222

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3.3 Excavation - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3300e-003	2.6400e-003	0.0379	1.2000e-004	0.0158	7.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.1699	11.1699	2.7000e-004	2.8000e-004	11.2606
Total	4.3300e-003	2.6400e-003	0.0379	1.2000e-004	0.0158	7.0000e-005	0.0159	4.1900e-003	7.0000e-005	4.2600e-003	0.0000	11.1699	11.1699	2.7000e-004	2.8000e-004	11.2606

3.3 Excavation - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4500e-003	0.0488	0.0737	1.6000e-004		1.9700e-003	1.9700e-003		1.9100e-003	1.9100e-003	0.0000	13.6452	13.6452	2.5200e-003	0.0000	13.7082
Total	6.4500e-003	0.0488	0.0737	1.6000e-004	0.0000	1.9700e-003	1.9700e-003	0.0000	1.9100e-003	1.9100e-003	0.0000	13.6452	13.6452	2.5200e-003	0.0000	13.7082

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3.3 Excavation - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	2.0700e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.6293	0.6293	1.0000e-005	2.0000e-005	0.6342
Total	2.3000e-004	1.4000e-004	2.0700e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.6293	0.6293	1.0000e-005	2.0000e-005	0.6342

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4500e-003	0.0488	0.0737	1.6000e-004		1.9700e-003	1.9700e-003		1.9100e-003	1.9100e-003	0.0000	13.6452	13.6452	2.5200e-003	0.0000	13.7082
Total	6.4500e-003	0.0488	0.0737	1.6000e-004	0.0000	1.9700e-003	1.9700e-003	0.0000	1.9100e-003	1.9100e-003	0.0000	13.6452	13.6452	2.5200e-003	0.0000	13.7082

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	2.0700e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.6293	0.6293	1.0000e-005	2.0000e-005	0.6342
Total	2.3000e-004	1.4000e-004	2.0700e-003	1.0000e-005	9.1000e-004	0.0000	9.1000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.6293	0.6293	1.0000e-005	2.0000e-005	0.6342

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8200e-003	0.0352	0.0541	8.0000e-005		1.4200e-003	1.4200e-003		1.3200e-003	1.3200e-003	0.0000	6.7738	6.7738	2.0400e-003	0.0000	6.8248
Total	3.8200e-003	0.0352	0.0541	8.0000e-005		1.4200e-003	1.4200e-003		1.3200e-003	1.3200e-003	0.0000	6.7738	6.7738	2.0400e-003	0.0000	6.8248

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6000e-004	0.0605	0.0180	2.7000e-004	8.5300e-003	4.4000e-004	8.9700e-003	2.3400e-003	4.2000e-004	2.7600e-003	0.0000	27.1913	27.1913	2.0400e-003	4.3400e-003	28.5348
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2900e-003	4.7300e-003	0.0633	1.8000e-004	0.0235	1.2000e-004	0.0236	6.2300e-003	1.1000e-004	6.3400e-003	0.0000	17.3927	17.3927	4.8000e-004	4.7000e-004	17.5442
Total	8.2500e-003	0.0652	0.0813	4.5000e-004	0.0320	5.6000e-004	0.0326	8.5700e-003	5.3000e-004	9.1000e-003	0.0000	44.5839	44.5839	2.5200e-003	4.8100e-003	46.0791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8200e-003	0.0352	0.0541	8.0000e-005		1.4200e-003	1.4200e-003		1.3200e-003	1.3200e-003	0.0000	6.7738	6.7738	2.0400e-003	0.0000	6.8248
Total	3.8200e-003	0.0352	0.0541	8.0000e-005		1.4200e-003	1.4200e-003		1.3200e-003	1.3200e-003	0.0000	6.7738	6.7738	2.0400e-003	0.0000	6.8248

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3.4 Installation/Backfill - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.6000e-004	0.0605	0.0180	2.7000e-004	8.5300e-003	4.4000e-004	8.9700e-003	2.3400e-003	4.2000e-004	2.7600e-003	0.0000	27.1913	27.1913	2.0400e-003	4.3400e-003	28.5348
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2900e-003	4.7300e-003	0.0633	1.8000e-004	0.0235	1.2000e-004	0.0236	6.2300e-003	1.1000e-004	6.3400e-003	0.0000	17.3927	17.3927	4.8000e-004	4.7000e-004	17.5442
Total	8.2500e-003	0.0652	0.0813	4.5000e-004	0.0320	5.6000e-004	0.0326	8.5700e-003	5.3000e-004	9.1000e-003	0.0000	44.5839	44.5839	2.5200e-003	4.8100e-003	46.0791

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883
Total	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4900e-003	0.2183	0.0676	9.6000e-004	0.0314	1.6000e-003	0.0330	8.6100e-003	1.5300e-003	0.0101	0.0000	97.9039	97.9039	7.7100e-003	0.0156	102.7546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0252	0.0158	0.2190	6.6000e-004	0.0863	4.1000e-004	0.0867	0.0229	3.8000e-004	0.0233	0.0000	62.4265	62.4265	1.6300e-003	1.6200e-003	62.9506
Total	0.0287	0.2341	0.2866	1.6200e-003	0.1177	2.0100e-003	0.1197	0.0315	1.9100e-003	0.0334	0.0000	160.3304	160.3304	9.3400e-003	0.0173	165.7053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883
Total	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4900e-003	0.2183	0.0676	9.6000e-004	0.0314	1.6000e-003	0.0330	8.6100e-003	1.5300e-003	0.0101	0.0000	97.9039	97.9039	7.7100e-003	0.0156	102.7546
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0252	0.0158	0.2190	6.6000e-004	0.0863	4.1000e-004	0.0867	0.0229	3.8000e-004	0.0233	0.0000	62.4265	62.4265	1.6300e-003	1.6200e-003	62.9506
Total	0.0287	0.2341	0.2866	1.6200e-003	0.1177	2.0100e-003	0.1197	0.0315	1.9100e-003	0.0334	0.0000	160.3304	160.3304	9.3400e-003	0.0173	165.7053

3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883
Total	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883

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3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4500e-003	0.2139	0.0687	9.4000e-004	0.0314	1.5900e-003	0.0330	8.6100e-003	1.5200e-003	0.0101	0.0000	95.6582	95.6582	7.9000e-003	0.0153	100.4103
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0145	0.2072	6.4000e-004	0.0863	3.9000e-004	0.0867	0.0229	3.6000e-004	0.0233	0.0000	61.0618	61.0618	1.4900e-003	1.5400e-003	61.5578
Total	0.0271	0.2283	0.2760	1.5800e-003	0.1177	1.9800e-003	0.1196	0.0315	1.8800e-003	0.0334	0.0000	156.7200	156.7200	9.3900e-003	0.0168	161.9681

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883
Total	0.0141	0.1294	0.1990	2.9000e-004		5.2100e-003	5.2100e-003		4.8600e-003	4.8600e-003	0.0000	24.9010	24.9010	7.4900e-003	0.0000	25.0883

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4500e-003	0.2139	0.0687	9.4000e-004	0.0314	1.5900e-003	0.0330	8.6100e-003	1.5200e-003	0.0101	0.0000	95.6582	95.6582	7.9000e-003	0.0153	100.4103
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0145	0.2072	6.4000e-004	0.0863	3.9000e-004	0.0867	0.0229	3.6000e-004	0.0233	0.0000	61.0618	61.0618	1.4900e-003	1.5400e-003	61.5578
Total	0.0271	0.2283	0.2760	1.5800e-003	0.1177	1.9800e-003	0.1196	0.0315	1.8800e-003	0.0334	0.0000	156.7200	156.7200	9.3900e-003	0.0168	161.9681

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	7.4400e-003	0.0114	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	1.4311	1.4311	4.3000e-004	0.0000	1.4419
Total	8.1000e-004	7.4400e-003	0.0114	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	1.4311	1.4311	4.3000e-004	0.0000	1.4419

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	0.0121	4.0200e-003	5.0000e-005	1.8000e-003	9.0000e-005	1.8900e-003	4.9000e-004	9.0000e-005	5.8000e-004	0.0000	5.3736	5.3736	4.7000e-004	8.6000e-004	5.6413
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2800e-003	7.7000e-004	0.0113	4.0000e-005	4.9600e-003	2.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.4401	3.4401	8.0000e-005	8.0000e-005	3.4672
Total	1.4800e-003	0.0129	0.0154	9.0000e-005	6.7600e-003	1.1000e-004	6.8700e-003	1.8100e-003	1.1000e-004	1.9200e-003	0.0000	8.8137	8.8137	5.5000e-004	9.4000e-004	9.1085

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	7.4400e-003	0.0114	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	1.4311	1.4311	4.3000e-004	0.0000	1.4419
Total	8.1000e-004	7.4400e-003	0.0114	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	1.4311	1.4311	4.3000e-004	0.0000	1.4419

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3.4 Installation/Backfill - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	0.0121	4.0200e-003	5.0000e-005	1.8000e-003	9.0000e-005	1.8900e-003	4.9000e-004	9.0000e-005	5.8000e-004	0.0000	5.3736	5.3736	4.7000e-004	8.6000e-004	5.6413
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2800e-003	7.7000e-004	0.0113	4.0000e-005	4.9600e-003	2.0000e-005	4.9800e-003	1.3200e-003	2.0000e-005	1.3400e-003	0.0000	3.4401	3.4401	8.0000e-005	8.0000e-005	3.4672
Total	1.4800e-003	0.0129	0.0154	9.0000e-005	6.7600e-003	1.1000e-004	6.8700e-003	1.8100e-003	1.1000e-004	1.9200e-003	0.0000	8.8137	8.8137	5.5000e-004	9.4000e-004	9.1085

3.5 Installation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6000e-004	6.4100e-003	5.3200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	1.4837	1.4837	4.3000e-004	0.0000	1.4944
Total	7.6000e-004	6.4100e-003	5.3200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	1.4837	1.4837	4.3000e-004	0.0000	1.4944

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3.5 Installation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	6.2100e-003	1.8500e-003	3.0000e-005	8.8000e-004	5.0000e-005	9.2000e-004	2.4000e-004	4.0000e-005	2.8000e-004	0.0000	2.7926	2.7926	2.1000e-004	4.5000e-004	2.9305
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6700e-003	1.0000e-005	9.9000e-004	0.0000	1.0000e-003	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7349	0.7349	2.0000e-005	2.0000e-005	0.7413
Total	4.1000e-004	6.4100e-003	4.5200e-003	4.0000e-005	1.8700e-003	5.0000e-005	1.9200e-003	5.0000e-004	4.0000e-005	5.5000e-004	0.0000	3.5275	3.5275	2.3000e-004	4.7000e-004	3.6718

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6000e-004	6.4100e-003	5.3200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	1.4837	1.4837	4.3000e-004	0.0000	1.4944
Total	7.6000e-004	6.4100e-003	5.3200e-003	2.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	1.4837	1.4837	4.3000e-004	0.0000	1.4944

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3.5 Installation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	6.2100e-003	1.8500e-003	3.0000e-005	8.8000e-004	5.0000e-005	9.2000e-004	2.4000e-004	4.0000e-005	2.8000e-004	0.0000	2.7926	2.7926	2.1000e-004	4.5000e-004	2.9305
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6700e-003	1.0000e-005	9.9000e-004	0.0000	1.0000e-003	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7349	0.7349	2.0000e-005	2.0000e-005	0.7413
Total	4.1000e-004	6.4100e-003	4.5200e-003	4.0000e-005	1.8700e-003	5.0000e-005	1.9200e-003	5.0000e-004	4.0000e-005	5.5000e-004	0.0000	3.5275	3.5275	2.3000e-004	4.7000e-004	3.6718

3.5 Installation - Trenchless - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3700e-003	0.0534	0.0443	1.4000e-004		1.9800e-003	1.9800e-003		1.8600e-003	1.8600e-003	0.0000	12.3639	12.3639	3.5700e-003	0.0000	12.4531
Total	6.3700e-003	0.0534	0.0443	1.4000e-004		1.9800e-003	1.9800e-003		1.8600e-003	1.8600e-003	0.0000	12.3639	12.3639	3.5700e-003	0.0000	12.4531

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3.5 Installation - Trenchless - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.1000e-004	0.0508	0.0157	2.2000e-004	7.3000e-003	3.7000e-004	7.6800e-003	2.0000e-003	3.6000e-004	2.3600e-003	0.0000	22.7933	22.7933	1.7900e-003	3.6400e-003	23.9226
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.5100e-003	0.0210	6.0000e-005	8.2600e-003	4.0000e-005	8.3000e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	5.9796	5.9796	1.6000e-004	1.6000e-004	6.0298
Total	3.2200e-003	0.0523	0.0367	2.8000e-004	0.0156	4.1000e-004	0.0160	4.2000e-003	4.0000e-004	4.5900e-003	0.0000	28.7729	28.7729	1.9500e-003	3.8000e-003	29.9524

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3700e-003	0.0534	0.0443	1.4000e-004		1.9800e-003	1.9800e-003		1.8600e-003	1.8600e-003	0.0000	12.3639	12.3639	3.5700e-003	0.0000	12.4531
Total	6.3700e-003	0.0534	0.0443	1.4000e-004		1.9800e-003	1.9800e-003		1.8600e-003	1.8600e-003	0.0000	12.3639	12.3639	3.5700e-003	0.0000	12.4531

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3.5 Installation - Trenchless - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.1000e-004	0.0508	0.0157	2.2000e-004	7.3000e-003	3.7000e-004	7.6800e-003	2.0000e-003	3.6000e-004	2.3600e-003	0.0000	22.7933	22.7933	1.7900e-003	3.6400e-003	23.9226
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4100e-003	1.5100e-003	0.0210	6.0000e-005	8.2600e-003	4.0000e-005	8.3000e-003	2.2000e-003	4.0000e-005	2.2300e-003	0.0000	5.9796	5.9796	1.6000e-004	1.6000e-004	6.0298
Total	3.2200e-003	0.0523	0.0367	2.8000e-004	0.0156	4.1000e-004	0.0160	4.2000e-003	4.0000e-004	4.5900e-003	0.0000	28.7729	28.7729	1.9500e-003	3.8000e-003	29.9524

3.6 Paving - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9100e-003	0.0366	0.0519	1.1000e-004		1.6600e-003	1.6600e-003		1.5300e-003	1.5300e-003	0.0000	9.2277	9.2277	2.9300e-003	0.0000	9.3009
Paving	5.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8100e-003	0.0366	0.0519	1.1000e-004		1.6600e-003	1.6600e-003		1.5300e-003	1.5300e-003	0.0000	9.2277	9.2277	2.9300e-003	0.0000	9.3009

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3.6 Paving - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	2.1600e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6545	0.6545	2.0000e-005	2.0000e-005	0.6596
Total	2.4000e-004	1.5000e-004	2.1600e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6545	0.6545	2.0000e-005	2.0000e-005	0.6596

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9100e-003	0.0366	0.0519	1.1000e-004		1.6600e-003	1.6600e-003		1.5300e-003	1.5300e-003	0.0000	9.2277	9.2277	2.9300e-003	0.0000	9.3009
Paving	5.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8100e-003	0.0366	0.0519	1.1000e-004		1.6600e-003	1.6600e-003		1.5300e-003	1.5300e-003	0.0000	9.2277	9.2277	2.9300e-003	0.0000	9.3009

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3.6 Paving - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	2.1600e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6545	0.6545	2.0000e-005	2.0000e-005	0.6596
Total	2.4000e-004	1.5000e-004	2.1600e-003	1.0000e-005	9.4000e-004	0.0000	9.5000e-004	2.5000e-004	0.0000	2.5000e-004	0.0000	0.6545	0.6545	2.0000e-005	2.0000e-005	0.6596

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0000e-004	1.4000e-004	1.2700e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0388	0.0388	2.0000e-005	1.0000e-005	0.0430
Unmitigated	3.0000e-004	1.4000e-004	1.2700e-003	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0388	0.0388	2.0000e-005	1.0000e-005	0.0430

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.96	0.00	0.00	31	31
Total	1.96	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.06	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.564931	0.058891	0.167885	0.120679	0.025398	0.007381	0.013024	0.006272	0.000657	0.000386	0.028170	0.000621	0.005705

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003
Unmitigated	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003
Total	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0127					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003
Total	0.0156	2.0000e-005	1.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5000e-003	3.5000e-003	1.0000e-005	0.0000	3.7300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Calleguas SMP Phase 4 - AQ
Ventura County APCD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	196.00	1000sqft	4.50	196,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (49,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant information, such as 80 feet installation for open trench per day, 400 LF of trenchless activity, and paving would occur after excavation and installation operation. 4 feet trenchless activity per day.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Grading -

Vehicle Trips - Based on applicant provided information, maintenance and inspection trips would occur once per year, one worker trips for one day, and would travel from the district's office to the end of the pipeline and back.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	8.00	68.00
tblConstructionPhase	NumDays	8.00	608.00
tblConstructionPhase	NumDays	230.00	608.00
tblConstructionPhase	NumDays	230.00	28.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	392.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	952.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblVehicleTrips	CW_TL	9.50	0.06
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.0234	17.6452	21.8555	0.0725	2.3084	0.5110	2.8194	0.6196	0.4880	1.1075	0.0000	7,424.821 3	7,424.821 3	0.9968	0.4912	7,596.113 5
2026	1.9953	17.5185	20.4329	0.0715	2.3085	0.5103	2.8188	0.6196	0.4873	1.1069	0.0000	7,336.386 6	7,336.386 6	1.0005	0.4804	7,504.556 1
2027	1.2108	9.1918	13.8052	0.0364	1.0412	0.3182	1.3594	0.2783	0.3065	0.5848	0.0000	3,656.579 3	3,656.579 3	0.5147	0.1433	3,712.138 1
2028	1.1978	9.1553	13.7217	0.0360	1.0412	0.3179	1.3590	0.2783	0.3062	0.5845	0.0000	3,625.857 0	3,625.857 0	0.5152	0.1398	3,680.396 7
Maximum	2.0234	17.6452	21.8555	0.0725	2.3085	0.5110	2.8194	0.6196	0.4880	1.1075	0.0000	7,424.821 3	7,424.821 3	1.0005	0.4912	7,596.113 5

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.5500e-003	1.0400e-003	8.2000e-003	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3287	0.3287	1.8000e-004	1.0000e-004	0.3618
Total	0.0887	1.2200e-003	0.0282	0.0000	9.0000e-005	8.0000e-005	1.7000e-004	2.0000e-005	8.0000e-005	1.0000e-004		0.3716	0.3716	2.9000e-004	1.0000e-004	0.4074

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.5500e-003	1.0400e-003	8.2000e-003	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3287	0.3287	1.8000e-004	1.0000e-004	0.3618
Total	0.0887	1.2200e-003	0.0282	0.0000	9.0000e-005	8.0000e-005	1.7000e-004	2.0000e-005	8.0000e-005	1.0000e-004		0.3716	0.3716	2.9000e-004	1.0000e-004	0.4074

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Trenchless	Grading	9/24/2025	12/26/2025	5	68	
2	Excavation - Open Trench	Grading	9/24/2025	1/21/2028	5	608	
3	Installation/Backfill - Open Trench	Building Construction	9/24/2025	1/21/2028	5	608	
4	Installation - Trenchless	Building Construction	12/29/2025	2/4/2026	5	28	
5	Paving - Open Trench	Paving	1/24/2028	2/16/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Excavators	0	8.00	158	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48
Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Installation/Backfill - Open Trench	Cranes	0	7.00	231	0.29
Installation/Backfill - Open Trench	Forklifts	0	8.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38
Installation - Trenchless	Forklifts	0	8.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42
Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Trenchless	4	10.00	0.00	392.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	82.00	0.00	8,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	82.00	0.00	952.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Excavation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5748	4.3955	7.3987	0.0146		0.1807	0.1807		0.1756	0.1756		1,392.4427	1,392.4427	0.2353		1,398.3249
Total	0.5748	4.3955	7.3987	0.0146	0.0000	0.1807	0.1807	0.0000	0.1756	0.1756		1,392.4427	1,392.4427	0.2353		1,398.3249

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0115	0.6738	0.2077	3.1200e-003	0.1007	5.0900e-003	0.1058	0.0276	4.8700e-003	0.0325		347.8057	347.8057	0.0261	0.0555	364.9917
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0252	0.0144	0.2237	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.3442	68.3442	1.7400e-003	1.6400e-003	68.8756
Total	0.0366	0.6882	0.4315	3.7800e-003	0.1828	5.5000e-003	0.1883	0.0494	5.2400e-003	0.0546		416.1499	416.1499	0.0278	0.0571	433.8673

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5748	4.3955	7.3987	0.0146		0.1807	0.1807		0.1756	0.1756	0.0000	1,392.4427	1,392.4427	0.2353		1,398.3249
Total	0.5748	4.3955	7.3987	0.0146	0.0000	0.1807	0.1807	0.0000	0.1756	0.1756	0.0000	1,392.4427	1,392.4427	0.2353		1,398.3249

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0115	0.6738	0.2077	3.1200e-003	0.1007	5.0900e-003	0.1058	0.0276	4.8700e-003	0.0325		347.8057	347.8057	0.0261	0.0555	364.9917
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0252	0.0144	0.2237	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		68.3442	68.3442	1.7400e-003	1.6400e-003	68.8756
Total	0.0366	0.6882	0.4315	3.7800e-003	0.1828	5.5000e-003	0.1883	0.0494	5.2400e-003	0.0546		416.1499	416.1499	0.0278	0.0571	433.8673

3.3 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134
Total	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134
Total	0.0378	0.0216	0.3356	9.8000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		102.5163	102.5163	2.6100e-003	2.4600e-003	103.3134

3.3 Excavation - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0197	0.3157	9.5000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		100.0902	100.0902	2.3800e-003	2.3200e-003	100.8402
Total	0.0355	0.0197	0.3157	9.5000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		100.0902	100.0902	2.3800e-003	2.3200e-003	100.8402

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0197	0.3157	9.5000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		100.0902	100.0902	2.3800e-003	2.3200e-003	100.8402
Total	0.0355	0.0197	0.3157	9.5000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		100.0902	100.0902	2.3800e-003	2.3200e-003	100.8402

3.3 Excavation - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0334	0.0180	0.2985	9.2000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		97.8991	97.8991	2.1800e-003	2.2000e-003	98.6088
Total	0.0334	0.0180	0.2985	9.2000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		97.8991	97.8991	2.1800e-003	2.2000e-003	98.6088

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0334	0.0180	0.2985	9.2000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		97.8991	97.8991	2.1800e-003	2.2000e-003	98.6088
Total	0.0334	0.0180	0.2985	9.2000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		97.8991	97.8991	2.1800e-003	2.2000e-003	98.6088

3.3 Excavation - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0166	0.2840	9.0000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		95.9662	95.9662	2.0100e-003	2.1000e-003	96.6418
Total	0.0314	0.0166	0.2840	9.0000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		95.9662	95.9662	2.0100e-003	2.1000e-003	96.6418

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0166	0.2840	9.0000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		95.9662	95.9662	2.0100e-003	2.1000e-003	96.6418
Total	0.0314	0.0166	0.2840	9.0000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		95.9662	95.9662	2.0100e-003	2.1000e-003	96.6418

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6350	0.5041	7.5600e-003	0.2443	0.0124	0.2566	0.0669	0.0118	0.0787		843.9763	843.9763	0.0633	0.1346	885.6796
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2065	0.1181	1.8345	5.3800e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		560.4226	560.4226	0.0143	0.0134	564.7799
Total	0.2343	1.7532	2.3386	0.0129	0.9179	0.0157	0.9336	0.2456	0.0149	0.2605		1,404.3988	1,404.3988	0.0776	0.1481	1,450.4595

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0278	1.6350	0.5041	7.5600e-003	0.2443	0.0124	0.2566	0.0669	0.0118	0.0787		843.9763	843.9763	0.0633	0.1346	885.6796
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2065	0.1181	1.8345	5.3800e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		560.4226	560.4226	0.0143	0.0134	564.7799
Total	0.2343	1.7532	2.3386	0.0129	0.9179	0.0157	0.9336	0.2456	0.0149	0.2605		1,404.3988	1,404.3988	0.0776	0.1481	1,450.4595

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0275	1.6049	0.5153	7.3800e-003	0.2443	0.0123	0.2566	0.0669	0.0117	0.0787		826.6372	826.6372	0.0651	0.1320	867.5940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1941	0.1075	1.7256	5.2100e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		547.1598	547.1598	0.0130	0.0127	551.2596
Total	0.2216	1.7124	2.2410	0.0126	0.9179	0.0154	0.9333	0.2456	0.0146	0.2603		1,373.7969	1,373.7969	0.0782	0.1446	1,418.8537

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0275	1.6049	0.5153	7.3800e-003	0.2443	0.0123	0.2566	0.0669	0.0117	0.0787		826.6372	826.6372	0.0651	0.1320	867.5940
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1941	0.1075	1.7256	5.2100e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		547.1598	547.1598	0.0130	0.0127	551.2596
Total	0.2216	1.7124	2.2410	0.0126	0.9179	0.0154	0.9333	0.2456	0.0146	0.2603		1,373.7969	1,373.7969	0.0782	0.1446	1,418.8537

3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0272	1.5721	0.5240	7.1900e-003	0.2443	0.0121	0.2565	0.0669	0.0116	0.0786		807.6679	807.6679	0.0668	0.1290	847.7920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1825	0.0984	1.6316	5.0600e-003	0.6736	2.9800e-003	0.6766	0.1787	2.7400e-003	0.1814		535.1815	535.1815	0.0119	0.0120	539.0615
Total	0.2097	1.6705	2.1556	0.0123	0.9179	0.0151	0.9331	0.2456	0.0144	0.2600		1,342.8494	1,342.8494	0.0787	0.1411	1,386.8535

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0272	1.5721	0.5240	7.1900e-003	0.2443	0.0121	0.2565	0.0669	0.0116	0.0786		807.6679	807.6679	0.0668	0.1290	847.7920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1825	0.0984	1.6316	5.0600e-003	0.6736	2.9800e-003	0.6766	0.1787	2.7400e-003	0.1814		535.1815	535.1815	0.0119	0.0120	539.0615
Total	0.2097	1.6705	2.1556	0.0123	0.9179	0.0151	0.9331	0.2456	0.0144	0.2600		1,342.8494	1,342.8494	0.0787	0.1411	1,386.8535

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0270	1.5448	0.5342	7.0100e-003	0.2443	0.0120	0.2564	0.0669	0.0115	0.0785		789.4449	789.4449	0.0684	0.1262	828.7705
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1717	0.0907	1.5524	4.9200e-003	0.6736	2.7800e-003	0.6764	0.1787	2.5600e-003	0.1812		524.6151	524.6151	0.0110	0.0115	528.3085
Total	0.1987	1.6354	2.0866	0.0119	0.9180	0.0148	0.9328	0.2456	0.0141	0.2597		1,314.0599	1,314.0599	0.0794	0.1377	1,357.0791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0270	1.5448	0.5342	7.0100e-003	0.2443	0.0120	0.2564	0.0669	0.0115	0.0785		789.4449	789.4449	0.0684	0.1262	828.7705
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1717	0.0907	1.5524	4.9200e-003	0.6736	2.7800e-003	0.6764	0.1787	2.5600e-003	0.1812		524.6151	524.6151	0.0110	0.0115	528.3085
Total	0.1987	1.6354	2.0866	0.0119	0.9180	0.0148	0.9328	0.2456	0.0141	0.2597		1,314.0599	1,314.0599	0.0794	0.1377	1,357.0791

3.5 Installation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0675	3.9740	1.2253	0.0184	0.5937	0.0300	0.6237	0.1627	0.0287	0.1914		2,051.3437	2,051.3437	0.1538	0.3272	2,152.7064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2065	0.1181	1.8345	5.3800e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		560.4226	560.4226	0.0143	0.0134	564.7799
Total	0.2741	4.0922	3.0598	0.0238	1.2673	0.0334	1.3007	0.3413	0.0318	0.3731		2,611.7662	2,611.7662	0.1681	0.3407	2,717.4863

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0675	3.9740	1.2253	0.0184	0.5937	0.0300	0.6237	0.1627	0.0287	0.1914		2,051.3437	2,051.3437	0.1538	0.3272	2,152.7064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2065	0.1181	1.8345	5.3800e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		560.4226	560.4226	0.0143	0.0134	564.7799
Total	0.2741	4.0922	3.0598	0.0238	1.2673	0.0334	1.3007	0.3413	0.0318	0.3731		2,611.7662	2,611.7662	0.1681	0.3407	2,717.4863

3.5 Installation - Trenchless - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0668	3.9007	1.2526	0.0179	0.5938	0.0298	0.6236	0.1627	0.0285	0.1912		2,009.1998	2,009.1998	0.1583	0.3208	2,108.7482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1941	0.1075	1.7256	5.2100e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		547.1598	547.1598	0.0130	0.0127	551.2596
Total	0.2609	4.0082	2.9782	0.0232	1.2674	0.0330	1.3004	0.3413	0.0314	0.3728		2,556.3595	2,556.3595	0.1713	0.3334	2,660.0079

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0668	3.9007	1.2526	0.0179	0.5938	0.0298	0.6236	0.1627	0.0285	0.1912		2,009.1998	2,009.1998	0.1583	0.3208	2,108.7482
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1941	0.1075	1.7256	5.2100e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		547.1598	547.1598	0.0130	0.0127	551.2596
Total	0.2609	4.0082	2.9782	0.0232	1.2674	0.0330	1.3004	0.3413	0.0314	0.3728		2,556.3595	2,556.3595	0.1713	0.3334	2,660.0079

3.6 Paving - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0889	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0272	0.0144	0.2461	7.8000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		83.1707	83.1707	1.7400e-003	1.8200e-003	83.7562
Total	0.0272	0.0144	0.2461	7.8000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		83.1707	83.1707	1.7400e-003	1.8200e-003	83.7562

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0889	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0272	0.0144	0.2461	7.8000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		83.1707	83.1707	1.7400e-003	1.8200e-003	83.7562
Total	0.0272	0.0144	0.2461	7.8000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		83.1707	83.1707	1.7400e-003	1.8200e-003	83.7562

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5500e-003	1.0400e-003	8.2000e-003	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3287	0.3287	1.8000e-004	1.0000e-004	0.3618
Unmitigated	2.5500e-003	1.0400e-003	8.2000e-003	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3287	0.3287	1.8000e-004	1.0000e-004	0.3618

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.96	0.00	0.00	31	31
Total	1.96	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.06	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.564931	0.058891	0.167885	0.120679	0.025398	0.007381	0.013024	0.006272	0.000657	0.000386	0.028170	0.000621	0.005705

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Unmitigated	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0694					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8400e-003	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Total	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0694					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8400e-003	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Total	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

7.0 Water Detail

7.1 Mitigation Measures Water

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Calleguas SMP Phase 4 - AQ
Ventura County APCD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	196.00	1000sqft	4.50	196,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Disturbance area (49,000 linear feet by 4 foot-wide trench)

Construction Phase - Based on applicant information, such as 80 feet installation for open trench per day, 400 LF of trenchless activity, and paving would occur after excavation and installation operation. 4 feet trenchless activity per day.

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Off-road Equipment - Construction equipment provided by the applicant

Trips and VMT - 14 hauling trips per day according to the applicant.

Grading -

Vehicle Trips - Based on applicant provided information, maintenance and inspection trips would occur once per year, one worker trips for one day, and would travel from the district's office to the end of the pipeline and back.

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - Information provided by the applicant

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	8.00	68.00
tblConstructionPhase	NumDays	8.00	608.00
tblConstructionPhase	NumDays	230.00	608.00
tblConstructionPhase	NumDays	230.00	28.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblTripsAndVMT	HaulingTripNumber	0.00	392.00
tblTripsAndVMT	HaulingTripNumber	0.00	8,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	952.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblVehicleTrips	CW_TL	9.50	0.06
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	0.01

2.0 Emissions Summary

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.0550	17.9297	21.8291	0.0720	2.3084	0.5111	2.8195	0.6196	0.4880	1.1076	0.0000	7,374.8550	7,374.8550	0.9993	0.4949	7,547.3165
2026	2.0254	17.7957	20.4039	0.0710	2.3085	0.5104	2.8189	0.6196	0.4874	1.1070	0.0000	7,287.7381	7,287.7381	1.0028	0.4839	7,457.0150
2027	1.2279	9.2797	13.7880	0.0361	1.0412	0.3182	1.3594	0.2783	0.3065	0.5848	0.0000	3,630.1523	3,630.1523	0.5160	0.1450	3,686.2505
2028	1.2141	9.2407	13.7076	0.0358	1.0412	0.3179	1.3591	0.2783	0.3062	0.5845	0.0000	3,599.9762	3,599.9762	0.5164	0.1414	3,655.0309
Maximum	2.0550	17.9297	21.8291	0.0720	2.3085	0.5111	2.8195	0.6196	0.4880	1.1076	0.0000	7,374.8550	7,374.8550	1.0028	0.4949	7,547.3165

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.2800e-003	1.1700e-003	0.0108	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3316	0.3316	2.1000e-004	1.1000e-004	0.3687
Total	0.0885	1.3500e-003	0.0307	0.0000	9.0000e-005	8.0000e-005	1.7000e-004	2.0000e-005	8.0000e-005	1.0000e-004		0.3745	0.3745	3.2000e-004	1.1000e-004	0.4144

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	2.2800e-003	1.1700e-003	0.0108	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3316	0.3316	2.1000e-004	1.1000e-004	0.3687
Total	0.0885	1.3500e-003	0.0307	0.0000	9.0000e-005	8.0000e-005	1.7000e-004	2.0000e-005	8.0000e-005	1.0000e-004		0.3745	0.3745	3.2000e-004	1.1000e-004	0.4144

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation - Trenchless	Grading	9/24/2025	12/26/2025	5	68	
2	Excavation - Open Trench	Grading	9/24/2025	1/21/2028	5	608	
3	Installation/Backfill - Open Trench	Building Construction	9/24/2025	1/21/2028	5	608	
4	Installation - Trenchless	Building Construction	12/29/2025	2/4/2026	5	28	
5	Paving - Open Trench	Paving	1/24/2028	2/16/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation - Trenchless	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Trenchless	Excavators	0	8.00	158	0.38
Excavation - Trenchless	Excavators	1	5.00	158	0.38
Excavation - Trenchless	Generator Sets	1	5.00	84	0.74
Excavation - Trenchless	Graders	0	8.00	187	0.41
Excavation - Trenchless	Off-Highway Trucks	1	2.00	402	0.38

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Excavation - Trenchless	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Trenchless	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Excavation - Open Trench	Air Compressors	1	5.00	78	0.48
Excavation - Open Trench	Concrete/Industrial Saws	1	5.00	81	0.73
Excavation - Open Trench	Excavators	1	5.00	158	0.38
Excavation - Open Trench	Generator Sets	1	5.00	84	0.74
Excavation - Open Trench	Graders	0	8.00	187	0.41
Excavation - Open Trench	Off-Highway Trucks	1	2.00	402	0.38
Excavation - Open Trench	Rubber Tired Dozers	0	8.00	247	0.40
Excavation - Open Trench	Rubber Tired Loaders	1	5.00	203	0.36
Excavation - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Installation/Backfill - Open Trench	Cranes	0	7.00	231	0.29
Installation/Backfill - Open Trench	Forklifts	0	8.00	89	0.20
Installation/Backfill - Open Trench	Generator Sets	0	8.00	84	0.74
Installation/Backfill - Open Trench	Plate Compactors	1	5.00	8	0.43
Installation/Backfill - Open Trench	Tractors/Loaders/Backhoes	1	5.00	97	0.37
Installation/Backfill - Open Trench	Welders	0	8.00	46	0.45
Installation - Trenchless	Bore/Drill Rigs	1	5.00	221	0.50
Installation - Trenchless	Cranes	1	5.00	231	0.29
Installation - Trenchless	Dumpers/Tenders	1	5.00	16	0.38
Installation - Trenchless	Forklifts	0	8.00	89	0.20
Installation - Trenchless	Generator Sets	0	8.00	84	0.74
Installation - Trenchless	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Installation - Trenchless	Welders	1	5.00	46	0.45
Paving - Open Trench	Cement and Mortar Mixers	1	5.00	9	0.56
Paving - Open Trench	Pavers	1	5.00	130	0.42
Paving - Open Trench	Paving Equipment	1	5.00	132	0.36
Paving - Open Trench	Rollers	1	5.00	80	0.38
Paving - Open Trench	Surfacing Equipment	1	5.00	263	0.30

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving - Open Trench	Tractors/Loaders/Backhoes	0	8.00	97	0.37
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Excavation - Trenchless	4	10.00	0.00	392.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation - Open Trench	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation/Backfill - Open Trench	2	82.00	0.00	8,505.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Installation - Trenchless	4	82.00	0.00	952.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Open Trench	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Excavation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5748	4.3955	7.3987	0.0146		0.1807	0.1807		0.1756	0.1756		1,392.4427	1,392.4427	0.2353		1,398.3249
Total	0.5748	4.3955	7.3987	0.0146	0.0000	0.1807	0.1807	0.0000	0.1756	0.1756		1,392.4427	1,392.4427	0.2353		1,398.3249

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0107	0.7027	0.2103	3.1200e-003	0.1007	5.1000e-003	0.1058	0.0276	4.8800e-003	0.0325		348.1396	348.1396	0.0260	0.0555	365.3410
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0169	0.2204	6.3000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		65.3975	65.3975	1.9000e-003	1.8200e-003	65.9871
Total	0.0380	0.7196	0.4308	3.7500e-003	0.1828	5.5100e-003	0.1883	0.0494	5.2500e-003	0.0546		413.5371	413.5371	0.0279	0.0574	431.3281

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5748	4.3955	7.3987	0.0146		0.1807	0.1807		0.1756	0.1756	0.0000	1,392.4427	1,392.4427	0.2353		1,398.3249
Total	0.5748	4.3955	7.3987	0.0146	0.0000	0.1807	0.1807	0.0000	0.1756	0.1756	0.0000	1,392.4427	1,392.4427	0.2353		1,398.3249

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Excavation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0107	0.7027	0.2103	3.1200e-003	0.1007	5.1000e-003	0.1058	0.0276	4.8800e-003	0.0325		348.1396	348.1396	0.0260	0.0555	365.3410
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0169	0.2204	6.3000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		65.3975	65.3975	1.9000e-003	1.8200e-003	65.9871
Total	0.0380	0.7196	0.4308	3.7500e-003	0.1828	5.5100e-003	0.1883	0.0494	5.2500e-003	0.0546		413.5371	413.5371	0.0279	0.0574	431.3281

3.3 Excavation - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806
Total	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806
Total	0.0409	0.0253	0.3307	9.4000e-004	0.1232	6.1000e-004	0.1238	0.0327	5.6000e-004	0.0333		98.0962	98.0962	2.8600e-003	2.7300e-003	98.9806

3.3 Excavation - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0386	0.0230	0.3115	9.1000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		95.7804	95.7804	2.6100e-003	2.5700e-003	96.6125
Total	0.0386	0.0230	0.3115	9.1000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		95.7804	95.7804	2.6100e-003	2.5700e-003	96.6125

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0386	0.0230	0.3115	9.1000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		95.7804	95.7804	2.6100e-003	2.5700e-003	96.6125
Total	0.0386	0.0230	0.3115	9.1000e-004	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		95.7804	95.7804	2.6100e-003	2.5700e-003	96.6125

3.3 Excavation - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0363	0.0211	0.2949	8.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		93.6870	93.6870	2.4000e-003	2.4400e-003	94.4744
Total	0.0363	0.0211	0.2949	8.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		93.6870	93.6870	2.4000e-003	2.4400e-003	94.4744

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0363	0.0211	0.2949	8.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		93.6870	93.6870	2.4000e-003	2.4400e-003	94.4744
Total	0.0363	0.0211	0.2949	8.9000e-004	0.1232	5.4000e-004	0.1238	0.0327	5.0000e-004	0.0332		93.6870	93.6870	2.4000e-003	2.4400e-003	94.4744

3.3 Excavation - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544		2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0194	0.2809	8.6000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		91.8390	91.8390	2.2100e-003	2.3300e-003	92.5886
Total	0.0342	0.0194	0.2809	8.6000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		91.8390	91.8390	2.2100e-003	2.3300e-003	92.5886

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.8601	6.5118	9.8260	0.0210		0.2626	0.2626		0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589
Total	0.8601	6.5118	9.8260	0.0210	0.0000	0.2626	0.2626	0.0000	0.2544	0.2544	0.0000	2,005.4964	2,005.4964	0.3705		2,014.7589

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Excavation - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0194	0.2809	8.6000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		91.8390	91.8390	2.2100e-003	2.3300e-003	92.5886
Total	0.0342	0.0194	0.2809	8.6000e-004	0.1232	5.1000e-004	0.1237	0.0327	4.7000e-004	0.0332		91.8390	91.8390	2.2100e-003	2.3300e-003	92.5886

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7052	0.5103	7.5700e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		844.7867	844.7867	0.0632	0.1348	886.5270
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2238	0.1383	1.8076	5.1500e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		536.2594	536.2594	0.0156	0.0149	541.0942
Total	0.2498	1.8434	2.3179	0.0127	0.9179	0.0157	0.9336	0.2456	0.0149	0.2605		1,381.046 1	1,381.046 1	0.0788	0.1497	1,427.621 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0260	1.7052	0.5103	7.5700e-003	0.2443	0.0124	0.2567	0.0669	0.0119	0.0788		844.7867	844.7867	0.0632	0.1348	886.5270
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2238	0.1383	1.8076	5.1500e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		536.2594	536.2594	0.0156	0.0149	541.0942
Total	0.2498	1.8434	2.3179	0.0127	0.9179	0.0157	0.9336	0.2456	0.0149	0.2605		1,381.046 1	1,381.046 1	0.0788	0.1497	1,427.621 2

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0257	1.6740	0.5215	7.3900e-003	0.2443	0.0123	0.2566	0.0669	0.0118	0.0787		827.4482	827.4482	0.0650	0.1321	868.4421
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2107	0.1258	1.7027	4.9800e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		523.5994	523.5994	0.0143	0.0141	528.1482
Total	0.2364	1.7998	2.2242	0.0124	0.9179	0.0155	0.9334	0.2456	0.0147	0.2603		1,351.0475	1,351.0475	0.0793	0.1462	1,396.5903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0257	1.6740	0.5215	7.3900e-003	0.2443	0.0123	0.2566	0.0669	0.0118	0.0787		827.4482	827.4482	0.0650	0.1321	868.4421
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2107	0.1258	1.7027	4.9800e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		523.5994	523.5994	0.0143	0.0141	528.1482
Total	0.2364	1.7998	2.2242	0.0124	0.9179	0.0155	0.9334	0.2456	0.0147	0.2603		1,351.0475	1,351.0475	0.0793	0.1462	1,396.5903

3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0254	1.6402	0.5302	7.2000e-003	0.2443	0.0122	0.2565	0.0669	0.0117	0.0786		808.4789	808.4789	0.0667	0.1292	848.6402
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1985	0.1152	1.6119	4.8400e-003	0.6736	2.9800e-003	0.6766	0.1787	2.7400e-003	0.1814		512.1554	512.1554	0.0131	0.0134	516.4601
Total	0.2239	1.7553	2.1420	0.0120	0.9179	0.0152	0.9331	0.2456	0.0144	0.2600		1,320.6344	1,320.6344	0.0798	0.1425	1,365.1003

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0254	1.6402	0.5302	7.2000e-003	0.2443	0.0122	0.2565	0.0669	0.0117	0.0786		808.4789	808.4789	0.0667	0.1292	848.6402
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1985	0.1152	1.6119	4.8400e-003	0.6736	2.9800e-003	0.6766	0.1787	2.7400e-003	0.1814		512.1554	512.1554	0.0131	0.0134	516.4601
Total	0.2239	1.7553	2.1420	0.0120	0.9179	0.0152	0.9331	0.2456	0.0144	0.2600		1,320.6344	1,320.6344	0.0798	0.1425	1,365.1003

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372		210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0252	1.6119	0.5402	7.0200e-003	0.2443	0.0121	0.2564	0.0669	0.0115	0.0785		790.2530	790.2530	0.0683	0.1264	829.6158
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1870	0.1061	1.5354	4.7100e-003	0.6736	2.7800e-003	0.6764	0.1787	2.5600e-003	0.1812		502.0532	502.0532	0.0121	0.0127	506.1507
Total	0.2122	1.7180	2.0756	0.0117	0.9180	0.0148	0.9328	0.2456	0.0141	0.2597		1,292.3062	1,292.3062	0.0804	0.1391	1,335.7665

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169
Total	0.1076	0.9915	1.5251	2.2500e-003		0.0399	0.0399		0.0372	0.0372	0.0000	210.3345	210.3345	0.0633		211.9169

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Installation/Backfill - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0252	1.6119	0.5402	7.0200e-003	0.2443	0.0121	0.2564	0.0669	0.0115	0.0785		790.2530	790.2530	0.0683	0.1264	829.6158
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1870	0.1061	1.5354	4.7100e-003	0.6736	2.7800e-003	0.6764	0.1787	2.5600e-003	0.1812		502.0532	502.0532	0.0121	0.0127	506.1507
Total	0.2122	1.7180	2.0756	0.0117	0.9180	0.0148	0.9328	0.2456	0.0141	0.2597		1,292.3062	1,292.3062	0.0804	0.1391	1,335.7665

3.5 Installation - Trenchless - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0632	4.1445	1.2404	0.0184	0.5937	0.0301	0.6238	0.1627	0.0288	0.1914		2,053.313 4	2,053.313 4	0.1535	0.3276	2,154.766 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2238	0.1383	1.8076	5.1500e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		536.2594	536.2594	0.0156	0.0149	541.0942
Total	0.2870	4.2828	3.0480	0.0235	1.2673	0.0334	1.3007	0.3413	0.0319	0.3732		2,589.572 8	2,589.572 8	0.1691	0.3425	2,695.860 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.309 0	1,090.309 0	0.3148		1,098.178 6
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.309 0	1,090.309 0	0.3148		1,098.178 6

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0632	4.1445	1.2404	0.0184	0.5937	0.0301	0.6238	0.1627	0.0288	0.1914		2,053.313 4	2,053.313 4	0.1535	0.3276	2,154.766 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2238	0.1383	1.8076	5.1500e-003	0.6736	3.3300e-003	0.6769	0.1787	3.0700e-003	0.1817		536.2594	536.2594	0.0156	0.0149	541.0942
Total	0.2870	4.2828	3.0480	0.0235	1.2673	0.0334	1.3007	0.3413	0.0319	0.3732		2,589.572 8	2,589.572 8	0.1691	0.3425	2,695.860 3

3.5 Installation - Trenchless - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.309 0	1,090.309 0	0.3148		1,098.178 6
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490		1,090.309 0	1,090.309 0	0.3148		1,098.178 6

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0625	4.0688	1.2675	0.0180	0.5938	0.0299	0.6237	0.1627	0.0286	0.1913		2,011.1709	2,011.1709	0.1580	0.3211	2,110.8096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2107	0.1258	1.7027	4.9800e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		523.5994	523.5994	0.0143	0.0141	528.1482
Total	0.2732	4.1946	2.9702	0.0229	1.2674	0.0331	1.3004	0.3413	0.0315	0.3729		2,534.7702	2,534.7702	0.1723	0.3352	2,638.9578

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786
Total	0.5096	4.2750	3.5470	0.0116		0.1588	0.1588		0.1490	0.1490	0.0000	1,090.3090	1,090.3090	0.3148		1,098.1786

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Installation - Trenchless - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0625	4.0688	1.2675	0.0180	0.5938	0.0299	0.6237	0.1627	0.0286	0.1913		2,011.1709	2,011.1709	0.1580	0.3211	2,110.8096
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2107	0.1258	1.7027	4.9800e-003	0.6736	3.1700e-003	0.6768	0.1787	2.9100e-003	0.1816		523.5994	523.5994	0.0143	0.0141	528.1482
Total	0.2732	4.1946	2.9702	0.0229	1.2674	0.0331	1.3004	0.3413	0.0315	0.3729		2,534.7702	2,534.7702	0.1723	0.3352	2,638.9578

3.6 Paving - Open Trench - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0889	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701		1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - Open Trench - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0168	0.2434	7.5000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		79.5938	79.5938	1.9100e-003	2.0200e-003	80.2434
Total	0.0297	0.0168	0.2434	7.5000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		79.5938	79.5938	1.9100e-003	2.0200e-003	80.2434

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4339	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614
Paving	0.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0889	4.0658	5.7647	0.0118		0.1841	0.1841		0.1701	0.1701	0.0000	1,130.1965	1,130.1965	0.3586		1,139.1614

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - Open Trench - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0168	0.2434	7.5000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		79.5938	79.5938	1.9100e-003	2.0200e-003	80.2434
Total	0.0297	0.0168	0.2434	7.5000e-004	0.1068	4.4000e-004	0.1072	0.0283	4.1000e-004	0.0287		79.5938	79.5938	1.9100e-003	2.0200e-003	80.2434

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2800e-003	1.1700e-003	0.0108	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3316	0.3316	2.1000e-004	1.1000e-004	0.3687
Unmitigated	2.2800e-003	1.1700e-003	0.0108	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005		0.3316	0.3316	2.1000e-004	1.1000e-004	0.3687

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	1.96	0.00	0.00	31	31
Total	1.96	0.00	0.00	31	31

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.06	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.564931	0.058891	0.167885	0.120679	0.025398	0.007381	0.013024	0.006272	0.000657	0.000386	0.028170	0.000621	0.005705

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Unmitigated	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0694					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8400e-003	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Total	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0149					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0694					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8400e-003	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457
Total	0.0862	1.8000e-004	0.0200	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0429	0.0429	1.1000e-004		0.0457

7.0 Water Detail

7.1 Mitigation Measures Water

Calleguas SMP Phase 4 - AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Appendix B

Energy Calculations

Calleguas SMP - Phase 3

Last Updated: 1/20/2023

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Load Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Excavators	1	4	158	0.38	Excavation - Pipe in a Bridge	127
Tractors/Loaders/Backhoes	1	4	97	0.37	Installation - Pipe in a Bridge	84
Concrete/Industrial Saws	1	5	81	0.73	Excavation - Trenchless	1,373
Excavators	1	5	158	0.38	Excavation - Trenchless	1,254
Generator Sets	1	5	84	0.74	Excavation - Trenchless	1,443
Off-Highway Trucks	1	2	402	0.38	Excavation - Trenchless	1,276
Air Compressors	1	5	78	0.48	Excavation - Open Trench	3,542
Concrete/Industrial Saws	1	5	81	0.73	Excavation - Open Trench	5,594
Excavators	1	5	158	0.38	Excavation - Open Trench	5,110
Generator Sets	1	5	84	0.74	Excavation - Open Trench	5,881
Off-Highway Trucks	1	2	402	0.38	Excavation - Open Trench	5,200
Rubber Tired Loaders	1	5	203	0.36	Excavation - Open Trench	6,219
Bore/Drill Rigs	1	5	221	0.5	Installation - Trenchless	964
Cranes	1	5	231	0.29	Installation - Trenchless	584
Dumpers/Tenders	1	5	16	0.38	Installation - Trenchless	59
Welders	1	5	46	0.45	Installation - Trenchless	201
Plate Compactors	1	5	8	0.43	Installation/Backfill - Open Trench	325
Tractors/Loaders/Backhoes	1	5	97	0.37	Installation/Backfill - Open Trench	3,396
Cement and Mortar Mixers	1	5	9	0.56	Paving - Open Trench	15
Pavers	1	5	130	0.42	Paving - Open Trench	144
Paving Equipment	1	5	132	0.36	Paving - Open Trench	126
Rollers	1	5	80	0.38	Paving - Open Trench	89
Surfacing Equipment	1	5	263	0.3	Paving - Open Trench	209
Total Fuel Used						43,214
						(Gallons)

Construction Phase	Days of Operation
Excavation - Pipe in a Bridge	10
Installation - Pipe in a Bridge	10
Excavation - Trenchless	79
Excavation - Open Trench	322
Installation - Trenchless	33
Installation/Backfill - Open Trench	322
Paving - Open Trench	10
Total Days	786

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
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Excavation - Pipe in a Bridge	24.1	3	10.8	13.44
Installation - Pipe in a Bridge	24.1	45	10.8	201.66
Excavation - Trenchless	24.1	10	10.8	354.02
Excavation - Open Trench	24.1	15	10.8	2164.48
Installation - Trenchless	24.1	45	10.8	665.48
Installation/Backfill - Open Trench	24.1	45	10.8	6493.44
Paving - Open Trench	24.1	13	10.8	58.26
Total Fuel Used				9,950.79

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	(gallons)
HAULING TRIPS				
Excavation - Pipe in a Bridge	7.5	0	20.0	0.00
Installation - Pipe in a Bridge	7.5	140	20.0	373.33
Excavation - Trenchless	7.5	1095	20.0	2920.00
Excavation - Open Trench	7.5	0	20.0	0.00
Installation - Trenchless	7.5	451	20.0	1202.67
Installation/Backfill - Open Trench	7.5	4505	20.0	12013.33
Total Fuel Used				16,509.33
VENDOR TRIPS				
Excavation - Pipe in a Bridge	7.5	0	14.7	0.00
Installation - Pipe in a Bridge	7.5	0	14.7	0.00
Excavation - Trenchless	7.5	0	14.7	0.00
Excavation - Open Trench	7.5	0	14.7	0.00
Installation - Trenchless	7.5	0	14.7	0.00
Installation/Backfill - Open Trench	7.5	0	14.7	0.00
Total Fuel Used				-

Total Gasoline Consumption (gallons)	9,951
Total Diesel Consumption (gallons)	59,723

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Calleguas SMP - Phase 4

Last Updated: 1/20/2023

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per		Load Factor	Construction Phase	Fuel Used (gallons)
		Day	Horsepower			
Concrete/Industrial Saws	1	5	81	0.73	Excavation - Trenchless	1,181
Excavators	1	5	158	0.38	Excavation - Trenchless	1,079
Generator Sets	1	5	84	0.74	Excavation - Trenchless	1,242
Off-Highway Trucks	1	2	402	0.38	Excavation - Trenchless	1,098
Air Compressors	1	5	78	0.48	Excavation - Open Trench	6,688
Concrete/Industrial Saws	1	5	81	0.73	Excavation - Open Trench	10,563
Excavators	1	5	158	0.38	Excavation - Open Trench	9,648
Generator Sets	1	5	84	0.74	Excavation - Open Trench	11,104
Off-Highway Trucks	1	2	402	0.38	Excavation - Open Trench	9,819
Rubber Tired Loaders	1	5	203	0.36	Excavation - Open Trench	11,743
Bore/Drill Rigs	1	5	221	0.5	Installation - Trenchless	818
Cranes	1	5	231	0.29	Installation - Trenchless	496
Dumpers/Tenders	1	5	16	0.38	Installation - Trenchless	50
Welders	1	5	46	0.45	Installation - Trenchless	170
Plate Compactors	1	5	8	0.43	Installation/Backfill - Open Trench	615
Tractors/Loaders/Backhoes	1	5	97	0.37	Installation/Backfill - Open Trench	6,412
Cement and Mortar Mixers	1	5	9	0.56	Paving - Open Trench	27
Pavers	1	5	130	0.42	Paving - Open Trench	260
Paving Equipment	1	5	132	0.36	Paving - Open Trench	226
Rollers	1	5	80	0.38	Paving - Open Trench	161
Surfacing Equipment	1	5	263	0.3	Paving - Open Trench	375
Total Fuel Used						73,775

(Gallons)

Construction Phase	Days of Operation
Excavation - Trenchless	68
Excavation - Open Trench	608
Installation - Trenchless	28
Installation/Backfill - Open Trench	608
Paving - Open Trench	18
Total Days	1330

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Excavation - Trenchless	24.1	10	10.8	304.73
Excavation - Open Trench	24.1	15	10.8	4086.97
Installation - Trenchless	24.1	82	10.8	1028.91
Installation/Backfill - Open Trench	24.1	82	10.8	22342.11
Paving - Open Trench	24.1	13	10.8	104.86

Total Fuel Used	27,867.59
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HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	(gallons)
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HAULING TRIPS				
Excavation - Trenchless	7.5	392	20.0	1045.33
Excavation - Open Trench	7.5	0	20.0	0.00
Installation - Trenchless	7.5	952	20.0	2538.67
Installation/Backfill - Open Trench	7.5	8505	20.0	22680.00
Paving - Open Trench	7.5	0	20.0	0.00

Total Fuel Used	26,264.00
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VENDOR TRIPS				
Excavation - Trenchless	7.5	0	14.7	0.00
Excavation - Open Trench	7.5	0	14.7	0.00
Installation - Trenchless	7.5	0	14.7	0.00
Installation/Backfill - Open Trench	7.5	0	14.7	0.00
Paving - Open Trench	7.5	0	14.7	0.00

Total Fuel Used	-
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Total Gasoline Consumption (gallons)	27,868
Total Diesel Consumption (gallons)	100,039

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Appendix B

Scoping Comment Letters Received

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
FAX (213) 897-1337
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life*

March 15, 2023

Ms. Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360

RE: Calleguas Regional Salinity Management
Pipeline Phases 3 and 4
SCH # 2023020421
Vic. VEN-Variou Locations: SR-23/SR34/
US-101/SR-01
GTS # VEN-2023-00534-NOP

Dear Ms. Lancaster:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced NOP. The Calleguas Regional Salinity Management Pipeline (CRSMP) is a brine and treated wastewater conveyance pipeline designed to manage the use of high salinity groundwater and treated municipal wastewater, dispose of the brine produced by enhanced water treatment, and facilitate the development of water sources otherwise unavailable due to poor water quality. The proposed project would extend the CRSMP approximately 14 miles inland from the existing eastern terminus, enabling connections to additional dischargers in Simi Valley and unincorporated Ventura County. Discharges from these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the existing ocean outfall. Dischargers connecting to Phases 3 and 4 would be subject to existing NPDES constituent limits at the outfall. Any new infrastructure needed to connect specific dischargers to the project would be subject to separate CEQA review.

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Senate Bill 743 (2013) has codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. You may reference the Governor's Office of Planning and Research (OPR) for more information:

<https://opr.ca.gov/ceqa/#guidelines-updates>

As a reminder, VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, which is the statewide implementation date.

Caltrans is aware of challenges that the region faces in identifying viable solutions to alleviating congestion on State and Local facilities. With limited room to expand vehicular capacity, this development should incorporate multi-modal and complete streets transportation elements that will actively promote alternatives to car use and better manage existing parking assets. Prioritizing and allocating space to efficient modes of travel such as bicycling and public transit can allow streets to transport more people in a fixed amount of right-of-way.

Caltrans supports the implementation of complete streets and pedestrian safety measures such as road diets and other traffic calming measures. Please note the Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing. Overall, the environmental report should ensure all modes are served well by planning and development activities. This includes reducing single occupancy vehicle trips, ensuring safety, reducing vehicle miles traveled, supporting accessibility, and reducing greenhouse gas emissions.

We encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). This reference is available online at:

<http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>

You can also refer to the 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), which is available online at:

<http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Also, Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020 and the Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared in

On December 18, 2020. You can review the SB 743 Implementation Resource at the following link:

<https://dot.ca.gov/programs/sustainability/sb-743/sb743-resources>

Construction of the proposed project would temporarily increase traffic associated with project roadways. Project-generated traffic during construction would include worker-related commuter trips, trucks used for delivering construction equipment, and trucks used for delivering and hauling construction materials and wastes. Trenchless construction methods would be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts. However, lane closures during pipeline construction activities would be necessary. Project construction would result in temporary disruption to the existing circulation system. Other than a short segment of alignment along Santa Rosa Road and in front of certain driveways requiring flagger-controlled traffic controls, a minimum of one lane of traffic in each direction would be open during project construction. Construction phasing across arterial roads and driveways would be implemented to maintain access across these locations. Properties with multiple driveways and access points would have only one driveway closed at a time to maintain access to the property. In addition, traffic control plans would be prepared as part of the encroachment permitting process for all work within the public ROW.

Potential impacts associated with construction-related traffic, project-related operational traffic on local and regional transportation facilities, vehicle miles traveled, site access/internal circulation, traffic hazards, and emergency access in the project area should be lightly discussed in the Draft EIR.

Caltrans encourages lead agencies to prepare traffic safety impact analysis for this development in the California Environmental Quality Act (CEQA) review process using Caltrans guidelines above on the State facilities so that, through partnerships and collaboration, California can reach zero fatalities and serious injuries by 2050.

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # VEN-2023-00534AL-NOP.

Sincerely,



MIYA EDMONSON
LDR/CEQA Branch Chief

email: State Clearinghouse



City of Camarillo

601 Carmen Drive, Camarillo, CA 93010 | Ph: 805.388.5360 | planning@cityofcamarillo.org

March 23, 2023

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Drive
Thousand Oaks, CA 91360-6800

SUBJECT: Notice of Preparation – SMP, Phases 3 and 4

Dear Ms. Lancaster,

The City of Camarillo received a Notice of Preparation of an Environmental Impact Report circulated by the Calleguas Municipal Water District (Lead Agency). The Lead Agency's EIR is for the construction of phases 3 and 4 of the Calleguas Regional Salinity Management Pipeline (CRSMP [Project]), pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect the City of Camarillo.

The City of Camarillo is also submitting comments as a Responsible Agency under CEQA, (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). The City expects that it may need to exercise regulatory authority as the plan checking, permitting, and inspection agency for Capital Improvement Projects (CIP) that occur within Camarillo City limits.

COMMENTS AND RECOMMENDATIONS

The City of Camarillo offers the following comments and recommendations to assist the Lead Agency in adequately identifying and/or mitigating the Project's significant or potentially significant impacts.

1. The City of Camarillo had adopted Guidelines for Thresholds of Significance by which the City measures and evaluates all projects in regard to environmental impacts. For all CEQA analyses that will be performed for project review in Camarillo, the City's adopted thresholds must be used.
2. The new construction cannot affect the operation of the City of Camarillo's Desalter. Traffic access to the facility must be always maintained. The shutdown for tie-in to the existing SMP must be coordinated during a scheduled maintenance event at the Desalter Facility.
3. Ensure that the new/future discharges from the upstream user will not affect the future availability in the brine line for Camarillo's Desalter.
4. Connection to the existing SMP appears to be near the southwest corner of the Desalter property. Construction shall not impact the intersection of Lewis/Somis Road and Las Posas/Upland Road.

5. It is assumed that the start of construction will be to Jack and Bore across Somis Road and the Railroad Tracks. The launch pit will likely be in the private lot with the trees and the receiving pit (20'x20') will be located either in the private driveway or the private landscaping area at the corner of Lewis Road and Las Posas/Upland Roads. Please confirm that all construction work will be located on either private property or in the Lewis/Somis Road Right-of-Way. If work will be located within or impact City of Camarillo public right-of-way, then a plan shall be submitted to the City of Camarillo for review and comment, and subject to City of Camarillo approval.
6. Construction on Upland Road will be disruptive to the existing street and inconvenient to travelers. Upland Road is two lanes both ways with residential homes along the alignment which will be exposed to construction impacts, such as: noise, dust, diesel exhaust, etc.
 - a. Identify options to relocate the alignment to reduce/eliminate construction in Upland Road. For example, investigate installation along the same alignment as the Calleguas water main.
7. When the alignment reaches Santa Rosa Road, the disruption at that intersection will be significant. In addition, the SMP will need to cross the Quito Drain and the Camrosa Drain, prior to proceeding into Unincorporated Ventura County. Consider an alternative alignment that will not disrupt the intersection of Upland Road and Santa Rosa Road.
8. Any construction work within or impacting City of Camarillo public right-of-way, including the bridge on Upland Road, will require an encroachment permit from the City of Camarillo in advance of construction and will be subject to all associated requirements.
9. There is a potential to significantly impact the City of Camarillo's Fixed Transit Route between Lewis Road and Mission Oaks Blvd. Work must be closely coordinated with Transit staff to ensure that scheduled pickups and drop off times will be maintained.
10. Prior to construction on Upland Road, Calleguas will need to upgrade the traffic signal controllers at each of the intersections from Lewis Road to Santa Rosa Road to utilize traffic cameras. The new traffic control systems and cameras shall be approved by the City of Camarillo during design of SMP Phase 3. The previous phase of the SMP installation had the same requirement to keep traffic flowing while the work in the road is being performed.

If you have any questions or if clarification is needed, please feel free to contact Paul McClaren, Senior Planner, at 805.388.5365 or via e-mail at pmclaren@cityofcamarillo.org.

Sincerely,



Joseph R. Vacca, Director
Department of Community Development



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

South Coast Region
3883 Ruffin Road
San Diego, CA 92123
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March 23, 2023

Ms. Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91362
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Subject: Calleguas Regional Salinity Management Pipeline Phase 3 and 4, Notice of Preparation, SCH No. 2023020421; Cities of Camarillo, Moorpark, Simi Valley, and Thousand Oaks; Ventura County

Dear Ms. Lancaster:

The California Department of Fish and Wildlife (CDFW) has reviewed the Calleguas Municipal Water District's (District; Lead Agency) Notice of Preparation (NOP) for a subsequent Draft Environmental Impact Report (DEIR) for the Calleguas Regional Salinity Management Pipeline Phase 3 and 4 (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & Game Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & Game Code, §1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

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Project Description and Summary

Objective: The Project aims to address the high salinity of water within the Calleguas watershed by adding another branch to an existing effluent pipeline. The pipeline will be largely placed by traditional trenching methods except when crossing waterways where trenchless methods would be employed. The additional pipeline would transport additional recycled water and brine to the current ocean outfall off Port Hueneme. The proposed pipeline would be built in two phases, Phase 3 and Phase 4. Phase 3 of the Project will initiate at the eastern end of existing Calleguas River Salinity Management Pipeline (CRSMP) in the City of Camarillo, on the west side of Somis Road. Phase 3 would extend 5.1 miles, mostly along public Right of Way (ROW) and terminate along Santa Rosa Road in unincorporated Ventura County. Phase 3 is anticipated to take 16 months. Phase 4 will extend from the end of Phase 3 and follow several roadways into Moorpark and eventually into Simi Valley. Phase 4 is anticipated to take 30 months. Three potential dischargers are included within the Project and are currently existing, planned for development, or under consideration. These dischargers will be in close proximity to the pipeline alignment.

The alignment mostly follows roadways but a portion cuts across the width of the Tierra Rejada critical wildlife passage and the Santa Monica-Sierra Madre wildlife corridor. The pipeline would also pass designated critical habitat for several special status species. The pipeline would cross several waterways. Although the alignment largely follows ROWs, it was noted that mature trees are present along some of these roadways that may be impacted.

Location: Phase 3 of the alignment will begin at the existing CRSMP pipeline near the intersection of Las Posas Road and Upland Road and travel east on Santa Rosa Road into unincorporated Ventura County. The alignment will continue north onto Moorpark Road, east onto Read Road, and north onto Sunset Valley Road. The alignment will briefly travel north-east into Moorpark along Tierra Reijada Road and continue eastward into unincorporated Ventura County. The pipeline will terminate on Tierra Rejada Road within Simi Valley just before the intersection with Madera Road. Surrounding land uses include residential, agricultural, open spaces, and commercial.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the District in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources.

COMMENTS AND RECOMMENDATIONS

Specific Comments – Marine

- 1) Impacts to Marine Resources. The CRSMP has an existing National Pollutant Discharge Elimination System permit (NDPES CA0064521) for ocean outfall discharges via the Hueneme Outfall, located in the vicinity of Port Hueneme Beach, into the Pacific Ocean. The waters in this area support many resident and migratory fish, important marine plants such as eelgrass (*Zostera marina*), and special status wildlife such as seabirds, marine mammals, and sea turtles. Additionally, the waters also support commercially and recreationally important fish and invertebrate species such as California halibut (*Paralichthys californicus*),

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California spiny lobster (*Panulirus interruptus*), and the important forage fish Northern anchovy (*Engraulis mordax*). Brine disposal through the outfall may increase salinity at and around the discharge point and could also release contaminants into the marine environment. CDFW recommends that the Biological Resources section of the DEIR include an assessment on the potential impacts to marine life as a result of the ocean outfall discharge. The DEIR should also discuss potential changes to the zone of initial dilution (ZID), salinity differences, potential changes to pollutant amounts, and other changes associated with the discharge.

Specific Comments – Terrestrial

- 1) Impacts on Wildlife Corridors and Habitat Connectivity. According to the Ventura County's GIS viewer, the following roads along the Project alignment are within the Santa Monica-Sierra Madre wildlife corridor: Read Road, Sunset Valley Road, and Tierra Rejada Road. Tierra Rejada Road is also within the Tierra Rejada critical wildlife passage and permeable essential connectivity areas (Ventura County 2023; CDFW 2023a; CDFW 2023b). Likewise, several wildlife crossing areas are present along these roadways (Ventura County 2023). Although the Project will follow established roads and be done incrementally, increased noise, vibration, light, and human activity may impede wildlife movement in areas of Project implementation. Increased activity may lead wildlife, including special status species, to less permeable areas and increase the likelihood of vehicle strikes.
 - a. Analysis and Disclosure. CDFW recommends the Applicant analyze whether the Project would impact wildlife corridors and essential connectivity blocks within the entirety of the Project area. Impacts include (but are not limited to) habitat loss and fragmentation, narrowing of a wildlife corridor, and introduction of barriers to wildlife movement. CDFW recommends such an analysis be supported by studies to document wildlife activity and movement through Project area where development is proposed. Further, the DEIR should analyze the cumulative impacts of the Project within these important movement areas as part of their analysis. The Applicant should consider current, planned, and future Projects when analyzing Project impacts.
 - b. Avoidance. To more effectively avoid and mitigate within passage areas the Applicant should at a minimum consider the following datasets on the Biographic Information and Observations System (BIOS): Essential Connectivity Areas (ds620) and Habitat Connectivity Ventura County (ds565) (CDFW 2023b & CDFW 2023a). Based on these datasets, the Applicant should identify areas of possible impact. Project implementation should not exacerbate existing barriers to wildlife movement. Project activities should be avoided during dusk and dawn when wildlife movement and foraging is more likely. Proper setbacks in corridors, passage areas, crossings, and essential connectivity areas should be established.
 - c. Mitigation. CDFW recommends the Project avoid developing and encroaching onto wildlife corridors, essential connectivity blocks, critical wildlife passage areas, or potential linkage areas. If avoidance is not feasible, CDFW recommends the DEIR provide measures to minimize and mitigate for the Project's significant impacts on wildlife corridors (see General Comments 7 & 8). If impacts are anticipated to occur within movement areas, the Applicant should be required to construct a crossing or passage with wildlife fencing to maintain safe wildlife movement in the impacted area as

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part of the Project. The DEIR should provide the dimensions and locations of potential crossings. If temporary or permanent impacts occur to habitat or sensitive natural communities within these movement areas, the Applicant may also consider acquiring contiguous adjacent land parcels to be protected in perpetuity from encroachment and development.

2) Sensitive Habitats and Open Space. The Project alignment passes by several sensitive habitat areas (critical habitat for coastal California gnatcatcher (*Polioptila californica californica*), Riverside fairy shrimp (*Streptocephalus woottoni*), and Lyon's pentachaeta (*Lyon's pentachaeta*)) and open space areas. These areas offer nesting, breeding, and foraging habitat for species. Project activities abutting the sensitive habitats and open space could impact sensitive species due to increased noise, light, dust, vibrations, and human activity.

- a. Analysis and Disclosure. CDFW recommends the Applicant analyze and discuss the Project's direct and indirect impacts on sensitive habitats/open space within the Project area. Analysis should include but not be limited to:
 1. Direct impacts that could result in loss of sensitive habitats/open space due to development, grading, excavation, and fuel modifications.
 2. Indirect impacts that could result in habitat loss due to edge effects and introduction of non-native/invasive plants.
 3. The DEIR should disclose the acreage of sensitive habitats and open space that would be impacted/lost as a result of both direct and indirect impacts from the proposed Project.
- b. Avoidance. CDFW recommends the Project avoid developing and encroaching onto sensitive habitats/open space. Encroachment onto sensitive habitats/open space creates an abrupt transition between two different land uses. Encroachment onto sensitive habitats/open space could affect environmental and biological conditions and increase the magnitude of edge effects on biological resources. CDFW recommends the DEIR provide alternatives to the Project that would not result in the development of areas within close proximity of sensitive habitat or open space. CDFW also recommends the DEIR provide alternatives that would not encroach onto sensitive habitats/open space. Pursuant to CEQA Guidelines section 15126.6, a DEIR "shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasible attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives." Furthermore, a DEIR "shall include sufficient information about alternatives to allow meaningful evaluation, analysis, and comparison with the proposed project" (CEQA Guidelines, § 15126.6) (see General Comment 9).
- c. Mitigation. If avoidance is not feasible, CDFW recommends the DEIR provide measures to mitigate for impacts to sensitive habitats/open space. There should be no net loss of sensitive habitats/open space. CDFW recommends the DEIR provide a measure where any future development facilitated by the Project establishes unobstructed vegetated buffers and setbacks. The DEIR should provide standards for an effective buffer and setback; however, the buffer and setback distance should be increased at a project-

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level as needed. The DEIR should provide justifications for the effectiveness of all proposed mitigation measures. The DEIR should provide sufficient information and disclosure to facilitate meaningful public review, analysis, and comment on the adequacy of proposed mitigation measures to offset Project-related impacts on sensitive habitats/open space.

3) Least Bell's Vireo (*Vireo bellii pusillus*). The Project's alignment will pass through several areas documented with least Bell's vireo presence according to the CNDDDB (CDFW 2023c). Project implementation during the least Bell's vireo nesting season could adversely affect breeding behavior of least Bell's vireo. Elevated noise and ground-disturbance could result in least Bell's vireo abandoning nesting territory. In addition, elevated noise could result in the incidental loss of nests, fertile eggs, or nestlings. Likewise, Project activities conducted outside of the nesting season may cause the abandonment of more favorable territory and increase the likelihood of mortality due to reduced habitat resources (see Specific Comment 10).

- Phase 3 of the alignment within Camarillo along Santa Rosa Road (34.23726, - 118.96733) passes near Arroyo Conejo Creek. Populations of least Bell's vireo have been documented near this location according to the CNDDDB. Populations were document just upstream of the confluence between Arroyo Conejo Creek and Arroyo Santa Rosa. The Camrosa discharger station will also be placed close to this section of the Creek.
- a. Protection Status. Least Bell's vireo is a listed Endangered Species Act (ESA-) and CESA-listed species. ESA-listed species are considered endangered, rare, or threatened species under CEQA (CEQA Guidelines, § 15380). Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. CDFW considers impacts to CESA-listed species a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures.
- b. Surveys and Analysis. CDFW recommends the DEIR analyze and discuss the Project's potential impacts on least Bell's vireo and their habitat. The DEIR should have a discussion regarding how the Project avoids and mitigates least Bell's vireo and their associated habitat. The DEIR should be conditioned to perform project-level surveys for least Bell's vireo in the Project alignment and within an appropriate buffer around areas of potential impact. Surveys should follow the USFWS [Least Vireo Survey Guidelines](#) (USFWS 2001a).
- c. Avoidance. To more effectively avoid areas occupied by least Bell's vireo, the Project should review the CNDDDB (ds45) BIOS datasets (CDFW 2023d). CDFW recommends the DEIR provide measures where Project activities avoid encroachment or fragmentation of least Bell's vireo habitat. The Project should avoid natural communities and alliances/associations associated with riparian vegetation. Ground disturbance and vegetation clearing should avoid the nesting bird season (see Specific Comment 10).

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- d. Mitigation. If avoidance is not feasible, the Applicant should protect or create habitat suitable for least Bell's vireo. Replacement habitat should be protected in perpetuity (see General Comments 7 & 8). CDFW recommends the DEIR be conditioned to provide replacement habitat to ensure no net loss to least Bell's vireo habitat. The DEIR should discuss why mitigation measures proposed would be adequate to avoid or offset impacts to least Bell's vireo and associated habitat. If presence is confirmed, the Applicant should consult with the USFWS and CDFW before ground disturbing activities.
- e. CESA ITP. If impacts to least Bell's vireo are possible, appropriate authorization from CDFW under CESA may include an ITP or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP for the Project unless the Project's CEQA document addresses all the Project's impact on CESA endangered, threatened, and/or candidate species. The Project's CEQA document should also specify a mitigation monitoring and reporting program that will meet the requirements of an ITP. It is important that the take proposed to be authorized by CDFW's ITP be described in detail in the Project's CEQA document. Also, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP. However, it is worth noting that mitigation for the Project's impact on a CESA endangered, threatened, and/or candidate species proposed in the Project's CEQA document may not necessarily satisfy mitigation required to obtain an ITP.
- 4) Rare Plants. The Project's alignment passes several areas where rare and protected plants could exist. Impacts could occur during construction, staging (trampling, crushing, loss of seed bank), and throughout the life of the Project with the establishment of invasive plant species.
- Phase 4 alignment located west of SR 23 and to the north of Tierra Rejada Road will pass critical habitat for Lyon's pentachaeta (*Lyon's pentachaeta*) (CDFW 2023e). Lyon's Pentachaeta is only found in the Conejo Valley and may be present in or around the Project area. California Orcutt grass (*Orcuttia californica*) is also present in this same area (CDFW 2023f).
- a. Protection Status. Lyon's pentachaeta is CESA- and ESA- listed species. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, § 786.9) under CESA. As to CEQA, potential impacts on rare plants should be analyzed, disclosed, and mitigated in the Project's DEIR. CDFW considers adverse impacts to a species protected by CESA and ESA to be significant without mitigation under CEQA.

California Orcutt grass has California Rare Plant Ranking (CRPR) of 1B.1. Plants that have a California Native Plant Society (CNPS) CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet

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the definitions of CESA and are eligible for State listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, as they meet the definition of rare or endangered (CEQA Guidelines, § 15380). Please see CNPS [Rare Plant Ranks](#) page for additional rank definitions (CNPS 2023).

- b. Survey and Analysis. CDFW recommends the Applicant retain a qualified biologist to perform focused botanical surveys for rare plants with potential to occur. Surveys should identify all individual rare and protected plants and populations, as well as the plant communities supporting those rare plants which may be impacted. Surveys should be conducted within the Project site and in all areas subject to ground-disturbing activities (e.g., staging, mobilization, vegetation clearing). Surveys should be performed at the times of the year when plants will be both evident and identifiable. Botanical surveys should be spaced out throughout the growing season (CDFW 2018g).
 - c. Disclosure. The DEIR should fully disclose any impacts related to rare plants. At minimum the Applicant should disclose where impacts would occur, number of individual plants impacted, population size and density, and acres of habitat/plant communities impacted.
 - d. Avoidance. If rare plants are present and anticipated to be impacted, CDFW recommends the DEIR provide measures to fully avoid impacts on rare plants and their habitat.
 - e. Mitigation. If take or adverse impacts to rare plants cannot be avoided, the DEIR should provide measures to mitigate for those impacts. Appropriate mitigation may include obtaining appropriate take authorization under CESA prior to implementing the Project (pursuant to Fish & Game Code, § 2080 et seq.). Appropriate authorization may include an ITP or Consistency Determination, among other options [Fish & G. Code, §§ 2080.1, 2081, subs. (b) and (c)]. Additionally, CDFW recommends the Applicant provide compensatory mitigation for loss of rare plants and habitat.
- 5) Coastal California Gnatcatcher (*Poliophtila californica californica*). Project implementation will occur next to habitat utilized by ESA-listed and Species of Special Concern (SSC) coastal California gnatcatcher (CDFW 2023h). Project activities occurring during the breeding and nesting season could result in the incidental loss of fertile eggs or nestlings. Project implementation surrounding occupied habitat may result in permanent impacts to coastal California gnatcatcher through alteration, fragmentation, and/or loss of suitable nesting and foraging habitat (see Specific Comment 10). Use of heavy machinery, increased light, dust, vibrations, and human activity may disrupt or alter behaviors necessary for species survival and lead to nest abandonment. Outside of the breeding season the species could be forced from their territory into adjacent habitat that may be less suitable where they would be at risk of predation, starvation, or other injury. Coastal California gnatcatcher are non-migratory, territorial, and have been found not to disperse far from their natal nests (Bailey 1998; Vandergast 2019). Thus, the preservation of sensitive natural communities where they have been documented to utilize is of conservational importance.
- Phase 4 alignment would pass by designated final critical habitat for coastal California gnatcatcher located just east of State Route (SR 23) and north of Tierra Rejada Road (see Specific Comment 2).

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- Phase 4 alignment would traverse past several areas documented by the California Natural Diversity Database (CNDDDB) to house coastal California gnatcatcher. Observations of gnatcatcher have been made west of the SR 23 and north of Tierra Rejada Road in areas associated with Moorpark's Carlsberg Specific Plan residential tract. Populations are also documented in the open space area east of SR 23 and south of Tierra Rejada Road (34.2693, -118.8182).
 - a. Protection Status. Coastal California gnatcatcher is an ESA-listed species and a California SSC. ESA-listed species are considered endangered, rare, or threatened species under CEQA (CEQA Guidelines, § 15380). Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. CEQA provides protection not only for State and federally listed species, but for any species including, but not limited to SSC, which can be shown to meet the criteria for State listing. SSC's meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC's s could require a mandatory finding of significance (CEQA Guidelines, § 15065).
 - b. Survey and Analysis. CDFW recommends the DEIR analyze and discuss the Project's potential impacts on coastal California gnatcatcher and their habitat. The DEIR should have a discussion regarding how the project avoids and mitigates impacts to coastal California gnatcatcher and associated habitat. The DEIR should be conditioned to perform project-level surveys for coastal California gnatcatcher in the development footprint and within an appropriate buffer around areas of potential impact. Surveys should follow protocols outlined in the U.S. Fish and Wildlife Service's [Coastal California Gnatcatcher Presence/Absence Survey Guidelines](#) (USFWS 1993b).
 - c. Avoidance. To more effectively avoid areas occupied by coastal California gnatcatcher, the Project should review the Coastal California Gnatcatcher Final Critical Habitat (ds404) and the CNDDDB (ds45) BIOS datasets (CDFW 2023d). CDFW recommends the DEIR provide measures where Project activities avoid encroachment or fragmentation of coastal California gnatcatcher habitat and critical habitat. The Project should avoid natural communities and alliances/associations that fall under the coastal sage scrub umbrella. Ground disturbance and vegetation clearing should avoid the nesting bird season (see Specific Comment 10).
 - d. Mitigation. If avoidance is not feasible, the Applicant should protect or create habitat suitable for coastal California gnatcatcher. Replacement habitat should be protected in perpetuity (see General Comments 7 & 8). CDFW recommends the DEIR be conditioned to provide replacement habitat to ensure no net loss to gnatcatcher habitat. The DEIR should discuss why mitigation measures proposed would be adequate to avoid or offset impacts to gnatcatcher and associated habitat. If presence is confirmed, the Applicant should consult with USFWS and CDFW before ground disturbing activities.
- 6) Riverside Fairy Shrimp (*Streptocephalus woottoni*). Although the Project alignment follows established roads, Project activities such as dewatering may impact the adjacent vernal pool

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housing Riverside fairy shrimp. Impacts due to increased dust and vibration may also negatively impact Riverside fairy shrimp.

- Phase 4 of the alignment follows Tierra Rejada Road including the section directly west of SR 23 (34.26595, -118.85550). This area is designated as critical habitat for the Riverside fairy shrimp (CDFW 2023i).
 - a. Protection Status. Riverside fairy shrimp is an ESA-listed species. ESA-listed species are considered endangered, rare, or threatened species under CEQA (CEQA Guidelines, § 15380). Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.
 - b. Analysis and Surveys. CDFW recommends the analyze any potential impacts due to dewatering given the close proximity to the critical habitat area (see Specific Comment 2). Analysis on indirect impacts such as increased dust and vibrations should also be included. CDFW recommends the Project retain a qualified biologist familiar with Riverside fairy shrimp. The qualified biologist should use protocols outlined within the USFWS's [Survey Guidelines for the Listed Vernal Pool Branchiopods](#) (USFWS 2017c).
 - c. Avoidance. To more effectively avoid areas occupied by Riverside fairy shrimp the Project should review the Riverside fairy shrimp Final Critical Habitat (ds149) and the CNDDDB (ds45) BIOS datasets (CDFW 2023i & CDFW 2023d). The DEIR should provide measures to fully avoid impacts to Riverside fairy shrimp and their habitat.
 - d. Mitigation. The DEIR should include mitigation measures to reduce potential impacts from dewatering and increased vibration and dust. The Applicant should consult with USFWS to determine if an Incidental Take Permit (ITP) is necessary. If an ITP is necessary, the Project should adhere to any additional requirements set by the permit. CDFW recommends early consultation with USFWS to avoid potential impacts to Riverside fairy shrimp.
- 7) Reptiles of SSC. Project activities related to ground disturbance, such as grading, staging, and grubbing, may result in reptile habitat destruction and death or injury of adults, juveniles, eggs, or hatchlings. Moreover, the Project may remove essential foraging and breeding habitat for the species. A review of the CNDDDB revealed several SSC reptiles along the Project's alignment.
- Along the Phase 3 alignment near the intersection of Upland Road and Santa Rosa Road, Project activities will occur close to Conejo Creek. A review of the CNDDDB reveal western pond turtle (*Emys marmorata*) have potential to occur there and throughout Conejo Creek (CDFW 2023j).
 - Along the Phase 4 alignment, California legless lizard (*Anniella spp.*) observations were recorded near the intersection of Santa Rosa Road and Moorpark Road (34.24697, -118.87002) (CDFW 2023k).
 - a. Surveys. CDFW recommends qualified biologists familiar with the reptile species behavior and life history conduct focused surveys to determine the presence/absence of

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SSC prior to vegetation removal and/or grading. Surveys should be conducted during active season when the reptile species is most likely to be detected. Surveys for western pond turtle should be conducted in accordance to the U.S. Geological Surveys Draft USGS [Visual Survey Protocol for the Southcoast Region](#) (USGS 2006).

- b. Mitigation. To further avoid direct mortality, CDFW recommends that a qualified biological monitor be on site during ground and habitat disturbing activities to move out of harm's way special status species that would be injured or killed by grubbing or Project-related grading activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss (see General Comment 6).
 - c. Scientific Collections Permit. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & Game Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's [Scientific Collecting Permit](#) webpage for information (CDFW 2022I). Pursuant to the California Code of Regulations, title 14, section 650, the qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities.
- 8) Lake and Streambed Alteration (LSA) Agreement. The Project alignment crosses several riparian areas as depicted by Figures 3-6 of the related Initial Study. Although trenchless methods would be utilized in these areas, impacts could still occur through frac-outs, or at trenchless implementation entrance and exit points.
- a. Stream Delineation and Assessment. A preliminary delineation of the streams and their associated riparian habitats should be included in the environmental document. Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.
 - b. Avoidance and Setbacks. In Project areas which may support ephemeral or episodic streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of these resources and help maintain natural sedimentation processes. Therefore, CDFW recommends effective setbacks be established to maintain appropriately sized vegetated buffer areas adjoining ephemeral drainages. The environmental document should provide a justification for the effectiveness of the chosen distance for the setback.
 - c. Lake and Streambed Alteration Program. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use material from a streambed. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW

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pursuant to Fish and Game Code Section 1600 *et seq.* CDFW's issuance of a LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the environmental document of the local jurisdiction (Lead Agency) for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the environmental document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. Please visit CDFW's Lake and Streambed Alteration Program webpage for information about LSA Notification (CDFW 2022m).

- d. Hydrologic Evaluation. Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation should be included and evaluated in the environmental document.

9) Oak Trees (*Quercus* genus) and Oak Woodlands (*Quercus* Woodland Alliance). The Initial Study states that the roadways that align with the Project are surrounded by mature trees. If these trees include any trees within the oak genus or comprise oak woodland, Project activities could result in loss and removal. Oak woodlands are locally important communities and serve various ecological functions. Oak woodlands also have higher levels of biodiversity than any other terrestrial ecosystem in California (Block et al. 1990). Oak trees provide nesting and perching habitat for approximately 170 species of birds (Griffin and Muick 1990). Moreover, oak trees and woodlands are protected by the Oak Woodlands Conservation Act (pursuant under Fish and Game Code sections 1360-1372) and Public Resources Code section 21083.4 due to the historic and on-going loss of these resources.

- a. Arborist Report. CDFW recommends the District retain a qualified arborist to survey all oak trees that could be impacted by the Project. The tree survey should provide information on the presence of pests and diseases, including (but not limited to): sudden oak death (*Phytophthora ramorum*), thousand canker fungus (*Geosmithia morbida*), Polyphagous shot hole borer (*Euwallacea spp.*), and goldspotted oak borer (*Agrilus auroguttatus*) (Phytosphere Research 2012; TCD 2021; UCANR 2018; UCIPM 2021). A tree report should be included in the DEIR.
- b. Disclosure. Adequate disclosure includes providing the following information at a minimum: 1) location of each tree and area of oak woodland impacted; 2) scientific (Genus, species, subspecies, or variety) and common name of each tree and understory plant species impacted; 3) the size (diameter at breast height, inches) of each tree impacted; 4) a clear identifier to distinguish heritage trees; 5) acres of oak woodlands impacted; 6) mitigation ratio for individual trees and acres of oak woodlands; 7) total number of replacement trees and acres of oak woodlands; and, 8) total number of replacement trees and appropriate understory species to occur in suitable on- and/or offsite mitigation lands.
- c. Avoidance. CDFW recommends the DEIR provide measures to avoid impacts to oak trees and oak woodlands during the Project. The DEIR should provide measures to fully protect the Critical Root Zone of all oak trees not targeted for removal. The DEIR should also provide measures to protect the outer edge of oak woodlands with appropriate setbacks. The DEIR should provide a justification as to why proposed setback

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distance(s) would be effective to avoid impacts on oak trees and oak woodlands in perpetuity.

- d. Mitigation. For unavoidable Project impacts, CDFW recommends creating or restoring on- or off-site oak woodland habitat or planting individual oaks. The number of replacement trees and oak woodland habitat acres should be higher if the Project would impact large oak trees; impact an oak woodland supporting rare, sensitive, or special status plants and wildlife; or impact an oak woodland with a State rarity ranking of S1, S2, or S3 (see General Comment 2a). CDFW recommends the DEIR discuss why mitigation proposed by the District would reduce impacts on oak woodlands to less than significant and would be effective to mitigate for the number of trees, size of trees (e.g., heritage trees), and acres of habitat impacted. CDFW recommends the DEIR provide an on- or off-site mitigation plan and discuss the suitability of selected location(s) for mitigating impacts to oak trees and oak woodlands. The DEIR should provide information about reference sites, with similar species and habitat as being mitigated and the suitability of selected reference site(s) to inform the Project's mitigation plan. Lastly, a mitigation plan should provide specific mitigation goals and actions to achieve those goals to establish self-sustaining oak trees and oak woodlands.
 - e. Pest Management. Project activities have the potential to spread tree pests and diseases throughout the Project site and into adjacent natural habitat not currently exposed to these stressors. This could result in expediting the loss of native trees and woodlands. As such, CDFW recommends the DEIR include an infectious tree disease management plan or provide mitigation measures, developed in consultation with an arborist, and describe how the plan or mitigation measures will avoid or reduce the spread of tree insect pests and diseases.
- 10) Special Status Bird Species. Mature trees and vegetation have been identified along the Project alignment. Project activities and vegetation removal that occur during the breeding season may result in incidental loss of fertile eggs, or nestlings, or nest abandonment in trees and shrubs directly adjacent to the Project. The Project could also lead to the loss of foraging habitat for sensitive bird species.
- a. Protection Status. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA).
 - b. Avoidance. CDFW recommends that measures be taken, primarily, to avoid Project impacts to nesting birds. The DEIR should be conditioned with measures to avoid impacts on special status birds. Proposed Project activities including (but not limited to) staging and disturbances to native and nonnative vegetation, structures, and substrates should occur outside of the avian breeding season which generally runs from February 15 through August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs.
 - c. Mitigation. If avoidance of the avian breeding season is not feasible, CDFW recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be

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disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

- 11) Weed Management Plan. Weed management plans should be developed along the Project alignment both during, and for at least 3 years post-Project. Non-native weeds including noxious weeds (as listed by the California Invasive Plant Council) (CALIPC 2022) should be prevented from becoming established to control the local spread of invasive plants, both during and after construction. Site visits should be conducted monthly and weekly during the rainy season. The Project areas should be monitored via mapping for new introductions and expansions of non-native weeds. Annual threshold limits, eradication targets, and monitoring should be included in this plan. Monitoring for spread of invasive weeds to adjacent lands should also be included.

General Comments

- 1) Disclosure. The DEIR should provide an adequate, complete, and detailed disclosure about the effect which a proposed Project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, §15151). Adequate disclosure is necessary so CDFW may provide comments on the appropriateness of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).
- 2) Biological Baseline Assessment. CDFW recommends providing a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area, with emphasis upon identifying endangered, threatened, sensitive, regionally, and locally unique species and sensitive habitats. Impact analysis will aid in determining any direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW recommends avoiding any sensitive natural communities found on or adjacent to the Project. The DEIR should include the following information:
 - a. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities (CDFW 2022n) from Project-related impacts. Project implementation may result in impacts to rare or endangered plants or plant communities that have been recorded adjacent to the Project vicinity;
 - b. A complete floristic assessment within and adjacent to the Project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a thorough, recent, floristic-based assessment of special status plants and natural communities;
 - c. Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. The

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Manual of California Vegetation (MCV), second edition, should also be used to inform this mapping and assessment (CNPS 2023). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts off-site. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

- d. A complete, recent, assessment of the biological resources associated with each habitat type on-site and within adjacent areas that could also be affected by the Project. CDFW's CNDDDB in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDDB Field Survey Forms (CDFW 2022o) be completed and submitted to CNDDDB to document survey results;
 - e. A complete, recent, assessment of rare, threatened, and endangered, and other sensitive species on-site and within the area of potential effect, including California SSC and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the USFWS; and,
 - f. A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to two years as long as there was not a prevailing drought during the time of the botanical survey. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build out could occur over a protracted time frame, or in phases.
- 3) Data. CEQA requires that information developed in environmental impact reports be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species and natural communities detected by completing and submitting CNDDDB Field Survey Forms (CDFW 2021o). The applicant should ensure data collected for the preparation of the DEIR be properly submitted, with all data fields applicable filled out. The data entry should also list pending development as a threat and then update this occurrence after impacts have occurred.
- 4) Biological Direct, Indirect, and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:
- a. A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish &

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Game Code, § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

- b. A discussion of both short-term and long-term effects to species population distribution and concentration and alterations of the ecosystem supporting the species impacted [CEQA Guidelines, § 15126.2(a)];
- c. A discussion of adverse impacts due to increased noise, sound, vibrations, and human activity during Project activities and daily operations;
- d. An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR;
- e. A discussion of Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such Project impacts should be included; and,
- f. A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats. If the applicant determines that the Project would not have a cumulative impact, the DEIR should indicate why the cumulative impact is not significant. The Applicant's conclusion should be supported by facts and analyses [CEQA Guidelines, § 15130(a)(2)].

5) Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures [CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental impact report shall describe feasible measures which could mitigate for impacts below a significant level under CEQA.

- a. Level of Detail. Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, §§ 15126.4, 15041). A public agency shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures (Pub. Resources Code, § 21081.6). CDFW recommends that the District prepare mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear in order for a measure to be fully enforceable and implemented

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successfully via a mitigation monitoring and/or reporting program (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). Adequate disclosure is necessary so CDFW may provide comments on the adequacy and feasibility of proposed mitigation measures.

- b. Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the Project as proposed, the environmental document should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the environmental document should provide an adequate, complete, and detailed disclosure about a project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.
- 6) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual from a project site and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.
- 7) Compensatory Mitigation. An environmental document should include mitigation measures for adverse Project related direct or indirect impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.
- 8) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, an environmental document should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.
- 9) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:


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- a. A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas; and,
- b. A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. Potential impacts to wildlife movement areas should also be evaluated, avoided, or mitigated consistent with applicable requirements of the applicable City's General Plan.

Conclusion

We appreciate the opportunity to comment on the Project to assist the District in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the District has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Angela Castanon, Environmental Scientist, at Angela.Castanon@wildlife.ca.gov or (626) 513-6308 or Leslie Hart, Environmental Scientist at Leslie.Hart@wildlife.ca.gov.

Sincerely,

DocuSigned by:

B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW

Steve Gibson – Los Alamitos
Steve.Gibson@Wildlife.ca.gov

Cindy Hailey – San Diego
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OPR

State Clearinghouse – Sacramento
State.Clearinghouse@opr.ca.gov

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NATIVE AMERICAN HERITAGE COMMISSION

February 17, 2023

RECEIVED

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360

FEB 21 2023

CALLEGUAS M.W.D

CHAIRPERSON
Laura Miranda
Luiseño

**Re: 2023020421, Calleguas Regional Salinity Management Pipeline Phase 3 and 4 Project,
Ventura County**

VICE CHAIRPERSON
Reginald Pagaling
Chumash

Dear Ms. Lancaster:

SECRETARY
Sara Dutschke
Miwok

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

COMMISSIONER
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[Vacant]

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok/Nisenan

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an 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.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:
Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

cc: State Clearinghouse



March 23, 2023

Calleguas Municipal Water District
Attn: Jennifer Lancaster
2100 Olsen Road
Thousand Oaks, CA 91360

Subject: Calleguas Regional Salinity Management Pipeline, Phases 3 and 4


Dear Ms. Lancaster,

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 Anthony Ciuffetelli, 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 Anthony Ciuffetelli at (805) 654-2443.

Sincerely,



Tricia Maier, Manager
Planning Programs Section

Attachments


County RMA Reference Number 23-003



**VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: Jennifer Lancaster, Principal Resource Specialist

DATE: March 22, 2023

FROM: Nicole Collazo, Air Quality Specialist, VCAPCD Planning Division 

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report and Initial Study for the Calleguas Municipal Water District's Regional Salinity Management Pipeline Project (RMA 23-003)

Ventura County Air Pollution Control District (APCD) staff has reviewed the subject Notice of Preparation (NOP) for the draft environmental impact report (DEIR), which will analyze the environmental impacts of a construction project for pipeline alignments which would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the City of Camarillo to the western boundary of the City of Simi Valley. The NOP also contained an associated Initial Study (IS) for the project. The Lead Agency is the Calleguas Municipal Water District.

APCD has the following comments regarding the project's NOP and IS.

IS Comments

Page 23, last paragraph. The APCD adopted its latest air quality attainment plan on December 13, 2022. Please amend this to indicate the proper adopted plan.

Page 25, Item a. The AQMP consistency analysis (CEQA Appendix G Checklist Item 2a) in the IS was prepared after this and such, should follow our guidelines and state guidelines in using the "applicable air quality plan".

Page 47, GHG. The analysis uses an outdated state plan, the 2017 Scoping Plan by the California Air Resources Board (CARB). We recommend using the latest applicable plan, the CARB 2022 Scoping Plan, which was adopted on December 15, 2022, which has new climate targets and goals.

NOP Comments

1) *Air Quality Section*- The air quality assessment should consider project consistency, as included in the Ventura County Air Quality Assessment Guidelines, with the recently adopted 2022 Air Quality Management Plan (AQMP). The 2022 AQMP is the air plan to attain the 2015 federal 8-

hr ozone standard with updated emission factors and population forecasts. The 2016 AQMP was the plan to attain the 2008 federal ozone standard; that standard has been met. More information on the 2022 AQMP can be found here <http://www.vcapcd.org/AQMP-2022.htm>.

2) The Ventura County Air Quality Assessment Guidelines (AQAG) can also be used to evaluate all potential air quality impacts. The AQAG are also downloadable from our website here: <http://www.vcapcd.org/environmental-review.htm>. Specifically, the air quality assessment should consider reactive organic compound (ROC) and nitrogen oxide (NOx) emissions from all project-related motor vehicles for all proposed uses, energy emissions such as heating, lighting and electricity, and area emissions such as landscaping equipment and maintenance. The trips per day or VMT should be from a project-specific traffic study. We note that the AQAG has not been updated since 2003 and the recommended list of mitigation measures in the AQAG are also limited and outdated. Current air quality determinations follow the same methodology but using different tools (CalEEMod vs. URBEMIS, updated OEHHA standards health risk assessments). The recommended list of mitigation measures in the AQAG are also limited and outdated. Construction emission reduction measures such as requiring Tier 4 off-road construction equipment can reduce pollutants by up to 85% and is highly recommended if emissions are above local and state thresholds adopted. This mitigation can also be quantified using the CalEEMod air emissions model. Another reduction measure is using 2010 and newer on-road engine vehicles for exporting material that comply with California State Regulation for In-Use On-Road Diesel Vehicles Title 13, CCR §2025 since they emit less diesel emissions. Using low-VOC paints may also reduce ROC emissions once construction estimates are known for paving.

Thank you for the opportunity to comment on the project. If you have any questions, you may contact me at nicole@vcapcd.org.



March 15, 2023

Calleguas Municipal Water District
ATTN: Jennifer Lancaster, Principal Resource Specialist
2100 Olsen Road,
Thousand Oaks, CA 91360

Calleguas Regional Salinity Management Pipeline, Phases 3 & 4, Environmental Document Review – Notice of Preparation of Subsequent Draft Environmental Impact, (RMA REF # 23-003)

Ventura County Environmental Health Division (Division) staff reviewed the information submitted for the subject project.

The Division provides the following comment:

1. Project includes infrastructure improvements that may handle, store, or transport hazardous materials. Hazardous materials and/or hazardous wastes at or above the reportable thresholds must be reported to this Division's Certified Unified Program Agency (CUPA). Contact the CUPA for reporting and/or permitting requirements.

<https://vcrma.org/cupa>

If you have any questions, please contact me at (805) 654-5040 or Timothy.Krone@ventura.org.

Timothy Krone, R.E.H.S.
Land Use Section
Environmental Health Division



March 21, 2023

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360

SUBJECT: Response to Notice of Preparation for Subsequent Environmental Impact Report: Calleguas Regional Salinity Management Pipeline, Phases 3 and 4

Dear Jennifer Lancaster,

Thank you for providing the Ventura County Planning Division (Planning Division) with the opportunity to comment regarding the Initial Study and Notice of Preparation for a Draft Subsequent Environmental Impact Report (SEIR) for the Calleguas Regional Salinity Management Pipeline, Phases 3 and 4. The Planning Division coordinates with neighboring jurisdictions and provides review and comment on environmental documents prepared for projects that could affect the unincorporated area.

Background

The Calleguas Regional Salinity Management Pipeline (CRSMP) is a brine and treated wastewater conveyance pipeline designed to manage high salinity groundwater and municipal wastewater, dispose of the brine produced by enhanced water treatment processes, and facilitate the development of water sources otherwise unavailable due to poor water quality. There is a line currently in operation that extends approximately 22 miles from its upstream end in Camarillo to its downstream terminus at the legally permitted ocean outfall in Port Hueneme. The proposed project as shown in Attachment 1 would extend the CRSMP approximately 14 miles inland from the existing eastern terminus in Camarillo, enabling connections to additional dischargers in Simi Valley and unincorporated Ventura County.

The Initial Study states the pipeline alignment would primarily be located within the public right-of-way consisting of paved roads and dirt shoulders. Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. There will be no road closures during construction activities. The alignment for the pipeline phases is shown in colored segments in (Attachment 1).

Biological Resources Analysis

The Initial Study finds that there may be potentially significant impacts to habitats, waterways, sensitive natural communities and wildlife corridors. Due to the approximately 14-mile contiguous project length that encompasses diverse types of land uses and habitat, the SEIR should thoroughly analyze impacts to regional habitat connectivity corridors. Areas near the eastern portions of the CRSMP are within the Tierra Rejada Critical Wildlife Passage Area, which has been scientifically determined to be necessary for wildlife movement needed to support species' habitat. This corridor and any others that intersect the project should be mapped, described, and evaluated in the SEIR. The Ventura County Habitat Connectivity and Wildlife Corridors map¹ as shown in (Attachment 2) can be used as a reference. Furthermore, impacts to wildlife movement that occur within the corridor due to lighting, noise, wildlife impermeable fencing, and increased human activity, including during construction, should be thoroughly analyzed in the SEIR.

The SEIR should also discuss the proposed project with respect to the Ventura County General Plan *Goals, Policies and Programs (GPP)* for biological resources. Several goals and policies in the GPP support the protection of biological resources as follows:

1. Goal: COS-1

To identify, preserve, protect, and restore sensitive biological resources, including federal and state-designated endangered, threatened, rare, or candidate species and their supporting habitats; wetland and riparian habitats; coastal habitats; habitat connectivity and wildlife corridors; and habitats and species identified as "locally important" by the County.

2. Policy: COS-1.10 Evaluation of Potential Impacts of Discretionary Development on Wetlands

The County shall require discretionary development that is proposed to be located within 300 feet of a wetland to be evaluated by a County-approved biologist for potential impacts on the wetland and its associated habitats pursuant to the applicable provisions of the County's Initial Study Assessment Guidelines.

3. Policy: COS-1.11 Discretionary Development Sited Near Wetlands

The County shall require discretionary development to be sited 100 feet from wetland habitats, except as provided below. The 100-foot setback may be increased or decreased based upon an evaluation and recommendation by a qualified biologist and approval by the decision-making body based on factors that include, but may not be limited to, soil type, slope stability, drainage patterns, the potential for discharges that may impair water quality, presence or absence of endangered, threatened or rare plants or animals, direct and indirect effects to wildlife movement, and compatibility of the proposed development with use of the wetland habitat area by wildlife. Discretionary development that would have a significant impact on a wetland habitat shall be prohibited unless mitigation measures are approved that would reduce the impact to a less than significant

¹ <https://vcrma.org/en/habitat-connectivity-and-wildlife-movement-corridors>

level. Notwithstanding the foregoing, discretionary development that would have a significant impact on a wetland habitat on land within a designated Existing Community may be approved in conjunction with the adoption of a statement of overriding considerations by the decision-making body.

4. Policy: COS-1.5 Development Within Habitat Connectivity and Wildlife Corridors

Development within the Habitat Connectivity and Wildlife Corridors overlay zone and Critical Wildlife Passage Areas overlay zone shall be subject to the applicable provisions and standards of these overlay zones as set forth in the Non-Coastal Zoning Ordinance (8109-4.8).

Furthermore, the proposed CRSMP alignment as shown in the Initial Study (also Attachment 1, below) does not identify if there is any development planned for outside of the road right of way that would necessitate biological resource mitigations. Thus, the SEIR should specify if there are any project areas that extend beyond paved roads and dirt shoulders and have the potential for biological resource impacts. If there is potential for significant biological resource impacts, these sites should be identified in the SEIR, and the SEIR should include the following mitigation measures:

5. *Pre-Construction Wildlife Surveys, Monitoring, and Relocation.* Pre-construction protocol surveys and relocation must be conducted for all special status wildlife species, including (but not limited to) Locally Important Species that may occur within habitat planned to be removed by development of the CRSMP. For a complete listing of Locally Important Species, please see the following link: <https://vcrma.org/en/ventura-county-locally-important-species-list>. Typically, a biological monitor, with any appropriate permits needed, should survey the construction area prior to construction and relocate special-status wildlife outside of the construction area, which should be fenced to prevent wildlife from returning to the construction area. The biological monitor should also be present during project implementation.
6. *Bird Nesting Mitigation.* If feasible, construction activities including brush removal, tree trimming, building demolition, or grading activities, should be conducted outside of the nesting season which has been defined by California Department of Fish and Wildlife biologists as occurring between January 1st through September 15th. If construction activity occurs during the nesting season, construction areas should be surveyed by a biologist for nesting birds and active nests should be avoided. Mitigation measures should include details on requirements, timing, monitoring, and success criteria. The mitigation measures must include nesting and breeding considerations for any special status birds identified anywhere on the project's premises. Please refer to this Planning Division handout on the protection of nesting birds during project construction for more information.²

Thank you again for the opportunity to comment on this Notice of Preparation for a

² https://docs.vcrma.org/images/pdf/planning/bio/VC_Protection_of_Nesting_Birds_2020.pdf

Draft Subsequent Environmental Impact Report. If you have any questions about this letter, please contact Joel Hayes at Joel.Hayes@ventura.org or 805.654.2834.

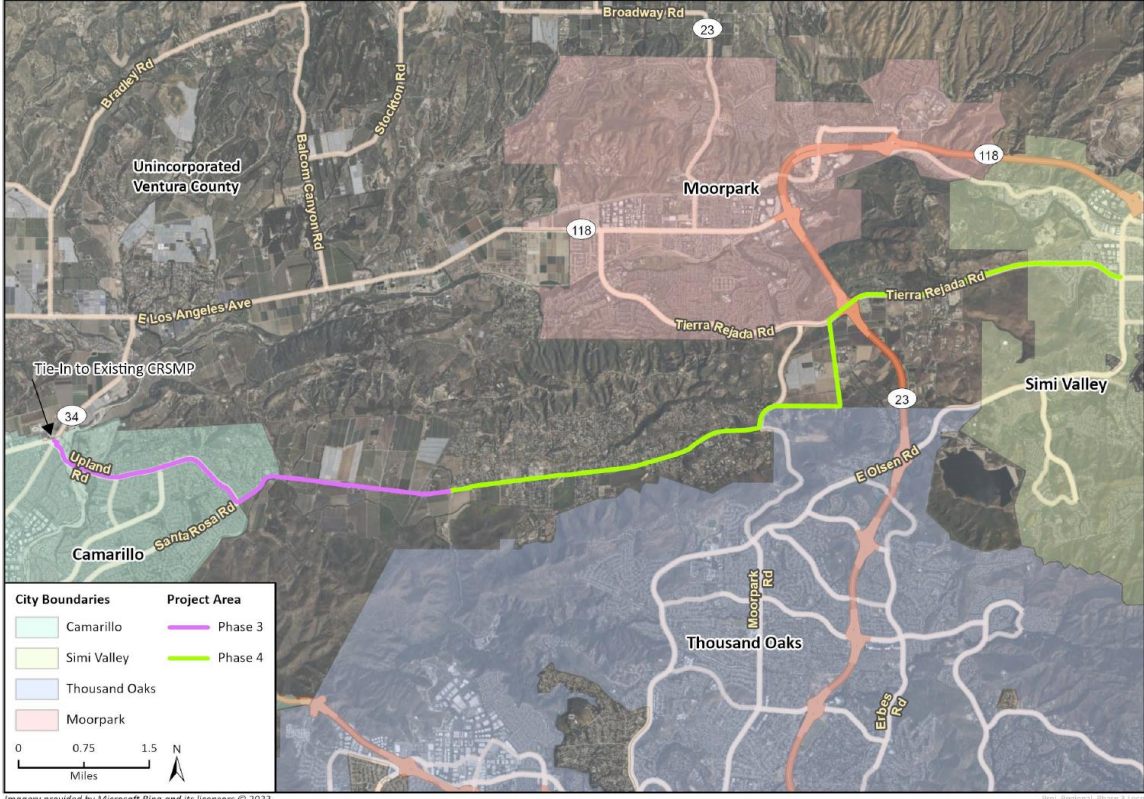
Sincerely,

A handwritten signature in blue ink that reads "Dave Ward". The signature is stylized with a large, sweeping "D" and "W".

Dave Ward, AICP | Planning Director
County of Ventura, Planning Division

Attachment 1

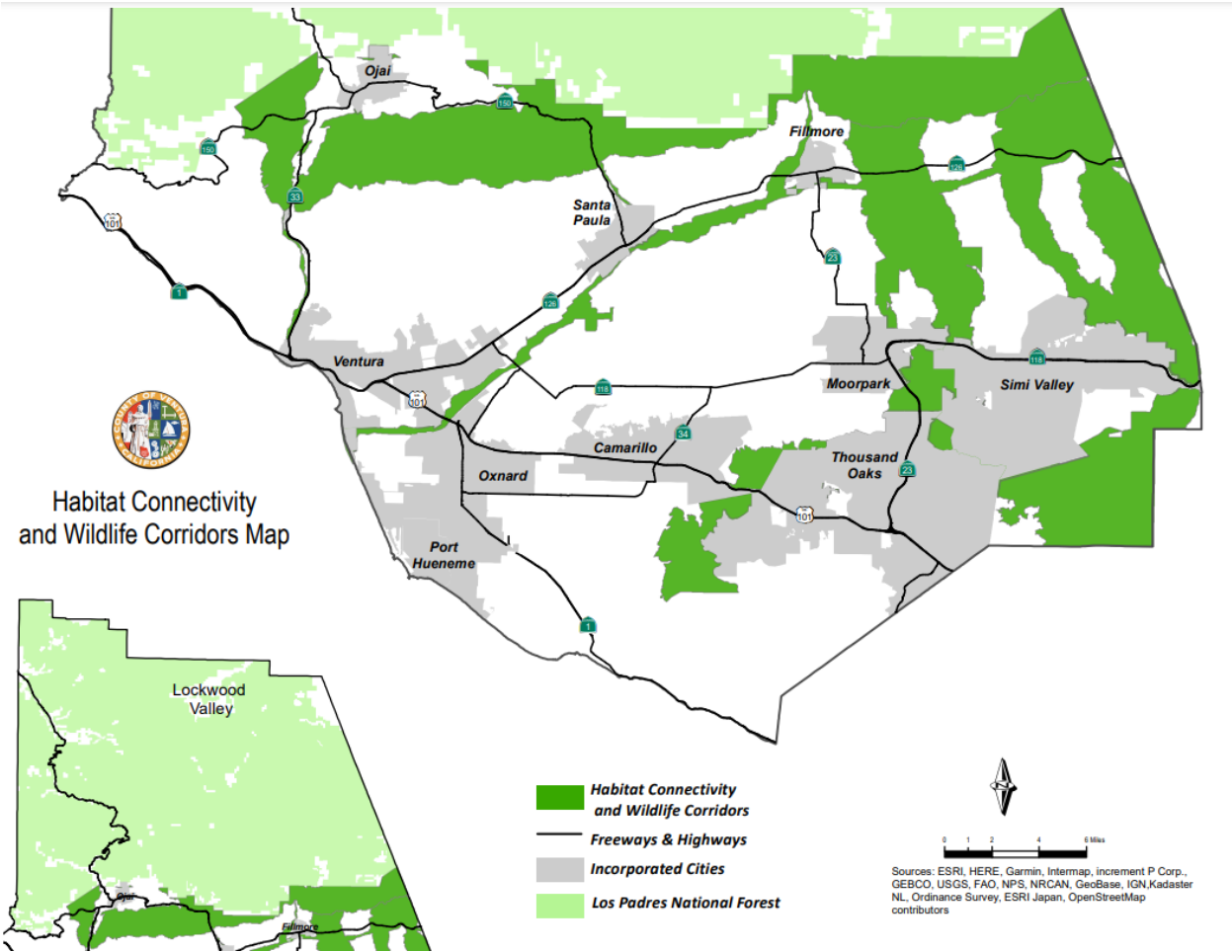
Figure 1. Project Site Location – Calleguas Regional Salinity Management Pipeline Phases 3 and 4



Imagery provided by Microsoft Bing and its licensors © 2022.
 Additional data provided by the County of Ventura.

Proj. Regional, Phase 3 Loc. 1
 Fig. 2.2 Project Location

Attachment 2



Date: February 27, 2023

To: Calleguas Municipal Water District

From: Ventura County Public Works Roads and Transportation
Glenn Derossett, Engineering Manager



Subject: REVIEW OF THE NOTICE OF PREPARATION OF AN EIR AND NOTICE OF PUBLIC SCOPING MEETING FOR CALLEGUAS MUNICIPAL WATER DISTRICT REGIONAL SALINITY MANAGEMENT PIPELINE PHASES 3 AND 4; COUNTY OF VENTURA RMA #23-003

Pursuant to your request, the Public Works Agency – Roads and Transportation Department has reviewed the Notice of Preparation that was received February 27, 2023.

The proposed project involves installation of a pipeline and associated improvements in County-maintained streets.

We offer the following comments:

1. According to County policy, trenching shall not be permitted on any street that was rehabilitated within the last five years, unless a full width pavement improvement is provided after trenching is completed. Please be aware that Moorpark Road, from Santa Rosa Road to Tierra Rejada Road, where your pipeline project is planned, is listed in the County's 2022 to 2026 Multi-Year Pavement Plan as a Priority 3 (out of 5) project. Please contact the County during your design for information regarding what type, and the extent, of pavement treatment will be necessary with your project.
2. The Water District shall repair any damage to County roads due to trenching and the traffic generated by this project up to and including providing a new overlay as determined by the Ventura County Public Works Agency-Roads and Transportation Department ("Transportation Department"). The overlay shall be done in



accordance with the County of Ventura, Public Works Agency, Road Standards, in particular Plate E-11.

3. Prior to any work conducted within the County right-of-way, the Water District shall obtain an encroachment permit from the Transportation Department. The applicant shall contact (805) 654-2055 for the requirements of this permit.
4. The Water District must provide a Traffic Management Plan (TMP) to identify the construction-related vehicle route, especially for trucks, if there are any. The TMP must be submitted to the Transportation Department for review and approval. If the applicant uses the County roads for truck and construction related trips, proper precautions shall be taken to protect all pavements, curb and gutter, sidewalks, and drainage structures from damage. Any portion damaged by the project's operations, in the opinion of the Transportation Department or designee, shall be replaced in accordance with current Standard Construction Details and/or in a manner acceptable to the Transportation Department or designee.
5. The proposed project would require construction in local roadways, including temporary closures of traffic lanes. Construction would cause driver inconvenience and could occur in proximity to homes, therefore, construction activity is recommended to take place during off-peak hours.

Our review is limited to the impacts this project may have on the County's Regional Road Network. If you have any questions, please contact Robert Zastrow at 805-477-7157, or by email at Robert.Zastrow@ventura.org.



Watershed Protection have the following conditions.

WATERSHED PROTECTION CONDITIONS:

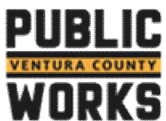
1. Watercourse/Encroachment Permit:

The proposed pipeline will cross several Ventura County Watershed Protection District’s jurisdictional flood control channels. Project proponent shall obtain a Watercourse/Encroachment Permit from the Ventura County Watershed Protection District to perform any work within, under, or over the channels, or utilize the District’s Right of Way. Project findings will be required to comply with the Ventura County Watershed Protection District hydrology data and the 2017 Hydrology Manual and follow the WP “Guide for Hydrology and Hydraulic Study Report” found at following website: <http://pwportal.ventura.org/WPD/onestop/guidelines/Guide%20for%20Hydra.pdf>.

Please let us know if you have any questions.

Thank you,

Dawn Husted
Management Assistant II
Watershed Protection – Planning & Permits



800 S. Victoria Ave. / #1610
Ventura, CA 93009
P: 805.662-6882
[VCPWA Online](#) | [Facebook](#) | [Twitter](#)

Appendix C

Biological Resources Assessment



Calleguas Regional Salinity Management Pipeline Phases 3 & 4

Biological Resources Assessment

prepared for

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Contact: Jennifer Lancaster

prepared by

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

March 2024



RINCON CONSULTANTS, INC. SINCE 1994

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Calleguas Regional Salinity Management Pipeline Phases 3 & 4

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1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Biological Resources Assessment (BRA) Report for the Calleguas Municipal Water District (Calleguas) to document existing conditions and provide a basis for evaluation of potential impacts to special-status and sensitive biological and jurisdictional resources associated with Calleguas Regional Salinity Management Pipeline, Phases 3 and 4 (project) in Ventura County, California.

1.1 Project Location

The proposed pipeline alignment would be located in Ventura County, extending approximately 14.4 miles from near the northeast boundary of the city of Camarillo to the western boundary of the city of Simi Valley. The alignment would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County.

The pipeline alignment would mostly be located within the public right-of-way (ROW) within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignment include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. Each of these roads would provide access to the project alignment during construction activities. Regional access would be provided by State Route 118, State Route 23, State Route 34, and U.S. 101.

Figure 1 shows the regional location of the project alignment and Figure 2 shows the alignments of both phases of the proposed project. For the purposes of this report, it is assumed that the project would avoid construction within areas subject to regulatory agency approval (e.g., wetlands, critical habitat).

1.2 Project Description

The current project consists of Phases 3 and 4 of the Calleguas Regional Salinity Management Pipeline (CRSMP). The proposed project would install an underground pipeline composed of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) materials.

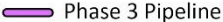
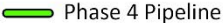

The CRSMP was assessed programmatically in a 2002 Final Program Environmental Impact Report (PEIR) which provided California Environmental Quality Act (CEQA) clearance for the overall CRSMP and project-specific clearance for Phase 1 of the CRSMP. It also discussed Phase 2 as a logical extension of Phase 1, with the acknowledgment additional project-level CEQA review would be required at the time of alignment development for Phase 2 and subsequent phases of the CRSMP. As stated in the 2002 PEIR (pages 1-2), future project-specific analyses would be required "...when assumptions become commitments and fundamental parameters such as the identity, volume and water quality of each potential pipeline contributor are fully identified, and the alignment of pipelines can be finalized."

Figure 1 Regional Location Map



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EPS Proj, Regional, Phase 3 Locn
 Fig 2.1 Regional Location

-  Phase 3 Pipeline
-  Phase 4 Pipeline
-  Existing Salinity Management Pipeline

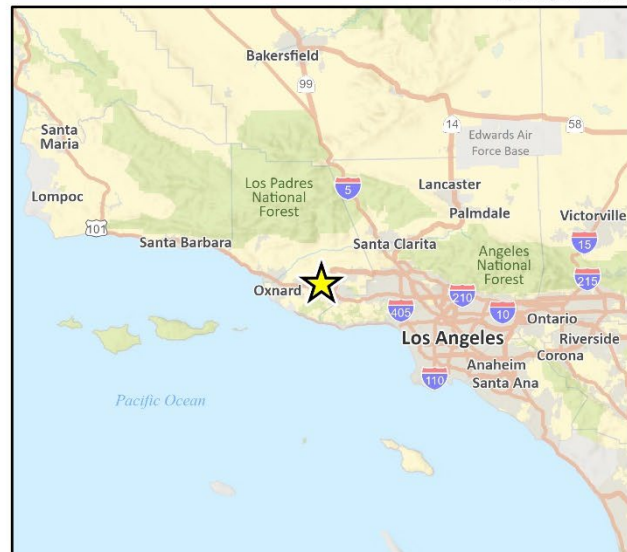
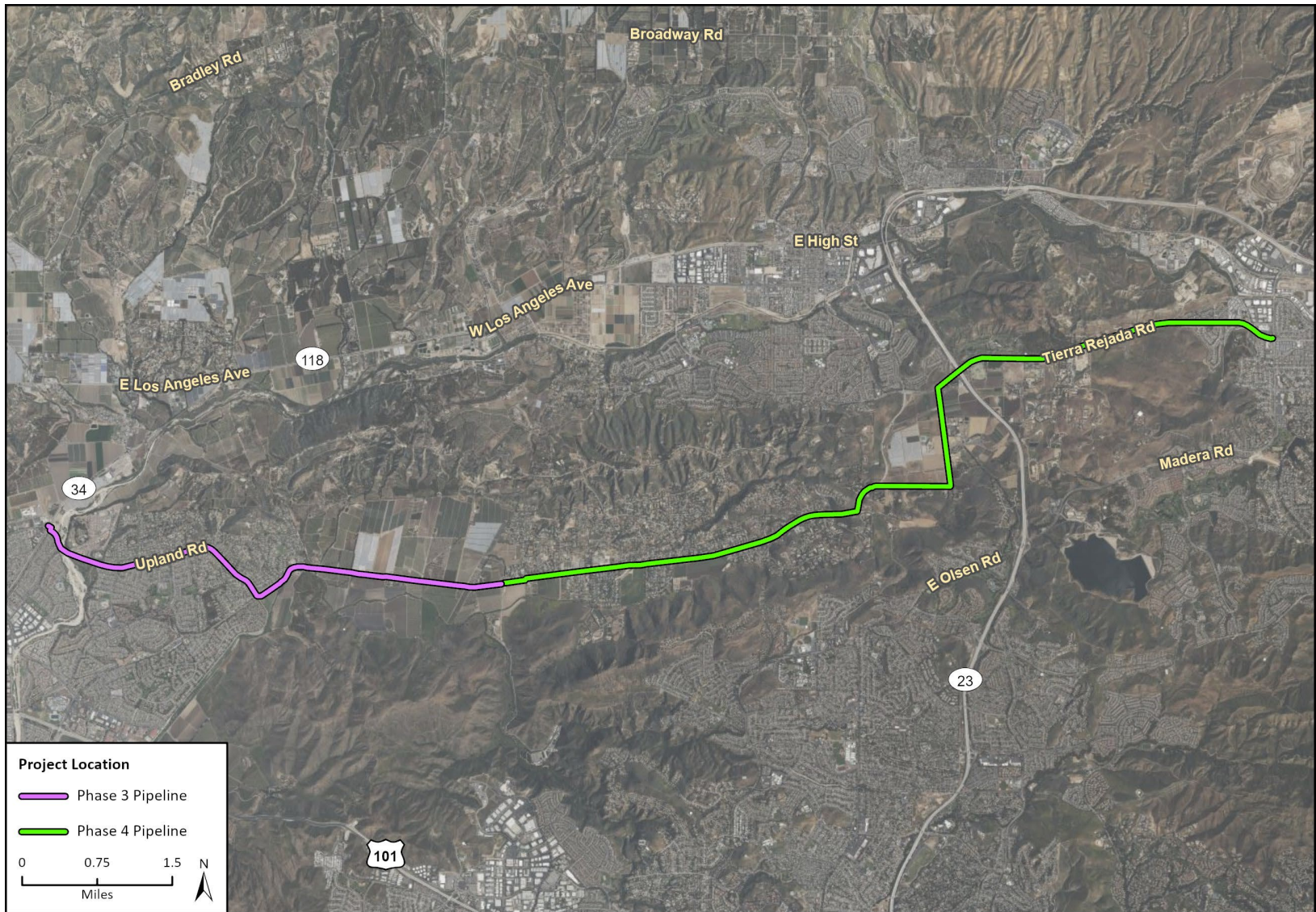


Figure 2 Project Location



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22-12977 CR Maps
CRFig 2 Project Site

Phases 3 and 4 would connect additional dischargers to the CRSMP. Discharges from these phases, as well as previously constructed phases, would intermingle and combine to create the effluent discharged through the existing ocean outfall. Effluent would be subject to existing National Pollutant Discharge Elimination Standard (NPDES) permit constituent limits at the outfall. Prescribed sampling requirements in the NPDES permit necessitate weekly, monthly, quarterly, and semi-annual monitoring of effluent, as well as monitoring of receiving water twice a year, monitoring of sediment every two years, and a biological monitoring study involving mussels that would occur once during the term of the permit. Additionally, while not required by the NPDES permit, Calleguas monitors the individual discharges quarterly for all effluent limit constituents except toxicity and radioactivity.

Phases 3 and 4 of the CRSMP would typically be installed in 20- to 40-foot sections. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

1.2.1 Project Construction

The typical construction sequence for the proposed project would include the following pipeline installation activities:

- **Open-cut trench pipeline installation** typically consists of trench excavation (including saw cutting of pavement where applicable), pipe bedding stabilization, pipe installation, and backfill. The construction crew would typically operate a backhoe and/or excavator, compaction equipment (attachment on an excavator and hand-operated equipment), dump trucks for stockpiling of soils and delivery of backfill material, utility trucks (with truck-mounted or towed generator and hand tools), and water trucks/water buffalos. Where required by the jurisdictional agency to backfill with sand cement slurry, concrete trucks would deliver slurry to the project site.
- **Trenchless installation** typically consists of excavation of launching and receiving pits (including saw cutting of pavement where applicable), installation of shoring system and boring equipment, installation of steel casing and pipeline, removal of equipment, and backfill. This step typically includes the excavation and backfill of the pits using an excavator, dump truck, and potentially a second mini excavator inside the pits. The trenchless installation would be performed by operating a crane to lower and remove equipment and materials.
- **Paving and ground restoration** typically is performed at the completion of each segment of pipeline and then at the end of a project once all excavation and backfill operations have been completed.

The maximum depth of excavation typically would be 8 feet. Where the pipeline would need to cross below an existing utility or drainage channel, the depths may be greater and would depend on the characteristics of the utility or channel.

Based on an installation rate of 80 feet per day and a 4-foot-wide trench, the average amount of excess spoils requiring removal would be approximately 60 cubic yards per day and would require approximately 7 haul roundtrips per day. The average daily number of heavy-duty trucks hauling material to and from the construction site (including the delivery of pipe sections and miscellaneous

supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 haul roundtrips per day.

Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal at an appropriately licensed landfill. Storage of materials and equipment would be dependent upon the location of the contractor and subcontractors. If the contractors are local, they may store equipment and materials in their own yards.

If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water could be trucked off-site for reuse for dust control and irrigation.

Construction Schedule

Construction would mostly be limited to normal construction hours between 7:00 am and 4:30 pm, Monday through Friday. Weekend work, as well as evening and nighttime work between the hours of 4:30 pm and 7:00 am, may be required to install the trenchless portions of the pipelines. In areas where traffic conditions require non-traditional working hours, night and weekend work could also be necessary. Additionally, the tie-in connection to the CRSMP would require the shutdown of the CRSMP, consequently requiring work be performed continuously until complete. Work hours would be finalized through the roadway encroachment permitting and design process.

Construction is anticipated to require approximately 16 months for Phase 3 and 30 months for Phase 4. Due to uncertainties about the anticipated timing of dischargers, duration of permitting and design, and other considerations, there is currently no planned start date.

1.2.2 Project Operation and Maintenance

Once construction is complete, Calleguas staff would periodically inspect the pipeline and perform routine maintenance. Valves on the appurtenances would be exercised roughly once per year and the pipeline alignment would be marked as needed in response to DigAlert (utility marking) requests.

The proposed project would operate under open channel flow, meaning the contents of the pipeline would be propelled by gravity. Project operation would not introduce new electricity demands.

In the event any project component is compromised during operation, Calleguas would temporarily cease operations and conduct emergency repairs as soon as possible; emergency response and repairs are part of Calleguas' normal operations to maintain system integrity and reliability and are not a new or increased activity associated with the project.

1.3 Regulatory Summary

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, state, and local authorities. Primary authority for regulation of general biological resources lies with local jurisdictions (in this instance, Calleguas).

1.3.1 Definition of Special-Status Species

For the purposes of this report, special-status species include:

- Species listed as threatened or endangered under the federal Endangered Species Act (FESA), including proposed and candidate species
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern or Watch List by the California Department of Fish and Wildlife (CDFW)
- Native Plant Protection Act (NPPA) – state rare (SR)
- California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B
- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance, or local policy
- Ventura County Locally Important Species Lists (Ventura County 2018)

1.3.2 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes (Appendix A):

- CEQA
- FESA
- CESA
- Federal Clean Water Act (CWA)
- CFGC
- Migratory Bird Treaty Act (MBTA)
- Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- Ventura County General Plan
- City of Camarillo General Plan
- City of Moorpark General Plan
- City of Simi Valley General Plan
- City of Thousand Oaks General Plan

1.3.3 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

- a) *Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*
- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*
- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

2 Methodology

2.1 Biological Survey Area

Rincon biologists conducted the survey within the Biological Survey Area (BSA), defined for this project as the proposed pipeline alignment and a 25-foot buffer on either side of each road. The BSA is approximately 183 acres in total area.

2.2 Literature Review

Rincon conducted a literature review to characterize the nature and extent of biological resources on and adjacent to the BSA. The literature review included an evaluation of current and historical aerial photographs of the site (Google Earth Pro 2022), regional and site-specific topographic maps, and climatic data.

Queries of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (IPaC; USFWS 2022a), CDFW California Natural Diversity Database (CNDDDB; CDFW 2022a), and CNPS online Inventory of Rare and Endangered Plants of California (2022b) were conducted to obtain comprehensive information regarding state and federally listed species, and other special-status species, with potential to occur within the United States Geological Survey (USGS) 7.5-minute topographic quadrangles (USGS 2022b) crossed by the BSA (*Camarillo, Newbury Park, Thousand Oaks, and Simi Valley West*). The CNDDDB query also included a search of special-status resources within five miles of the BSA. The results of database queries and lists of special-status species were reviewed by Rincon's regional biological experts for accuracy and completeness. The final list of special-status biological resources (species and sensitive natural communities) was evaluated based on documented occurrences within the four-quadrangle search area and biologists' expert opinions on species known to occur in the region.

The following resources were reviewed for additional information on existing conditions relating to biological resources within the BSA:

- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA NRCS 2022b)
- The State Hydric Soils List (USDA NRCS 2022a)
- USFWS Critical Habitat Portal (USFWS 2022b)
- CDFW Biogeographic Information and Observation System (CDFW 2022a)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2022d)
- CDFW Special Animals List (CDFW 2022c)
- USFWS National Wetland Inventory (NWI) Mapper (USFWS 2022c)
- USGS National Hydrography Dataset (NHD) (USGS 2022a)

The vegetation community characterizations for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009). Updates to the MCV2 provided in the online database (CNPS 2022a) were taken into consideration.

The potential for wildlife movement corridors was evaluated based on the California Essential Habitat Connectivity Project commissioned by the California Department of Transportation and CDFW (Spencer et al. 2010).

2.3 Field Reconnaissance Survey

The reconnaissance field survey was conducted to document the existing site conditions and to evaluate the potential presence of sensitive biological resources, including special-status plant and animal species, sensitive plant communities, potentially jurisdictional wetlands and aquatic resources, and habitat for federally and state protected species. The survey was conducted by Rincon biologists Carolyn Welch and Kyle Gern on October 6, 2022, between 8:00 AM and 3:00 PM. Weather conditions during the survey included temperatures between 66 and 82 degrees Fahrenheit (°F), calm winds up to five miles per hour, and overcast to clear skies.

The survey was conducted primarily by driving along the proposed pipeline alignment, with stops as necessary to evaluate potential sensitive resources. The majority of the BSA was accessible and was evaluated on foot or from a vehicle, as necessary. Portions of the BSA located on private property or behind fences were surveyed from adjacent accessible areas, using 10x25 binoculars.

Biological resources observed in the BSA were recorded, including plant and wildlife species. Plant species nomenclature and taxonomy follows *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012).

2.4 Impact Evaluation

Impacts are defined as project-related activities that destroy, damage, alter, or otherwise affect biological resources. This may include injury or mortality to plant or wildlife species, effects on an animal's behavior (such as through harassment or frightening off an animal by construction noise), as well as the loss, modification, or disturbance of natural resources or habitats. Impacts are defined as either direct or indirect, and either permanent or temporary.

Direct impacts are generally those that occur during project implementation and at the same time and location as the cause of the impact. Direct impacts for this project may include injury, death, and/or harassment of special-status wildlife species, if present in the work areas or vicinity. Direct impacts may also include the destruction of vegetation communities necessary for special-status wildlife species breeding, feeding, or sheltering. Direct impacts to plants can include crushing of plants, bulbs, or seeds where present in the impact areas.

Indirect impacts are those that are reasonably foreseeable and caused by a project but occur later in time and/or potentially at locations of some distance from the source of the impact. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect impact. Specific examples for this project may include dust that drifts outside of project disturbance areas and covers native plants, thereby decreasing their photosynthetic capacity, and unintentional introduction of invasive species (particularly weedy plant species that outcompete native plant species) that over time negatively affect the local ecology.

Permanent impacts are those that result in the long-term or irreversible loss of biological resources. Temporary impacts to biological resources are those that are reversible over time, with or without implementation of mitigation measures. Examples include the generation of fugitive dust and noise during project implementation, trimming or crushing vegetation that will regrow following project

Calleguas Regional Salinity Management Pipeline Phases 3 & 4

completion, and removed vegetation that will be actively restored. These temporary impacts are anticipated to last during project implementation and shortly thereafter. However, the biological resources are anticipated to return to a baseline condition after project completion.

3 Existing Conditions

This section summarizes the existing biological conditions of the BSA and results of biological resource database inquiries and field surveys. Brief discussions regarding the general physical characteristics within the BSA are presented below. Representative photographs of the BSA are provided in Appendix B, and complete lists of all plants and wildlife species observed within the BSA are presented in Appendix C.

3.1 Physical Characteristics

3.1.1 Topography and Geography

The BSA is situated in a region that is characterized by a Mediterranean climate with warm, dry summers and cool, wet winters. Average high temperatures range from 77 to 89°F and average low temperatures range from 61 to 68°F. The average annual precipitation in the region is 15.56 inches with the majority falling in February (Western Regional Climate Center 2022).

The topography of the BSA is generally level, as it follows the contours of developed roadways. The elevation ranges between approximately 150 and 700 feet above mean sea level. The elevation is highest in the eastern portion of the BSA along Tierra Rejada Road, and lowest in the western portion of the BSA along Upland Road. Land uses surrounding the BSA include agriculture, recreation, open space, and residential, commercial, and industrial development.

3.1.2 Watershed and Drainages

The eastern portion of the BSA along Tierra Rejada Road between Madera Road and Llevarancho Road is within the Lower Simi Arroyo watershed (HUC12 number 180701030101). The central portion of the BSA, extending west until the intersection of Upland Road and Woodcreek Road, is within the Lower Conejo Arroyo watershed (HUC12 number 180701030105). The western portion of the BSA along Upland Road between Woodcreek Road and Lewis Road is within the Las Posas Arroyo watershed (HUC12 number 180701030103; USGS 2022a).

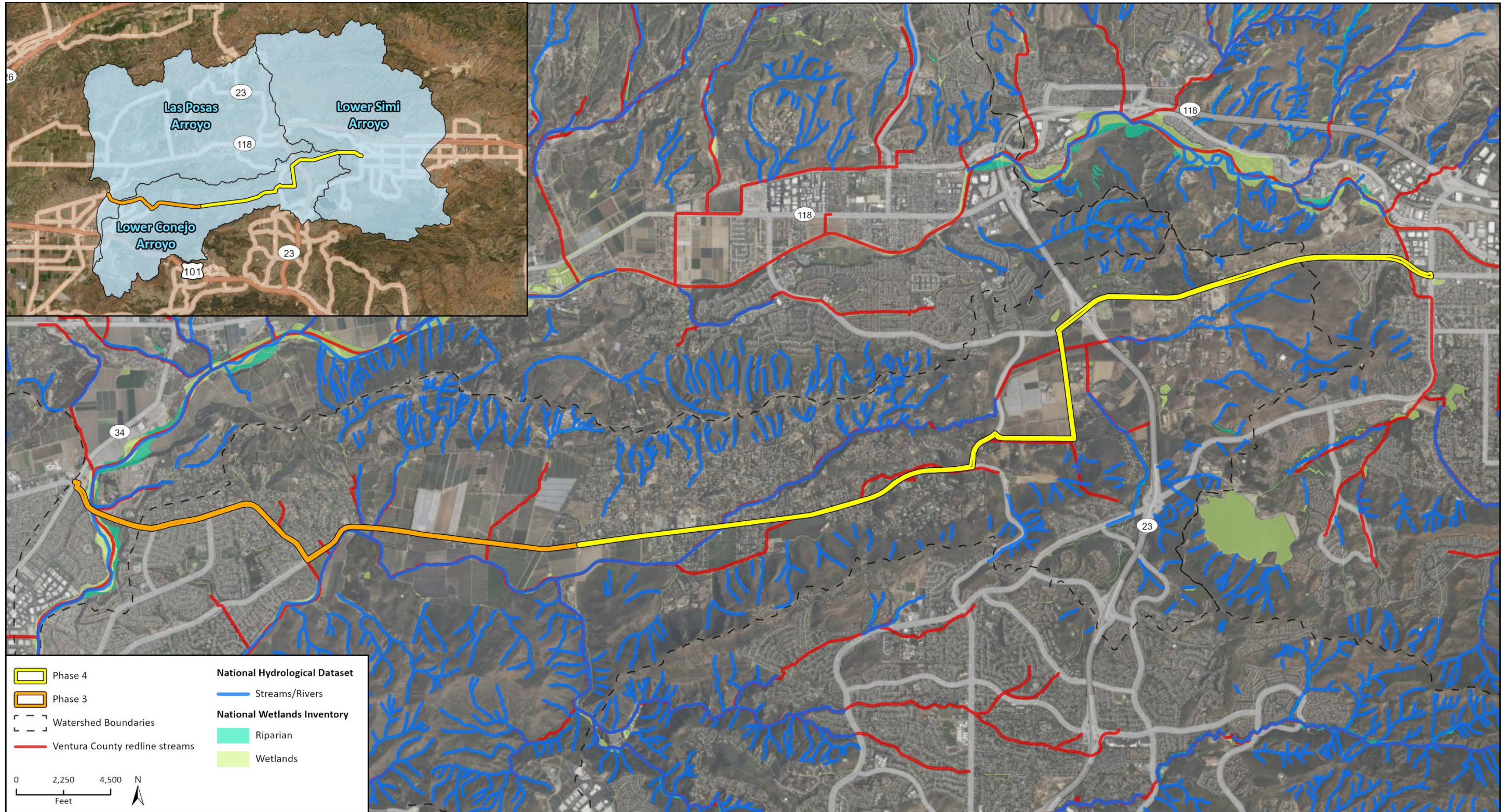
The NWI identifies 15 hydrologic features that cross the BSA, 10 of which are intermittent and five of which are ephemeral (USFWS 2022c). Eight of these features are also identified in the NHD (USGS 2022a). Named hydrologic features within the BSA include Calleguas Creek, Conejo Creek, and Arroyo Santa Rosa. The remainder of the features identified in the NWI are unnamed, and most of these features correspond with agricultural ditches.

An overview of these features and watersheds is shown in Figure 3 below and more detail is found in Appendix E. The mapping presented in the NHD and NWI provide useful context, but not a completely accurate depiction of current conditions or extent of regulatory agency jurisdiction in the BSA, particularly regarding alignment and flow regime of streams.

During the field reconnaissance survey, 15 potentially jurisdictional features were observed within the BSA, and include Calleguas Creek, Conejo Creek, Arroyo Santa Rosa, and multiple agricultural and/or drainage ditches. Most of these features flow in the southerly or southwesterly direction within the BSA. Additional details on these resources can be found in Section 4.3 below.

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Figure 3 Hydrology Overview



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EPS Proj. Regional, Phase 3 Loc. Fig. X. Biological Study Area Overview

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3.1.3 Soils

According to the NRCS Web Soil Survey, the BSA includes 44 soil map units (Table 1) (USDA NRCS 2022b). One soil type, riverwash, is classified as a hydric soil (USDA NRCS 2022a).

Table 1 Soil Units in the BSA

Soil Unit Name	Hydric Soil Rating	Acreage
Topdeck loam, 10 to 35 percent slopes	No	3.84
Urban land-Typic Xerorthents, terraced-Gilroy complex, 5 to 20 percent slopes	No	0.16
Urban land-Typic Xerorthents, very gravelly-Topdeck complex, 10 to 35 percent slopes	No	1.91
Anacapa sandy loam, 0 to 2 percent slopes	No	5.36
Anacapa sandy loam, 2 to 9 percent slopes	No	3.09
Calleguas very channery loam, 30 to 50 percent slopes	No	3.78
Calleguas-Arnold complex, 30 to 50 percent slopes, eroded	No	1.56
Camarillo loam	No	3.25
Castaic-Balcom complex, 15 to 30 percent slopes	No	0.01
Cibo clay, 15 to 30 percent slopes, MLRA 20	No	6.93
Corralitos loamy sand, 2 to 9 percent slopes	No	0.47
Cropley clay, 0 to 2 percent slopes, warm MAAT, MLRA 19	No	6.05
Cropley clay, 2 to 9 percent slopes, warm MAAT, MLRA 19	No	50.80
Garretson loam, 2 to 9 percent slopes	No	0.99
Gilroy-Cibo complex, 5 to 15 percent slopes	No	5.81
Gilroy loam, 15 to 50 percent slopes, very rocky	No	0.24
Gullied land	No	1.64
Hambright very rocky loam, 15 to 75 percent slopes	No	0.99
Huerhuero very fine sandy loam, 0 to 5 percent slopes	No	0.24
Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded	No	2.58
Huerhuero very fine sandy loam, 9 to 15 percent slopes, eroded	No	3.52
Huerhuero very fine sandy loam, 9 to 30 percent slopes, severely eroded	No	12.38
Linne silty clay loam, 15 to 30 percent slopes, eroded	No	0.18
Metz loamy fine sand, 2 to 9 percent slopes	No	3.19
Metz loamy sand, 2 to 9 percent slopes	No	0.11
Metz loamy sand, loamy substratum, 0 to 2 percent slopes	No	5.99
Mocho loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	No	10.61
Mocho gravelly loam, 2 to 9 percent slopes	No	0.06
Pico sandy loam, 0 to 2 percent slopes	No	2.44
Pico sandy loam, 2 to 9 percent slopes	No	1.44
Pico loam, sandy substratum, 0 to 2 percent slopes	No	2.60
Rincon silty clay loam, 2 to 9 percent slopes, MLRA 19	No	17.47
Rincon silty clay loam, 15 to 30 percent slopes, eroded	No	1.34
Rincon silty clay loam, 9 to 30 percent slopes, severely eroded	No	2.42

Soil Unit Name	Hydric Soil Rating	Acreage
Riverwash	Yes	1.92
Salinas clay loam, 2 to 9 percent slopes	No	4.01
Soper loam, 15 to 30 percent slopes, eroded	No	2.17
Sorrento loam, 0 to 2 percent slopes, MLRA 14	No	2.85
Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	No	0.24
Sorrento silty clay loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	No	1.80
Vina loam, 0 to 4 percent slopes, MLRA 19	No	1.00
Vina loam, 2 to 9 percent slopes	No	1.38
Vina gravelly loam, 2 to 9 percent slopes	No	1.83
Vina silty clay loam, 2 to 9 percent slopes	No	2.72

3.2 Vegetation Communities and Other Land Cover

Six vegetation communities and four land cover types were identified within the BSA. Figure 4 below provides an overview of these vegetation communities and land cover types, as well as other resources such as protected native trees and potential heritage trees under Ventura County regulations. More detailed figures are available in Appendix E. A list of plant species encountered during the field reconnaissance survey is provided in Appendix C.

Figure 4 Biological Resources Overview



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3.2.1 Arroyo Willow - Mulefat Thickets

Arroyo willow thickets (*Salix lasiolepis* Shrubland Alliance) are typically found along stream banks and benches, slope seeps, and stringers along drainages from sea level to 7,120 feet (2,170 meters) in elevation. Arroyo willow (*Salix lasiolepis*) provides at least 50 percent relative cover in the tree or shrub canopy, at least 25 percent absolute cover in the tree or shrub canopy, or at least 30 percent relative cover in the shrub canopy. Mulefat (*Baccharis salicifolia*) is present as a subdominant species in the shrub layer of this association. This vegetation community is ranked G4S4 and is not classified as sensitive (CDFW 2022b).

In the BSA, this vegetation community is characterized by the arroyo willow – mulefat thickets association, in which the variable shrub layer is dominated by arroyo willow and mulefat. Other shrub species present include tree tobacco (*Nicotiana glauca*), and giant reed (*Arundo donax*). The sparse herbaceous layer includes prickly lettuce (*Lactuca serriola*) and castor bean (*Ricinus communis*). This community is present on the far west end of the BSA, on the banks of Calleguas Creek.

3.2.2 California Buckwheat Scrub

California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) is typically found along upland sloped, intermittently flooded arroyos, channels and washes, and rarely within flooded low-gradient deposits, between sea level and 3,940 feet (1,200 meters) in elevation. Soils are typically coarse, well drained, and moderately acidic to slightly saline. This vegetation community is characterized by a continuous to intermittent shrub layer and a variable herbaceous layer. California buckwheat (*Eriogonum fasciculatum*) contributes to at least 50% relative cover in the shrub layer. This vegetation community is ranked G5S5 and is not a CDFW sensitive natural community (CDFW 2022b).

In the BSA, this community has an open shrub layer dominated by California buckwheat. Other widespread species include deerweed (*Acmispon glaber*), coastal prickly pear (*Opuntia littoralis*), and California sagebrush (*Artemisia californica*). The dense herbaceous layer is dominated by weeds including summer mustard (*Hirschfeldia incana*), fountain grass (*Pennisetum setaceum*), and fennel (*Foeniculum vulgare*). Patches of this community are found along the roadsides in the BSA, primarily on hillsides.

3.2.3 Purple Sage Scrub

Purple sage scrub (*Salvia leucophylla* Shrubland Alliance) is typically found along steep slopes of variable aspect or on low-gradient deposits along streams with alluvial or colluvial soils between sea level and 3,937 feet (1,200 meters) in elevation. This vegetation community is characterized by an intermittent to continuous one- or two-tiered shrub canopy and a variable herbaceous layer. Purple sage (*Salvia leucophylla*) is present at over 30% relative cover, and is often codominant with California sagebrush in the shrub layer. This vegetation community is ranked G4S4 and is not a CDFW sensitive natural community (CDFW 2022b).

In the BSA, this alliance is dominated by purple sage. Other shrubs present include coastal prickly pear and chaparral yucca (*Hesperoyucca whipplei*). The herbaceous layer is sparse and includes summer mustard and wild oats (*Avena* sp.). One patch of this community is found on a steep south-facing hillside north of Tierra Rejada Road.

3.2.4 Wild Oats and Annual Brome Grasslands

Wild oats and annual brome grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance) are found in all topographic settings in foothills, waste places, rangelands, and openings in woodlands at elevations of sea level to 7,215 feet (2,200 meters) in elevation. Wild oats, annual bromes (*Bromus* spp.), purple false brome (*Brachypodium distachyon*), fillaree (*Erodium* spp.), rattlesnake grass (*Briza* spp.) or cat's ear (*Hypochaeris* spp.) are dominant or co-dominant with other non-native species in the herbaceous layer. Emergent trees and shrubs may be present at low cover. The alliance is ranked GNA/SNA (global/state rank not applicable) and is not a CDFW sensitive natural community. There are no sensitive associations of this community (CDFW 2022b).

In the BSA, this community has a dense herbaceous layer dominated by wild oats, annual bromes, summer mustard, and Russian thistle (*Salsola tragus*). Scattered coast live oak (*Quercus agrifolia*) trees and ornamental trees and shrubs are present. Patches of this community are present throughout the BSA on the road shoulders.

3.2.5 Summer Mustard Fields

Upland mustards (*Brassica nigra* Herbaceous Semi-Natural Alliance) are typically found in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places between sea level and 9,186 feet (2,800 meters) in elevation. This vegetation community is characterized by an open to continuous herbaceous layer. Black mustard (*Brassica nigra*), summer mustard, wild radish (*Raphanus sativus*), or other mustards occur with non-native plants at over 80% cover in the herbaceous layer. This vegetation community is unranked and is not a CDFW sensitive natural community (CDFW 2022b).

In the BSA, this community is characterized by the summer mustard fields association. The dense herbaceous layer is dominated by summer mustard. Other species include fennel, Russian thistle, and telegraphweed (*Heterotheca grandiflora*). Parts of this community in the BSA were mowed during the field survey. Scattered ornamental trees and shrubs are present.

3.2.6 Fountain Grass Swards

Fountain grass swards (*Pennisetum setaceum* - *Pennisetum ciliare* Herbaceous Semi-Natural Alliance) are generally found on steep coastal cliffs, bluffs, road-cuts, coastal dunes, coastal scrub, or desert scrub types in areas with mild, frost-free winters. Elevations range between sea level and 330 feet (100 meters) in elevation. This community is characterized by an open to intermittent herbaceous layer. Fountain grasses (*Pennisetum* spp.) have at least 50 percent relative cover in the herbaceous layer and non-native plants have over 90 percent relative cover in the herbaceous layer. Fountain grass swards are ranked GNASNA and are not a CDFW sensitive natural community (CDFW 2022b).

In the BSA, this community is dominated by fountain grass. Other species present include summer mustard and scattered California buckwheat and ornamental trees. This community is found on roadside shoulders in the eastern portion of the BSA.

3.2.7 Riverwash

This land cover type is located within the open, unvegetated or sparsely vegetated channel of Calleguas Creek in the western end of the BSA. The substrate is comprised of gravel, cobble, and sand. Riverwash is a naturally dynamic habitat and may shift and change position within the drainage, depending on flood volumes and regularity.

3.2.8 Ornamental

Ornamental areas have been planted for the purpose of landscaping, generally with non-native species that require regular irrigation or other maintenance. Much of the BSA is characterized by ornamental vegetation, primarily including street trees, shrubs, grass lawns, and plant nurseries. Occasionally native trees are included in this land cover type.

3.2.9 Agricultural

This land cover type includes active agricultural fields, orchards, fallow fields, and associated access roads. Common crops in the BSA during the field survey include avocados, pumpkins, and tomatoes.

3.2.10 Developed

Developed areas consist of paved areas, roadways, and gravel or hardpacked dirt road shoulders with little to no vegetation. Buildings and scattered ornamental vegetation are included in this land cover type. This is the most abundant land cover type in the BSA.

3.3 General Wildlife

A total of 13 wildlife species were observed during the field reconnaissance survey (Appendix C). Common mammalian species occurring in the region include California ground squirrel (*Otospermophilus beecheyi*), domesticated dog (*Canis lupus familiaris*), and domesticated cat (*Felis catus*). Common avian species in the region include common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), and mourning dove (*Zenaida macroura*), among others. These species, with the exception of domesticated dog and cat, would be expected to use the BSA for foraging, nesting, and/or shelter.

4 Sensitive Biological Resources

This section discusses special-status species and sensitive biological resources observed in the BSA and evaluates the potential for the BSA to support additional sensitive biological resources. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB and other sources, species occurrence records from other sites in the vicinity of the BSA, previous reports for the BSA, and the results of surveys of the BSA. An assessment of each special-status species evaluated is included in Appendix D. The potential for each special-status species to occur in the BSA was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the BSA is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), or species would have been identifiable in the BSA if present (e.g., oak trees).
- **Low Potential.** Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat in and adjacent to the BSA is unsuitable or of very poor quality. The species is not likely to be found in the BSA.
- **Moderate Potential.** Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the BSA is unsuitable. The species has a moderate probability of being found in the BSA.
- **High Potential.** All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat in or adjacent to the BSA is highly suitable. The species has a high probability of being found on the BSA.
- **Present.** Species is observed in the BSA or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last five years).

4.1 Special-Status Species

4.1.1 Special-Status Plants

Special-status plants typically have specialized habitat requirements, including plant community types, soils, and elevational ranges. The CNDDDB and CNPS queries identified 24 special-status plant species that have been previously recorded in either the four USGS 7.5-minute topographic quadrangles crossed by the BSA or within five miles of the BSA.

The BSA consists primarily of landscaped areas and developed areas; however, some natural habitats are present and may be suitable for some of special-status plant species. Of the 24 special-status plants identified in the database queries, 22 are not expected to occur because habitat on and adjacent to the BSA is unsuitable for the species (i.e., the area does not meet minimum habitat requirements). One species has a low potential to occur and one has a moderate potential to occur in the BSA. Special-status plant species with a low potential to occur are omitted from further discussion, because they are not expected to be present. Species with moderate potential to occur

or which have been documented in the BSA are discussed below, and, if applicable, evaluated under Section 5.1.1:

- **Present**
 - Southern California black walnut (*Juglans californica*; CRPR 4.2)
- **Moderate Potential**
 - Lyon's pentachaeta (*Pentachaeta lyonii*; Federally Endangered [FE], California Endangered [CE], CRPR 1B.1)

One southern California black walnut (*Juglans californica*) [CRPR 4.2] was documented within the BSA; however, this species is not typically evaluated as a special-status species under CEQA. The species reasonably anticipated to occur were determined based on the published ranges of the species, and the type, extent, and condition of habitat available within the BSA. Potential to occur conclusions are further discussed in Appendix D.

Lyon's Pentachaeta

Lyon's pentachaeta is an annual herbaceous plant in the sunflower family (Asteraceae). This plant ranges between 6-48 centimeters (cm) in height, with small, linear leaves. The plant is generally hairy. The head inflorescence is composed of 17-42 yellow ray flowers and 21-91 yellow disk flowers. The fruit has 8-12 pappus bristles. Lyon's pentachaeta flowers between March and August (Jepson Flora Project 2022).

Lyon's pentachaeta is endemic to California, and its range is limited to coastal Ventura and Los Angeles Counties. This plant can be found in openings in coastal scrub, chaparral, and grasslands. It is often found at the edges between different habitats.

Critical habitat for Lyon's pentachaeta is adjacent to a small portion of the BSA north of Tierra Rejada Road and west of State Route 23. This area is dominated by California buckwheat scrub and characterized by a dense to open shrub layer.

4.1.2 Special-Status Wildlife

Based on the database and literature review, 30 special-status wildlife are known or have the potential to occur in the vicinity of the BSA. Of these, six have a moderate potential to occur, ten have a low potential, and the remaining 14 special-status species are not expected to occur based on a lack of suitable habitat. No special-status wildlife were observed within the BSA during the reconnaissance field survey.

Species with a low potential to occur are omitted from further discussion because they are not expected to be present. Special-status species or other protected species with moderate potential to occur within the BSA are discussed below:

- **Moderate Potential**
 - Western spadefoot toad (*Spea hammondi*; CDFW Species of Special Concern [SSC])
 - California legless lizard (*Anniella* spp.; SSC)
 - Coastal whiptail (*Aspidoscelis tigris stejnegeri*; SSC)
 - Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List [WL])

- Coastal California gnatcatcher (*Polioptila californica californica*; federally Threatened [FT], SSC)
- Least Bell's vireo (*Vireo bellii pusillus*; FE, CE)

The species reasonably anticipated to occur were determined based on the published ranges of the species; known records in the general vicinity; and the type, extent, and condition of habitat available within the BSA. Potential to occur conclusions are further discussed in Appendix D.

Western Spadefoot Toad

The western spadefoot toad [SSC] is typically found in sandy washes and flood plains of the Central Valley and the central and southern coast ranges of California (Stebbins 2003). The species prefers open areas with sandy or gravelly soils and is found in a variety of habitats, including mixed woodlands, grasslands, sandy washes, foothills, and mountains. The species spends most of the year in underground burrows which they construct themselves, although some individuals may use small mammal burrows. Vernal pools or other temporary ponds are required for breeding and larval development. Pools that are suitable for breeding do not contain bullfrogs, fish, or crayfish and hold water for at least 30 days to support successful completion of larval development (Morey and Reznick 2004). The breeding period for western spadefoot toad is typically January to May and takes place after heavy rainfall (Nafis 2020).

Potentially suitable grasslands are present in the BSA. However, these natural areas are limited and are adjacent to busy roadways. No vernal pools are present within the BSA; however, several vernal pools are present within a mile of the BSA. Multiple CNDDDB occurrences are located within the quadrangles crossed by the BSA, including one occurrence from 2013 located approximately 0.3 mile north of the BSA. This species has a moderate potential to occur in the BSA.

California Legless Lizard

California legless lizard [SSC] is found in the Coast Ranges from Contra Costa County to the Mexican border. California legless lizard occurs in a variety of habitats including sparsely vegetated areas of coastal dunes, valley-foothill grasslands, chaparral, and coastal scrub that contain sandy or loose organic soils with leaf litter and moist soils for burrowing. Areas disturbed by agriculture or other human uses are typically not suitable habitat for the species (Zeiner 1988).

Potentially suitable natural areas with sparse vegetation are present in the BSA; however, these natural areas are limited and are adjacent to roadways. Three CNDDDB occurrences are located within the quadrangles crossed by the BSA, including one from 2015 located approximately 3.8 miles south of the BSA. This species has a moderate potential to occur in the BSA.

Coastal Whiptail

Coastal whiptail [SSC] is found in deserts and semi-arid areas with sparse vegetation within Ventura, Los Angeles, Riverside, and San Diego Counties. The species is commonly found in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grasslands (Zeiner 1988).

Potentially suitable natural areas with sparse vegetation are present in the BSA; however, these natural areas are limited and are adjacent to roadways. Multiple CNDDDB occurrences are located

within the surveyed quadrangles, including one from 1996 located approximately 0.8 mile north of the BSA. This species has a moderate potential to occur in the BSA.

Southern California Rufous-crowned Sparrow

The southern California rufous-crowned sparrow [WL] is a small songbird found in southern California coastal sage scrub and sparse mixed chaparral, typically in elevation ranges from 200-4,500 feet. It frequents relatively steep, often rocky hillsides with grass and forb patches. The species prefers south- or west-facing slopes with scattered scrub cover interspersed with grasses and forbs or rock outcrops. Its diet is not well documented but likely includes grasses, forb seeds, and insects, depending on the season, locality, and availability (Collins 2020).

Potentially suitable coastal sage scrub is present in the BSA; however, these natural areas are very limited and are adjacent to busy roadways. Three CNDDDB occurrences are located in the quadrangles crossed by the BSA, including one occurrence from 2017 located approximately 0.6 mile north of the BSA. This species has a moderate potential to occur in the BSA.

Coastal California Gnatcatcher

The coastal California gnatcatcher [FT, SSC] is a non-migratory songbird found on the coastal slopes of southern California. It ranges from Ventura County south to northwest Baja California, Mexico (Atwood et al. 1999). It is strongly associated with coastal sage scrub habitat below 820 feet in coastal areas and between 820 and 1,640 feet in inland areas; however, not all types of coastal sage scrub communities are used or preferred (Atwood and Bolsinger 1992). This species appears to be most abundant in areas dominated by California sagebrush and California buckwheat. The breeding season extends from late February through August with peaks nesting in mid-March to mid-May (USFWS 2010).

Potentially suitable coastal scrub and grasslands are present in the BSA; however, these natural areas are limited and are adjacent to busy roadways. The eastern portion of the BSA overlaps critical habitat for this species. Multiple CNDDDB occurrences are located within the quadrangles crossed by the BSA, including two occurrences from 2012 which are adjacent to the BSA. This species has a moderate potential to occur in the BSA.

Least Bell's Vireo

The least Bell's vireo [FE, CE] is a summer resident of southern California in riparian areas in the vicinity of water or in dry river bottoms below 2,000 feet. The least Bell's vireo arrives at breeding grounds mid to late March and leaves late September. Its nests are placed along margins of bushes or on twigs projecting into pathways, usually willow species. The species prefers dense shrubby understory.

Potentially suitable riparian habitat is present in the BSA, in the arroyo willow – mulefat thickets along Calleguas Creek. Multiple CNDDDB occurrences are located within the quadrangles crossed by the BSA, including one historical occurrence from 1940 which overlaps the BSA and one occurrence from 2017 located approximately 0.3 mile south of the BSA in Conejo Creek. This species has a moderate potential to occur in the BSA.

4.1.3 Other Protected Species

The BSA contains suitable habitat to support regulated nesting birds and raptors protected under CFGC Sections 3503, 3503.5, and 3513, and the MBTA (16 United States Code Sections 703 to 712). Potential nesting habitat for birds and raptors was observed throughout the BSA, with the most suitable locations being mature ornamental and landscape trees along roadways, and the arroyo willow – mulefat thickets along Calleguas Creek in the western end of the BSA. No inactive or potentially active nests were observed within the BSA during the reconnaissance field survey.

4.2 Sensitive Natural Communities and Critical Habitat

Sensitive Natural Communities

The CDFW California Natural Community List identifies sensitive natural communities throughout California, based in part on global and state rarity ranks (CDFW 2022b). Natural communities having a rank of 1 to 3 are generally considered sensitive, though some communities with other ranks may also be considered sensitive. No CDFW-designated sensitive vegetation communities occur within the BSA.

Designated Critical Habitat

Critical habitat designated by USFWS for coastal California gnatcatcher overlaps the BSA. The BSA is also adjacent to critical habitat for Lyon’s pentachaeta and Riverside fairy shrimp (*Streptocephalus woottoni*; FE).

Critical habitat for coastal California gnatcatcher is present in the eastern portion of the BSA, along Tierra Rejada Road between State Route 23 and North Madera Road. Most of the area mapped as critical habitat within the BSA consists of paved roadways, sidewalks, buildings, and ornamental plants, and is not suitable habitat for coastal California gnatcatcher. Natural areas consist primarily of summer mustard fields dominated by dense non-native herbaceous vegetation. One small patch of California buckwheat scrub is present in this area, and additional coastal scrub communities potentially suitable for coastal California gnatcatcher are present to the north and south of the BSA.

Designated critical habitat for both Lyon’s pentachaeta and Riverside fairy shrimp is confined to the extent of a vernal pool located north of Tierra Rejada Road and west of State Route 23. The vernal pool is located in a flat area uphill from Tierra Rejada Road and outside the BSA. The nearby road shoulder within the BSA is characterized by upland vegetation consisting of California buckwheat scrub and purple sage scrub.

4.3 Jurisdictional Waters and Wetlands

Based upon the findings of the field survey, many features within the BSA may be subject to United States Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), CDFW, and/or Ventura County Watershed Protection District (VCWPD) jurisdiction. This assessment herein is intended for internal project planning and is not a formal jurisdictional delineation; therefore, certain agency-required elements are intentionally not included (e.g., stringent USACE mapping protocols and narrative descriptions of each feature). This report is intended to help inform decisions regarding work areas and staging areas to minimize impacts to jurisdictional features.

A summary of observed potentially jurisdictional features is presented in Table 2 and these areas are identified on Figure 5 and in Appendix E. Representative photographs of the features observed are included in Appendix B.

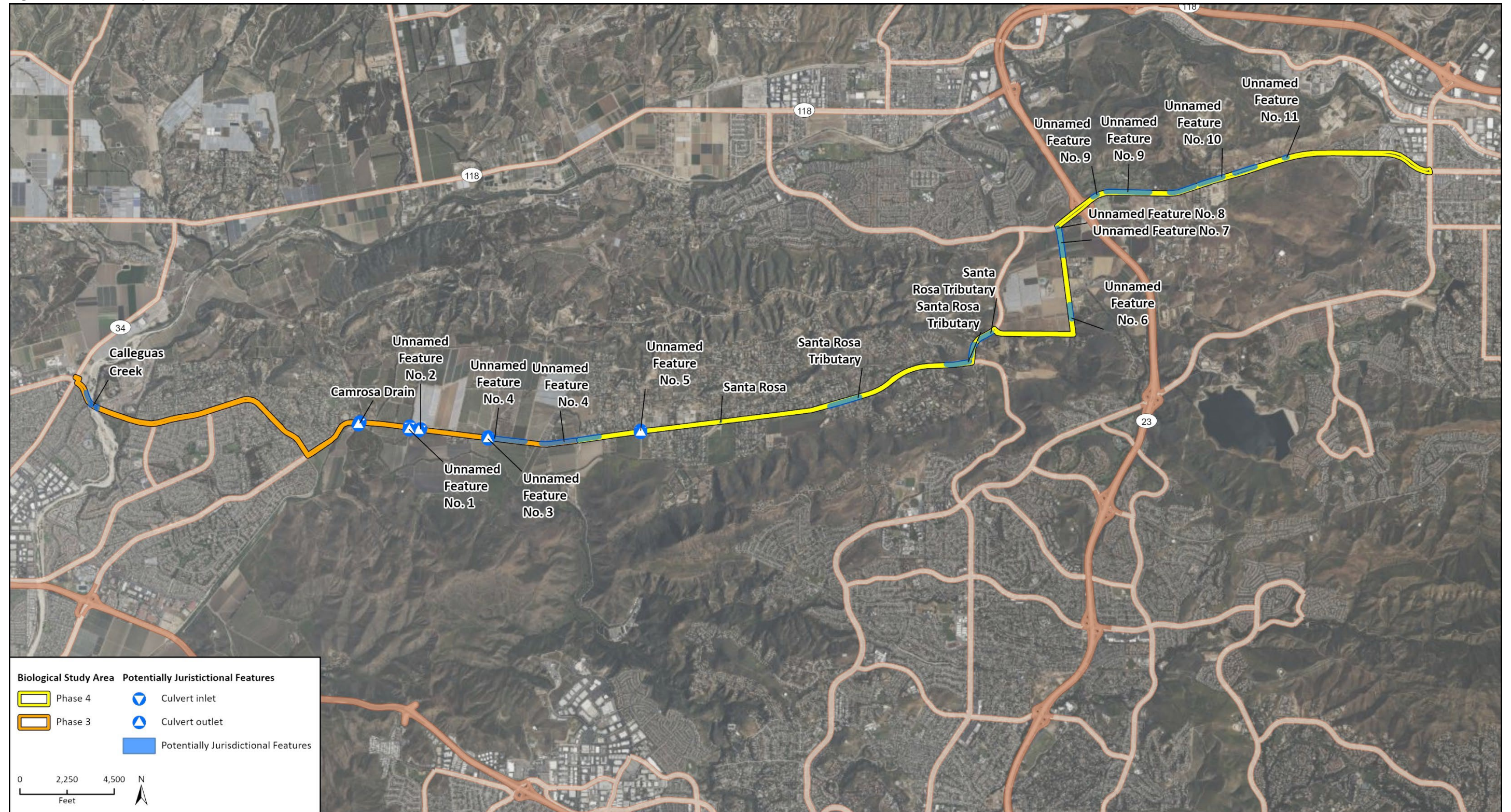
For this assessment, 15 features were mapped, including one natural streambed, six culverts, and eight roadside ditches. Four of these features are redline channels regulated by VCWPD (Calleguas Creek, Camrosa Drain, Santa Rosa, and Santa Rosa Tributary). Calleguas Creek has a natural streambed and is characterized by a sandy stream channel with a bridge crossing. Six features are only present in the BSA as underground culverts. The aboveground portions of these features are outside the BSA. Culverts range in type from corrugated metal pipe culverts to large concrete box culverts. The eight roadside ditches are located alongside roads in the BSA, generally between the road shoulder and adjacent residential buildings or agricultural fields. These ditches may be concrete-lined or natural-bottomed.

Table 2 Potentially Jurisdictional Features

Feature ID	Category	Potential Jurisdiction
Phase 3		
Calleguas Creek	Natural streambed	USACE, RWQCB, CDFW, VCWPD
Camrosa Drain	Culvert	USACE, RWQCB, CDFW, VCWPD
Unnamed Feature No. 1	Culvert	USACE, RWQCB, CDFW
Unnamed Feature No. 2	Culvert	USACE, RWQCB, CDFW
Unnamed Feature No. 3	Culvert	USACE, RWQCB, CDFW
Unnamed Feature No. 4	Roadside ditch	USACE, RWQCB, CDFW
Phase 4		
Unnamed Feature No. 4	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 5	Culvert	USACE, RWQCB, CDFW
Santa Rosa	Culvert	USACE, RWQCB, CDFW, VCWPD
Santa Rosa Tributary	Roadside ditch	USACE, RWQCB, CDFW, VCWPD
Unnamed Feature No. 6	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 7	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 8	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 9	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 10	Roadside ditch	USACE, RWQCB, CDFW
Unnamed Feature No. 11	Roadside ditch	USACE, RWQCB, CDFW

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Figure 5 Potentially Jurisdictional Features Overview



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4.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats in the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Portions of the BSA along much of Tierra Rejada Road, Read Road, and Moorpark Road are located within an Essential Connectivity Area as described in the *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010). This connectivity area connects the Santa Monica Mountains to the south and the Los Padres National Forest to the north. In addition, Calleguas Creek functions as a local route for wildlife movement. Calleguas Creek (or Arroyo Las Posas) extends from the Simi Hills to the northeast and empties into the Pacific Ocean at Mugu Lagoon. The creek connects highly diverse habitat types and provides a valuable movement and migration corridor for many types of wildlife, including terrestrial and semiaquatic species.

4.5 Resources Protected by Local Policies and Ordinances

4.5.1 Ventura County Policies and Ordinances

VCWPD Redline Channels

The list of redline channels under the jurisdiction of the VCWPD was adopted by the District Board of Supervisors in 1960, and then updated and confirmed by them in 1994. Four redline channels were observed in the BSA during the field survey, further described in Section 4.3 above.

Ventura County Protected Trees

Ventura County regulations for protected trees outside the coastal zone apply in the unincorporated portion of the BSA. In accordance with the County's tree protection ordinance, protected trees include oaks and sycamores that measure 9.5 inches in girth (circumference) or larger (generally measured 4.5 feet above ground), trees of any species that have "heritage" status because they measure 90 inches in girth or larger, and trees of any species with a historical designation (Ventura County 2020).

No historical trees were observed in the BSA. The field survey did not include a detailed arborist assessment; however, trees that potentially meet the qualifications to be classified as protected were mapped (Figure 4 and Appendix E). Between 80 and 115 potential protected native trees and between 164 and 229 potential heritage trees were documented in the BSA. Native trees included coast live oaks, valley oaks (*Quercus lobata*), and western sycamores (*Platanus racemosa*). Potential heritage trees included Peruvian pepper trees (*Schinus molle*), blue gum eucalyptus (*Eucalyptus globulus*), pines (*Pinus* spp.), coastal redwoods (*Sequoiadendron sempervierens*), and Canary Island date palms (*Phoenix canariensis*).

Ventura County General Plan

Applicable policies and actions put forth in the Conservation and Open Space Element of the General Plan (County of Ventura 2020) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- **Policy COS-1.1: Protection of Sensitive Biological Resources.** The County shall ensure that discretionary development that could potentially impact sensitive biological resources be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures that fully account for the impacted resource. When feasible, mitigation measures should adhere to the following priority: avoid impacts, minimize impacts, and compensate for impacts. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body. (MPSP, IGC, RDR)
- **Policy COS-1.4: Consideration of Impacts to Wildlife Movement.** When considering proposed discretionary development, County decision-makers shall consider the development's potential project-specific and cumulative impacts on the movement of wildlife at a range of spatial scales including local scales (e.g., hundreds of feet) and regional scales (e.g., tens of miles). (RDR)
- **Policy COS-1.5: Development Within Habitat Connectivity and Wildlife Corridors.** Development within the Habitat Connectivity and Wildlife Corridors overlay zone and Critical Wildlife Passage Areas overlay zone shall be subject to the applicable provisions and standards of these overlay zones as set forth in the Non-Coastal Zoning Ordinance. (RDR)
- **Policy COS-1.10: Evaluation of Potential Impacts of Discretionary Development on Wetlands.** The County shall require discretionary development that is proposed to be located within 300 feet of a wetland to be evaluated by a County-approved biologist for potential impacts on the wetland and its associated habitats pursuant to the applicable provisions of the County's Initial Study Assessment Guidelines. (RDR)
- **Policy COS-1.11: Discretionary Development Sited Near Wetlands.** The County shall require discretionary development to be sited 100 feet from wetland habitats, except as provided below. The 100-foot setback may be increased or decreased based upon an evaluation and recommendation by a qualified biologist and approval by the decision making body based on factors that include, but may not be limited to, soil type, slope stability, drainage patterns, the potential for discharges that may impair water quality, presence or absence of endangered, threatened or rare plants or animals, direct and indirect effects to wildlife movement, and compatibility of the proposed development with use of the wetland habitat area by wildlife. Discretionary development that would have a significant impact on a wetland habitat shall be prohibited unless mitigation measures are approved that would reduce the impact to a less than significant level. Notwithstanding the foregoing, discretionary development that would have a significant impact on a wetland habitat on land within a designated Existing community may be

approved in conjunction with the adoption of a statement of overriding considerations by the decision-making body. (RDR)

Ventura County Initial Study Assessment Guidelines/ Initial Study Biological Assessment

The Initial Study Assessment Guidelines (ISAG) were prepared in accordance with the County of Ventura's Administrative Supplement to State CEQA Guidelines. The Guidelines were originally adopted in 1992 by the directors of those County agencies/departments responsible for evaluating environmental issues and by the County's Environmental Quality Advisory Committee. Discretionary projects that have the potential to impact biological resources require a biological survey and report as part of the application submittal to the County Planning Division. This report is called an Initial Study Biological Assessment (ISBA). Because Calleguas is the Lead Agency, there is no need to submit an ISBA; nevertheless, this report has been prepared in accordance with the ISAG and ISBA requirements to identify the general parameters of "significant impacts" and determine whether any threshold criteria are exceeded by the project.

4.5.2 City Policies and Ordinances

City of Camarillo

General Plan Policies

Applicable policies and actions put forth in the Open Space Element of the General Plan (City of Camarillo 2006) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- Policy 7: Identify and protect natural watersheds, natural drainage beds and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.
- Policy 10: Encourage development in areas where services and facilities already exist and are underused. Promote efficient extension of utilities and services.

Applicable Ordinances (Ord. 663 § 2 (part), 1988.)

- Municipal Code 13.04.630 – Removal and/or trimming of trees.
- Municipal Code 13.12.060 – Maintenance and removal of trees and other plantings.
- Municipal Code 13.12.070 – Protection of trees and other plantings.

City of Moorpark

General Plan Policies

Applicable policies and actions put forth in the Open Space Element of the General Plan (City of Moorpark 1986) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- Policy 4.2: Conserve and protect water quality supplies through cooperative efforts with the Ventura County Water Conservation Plan and any future regional water quality and water

supply plans and programs that may be instrumental in reducing water quality-related problems.

- 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.

Applicable Ordinances (Ord. 101 § 1, 1988)

- Municipal Code Chapter 12.12 – Historic Trees, Native Oak Trees and Mature Trees

City of Simi Valley

General Plan Policies

Applicable policies and actions put forth in the Natural Resources Element of the General Plan (City of Simi Valley 2012) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- NR 2.1: Tree Preservation. Encourage the preservation of trees and native vegetation in development projects. Require that new development utilize creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible. (Imp A-1, A-2, LU-1, LU-7, LU-18, NR-4, NR-5)
- NR 2.4: Habitat Connectivity. Ensure that projects within areas identified as regional wildlife corridors are designed and constructed so as to preserve the ability of wildlife to travel through the region. (Imp A-1, A-2, LU-7, LU-18, NR-4)
- NR 2.6: Site Assessments. Require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors. Ensure that individual projects incorporate measures to reduce impacts to special-status species, sensitive natural communities, and important wildlife areas and movement corridors according to Simi Valley’s environmental review process. (Imp A-1, A-2, LU-1, LU-2, LU-18, NR-2, NR-5)

Applicable Ordinances (Ord. 1085 § 5, 2006)

- Municipal Code Chapter 9-38 – Tree Preservation, Cutting, and Removal

City of Thousand Oaks

General Plan Policies

Applicable policies and actions put forth in the Conservation Element of the General Plan (City of Thousand Oaks 2013) are intended to decrease development pressure on more sensitive or biologically productive areas within the scope of the General Plan. Such policies include the following:

- CO-21: The City shall encourage the proper management, conservation and protection of native plant communities throughout the City’s Planning Area, including developed areas and undeveloped open space lands.

- CO-23: Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.
- CO-30: Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value.
- CO-32: The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Wildlife), the California Native Plant Society (CNPS), the County of Ventura and the City of Thousand Oaks.

Applicable Ordinances (Ord. 1610-NS, 2016)

- Municipal Code Section 9-4.42 – Oak Tree Preservation and Protection
- Municipal Code Section 9-4.43 – Landmark Tree Preservation and Protection

4.6 Habitat Conservation Plans

The BSA does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan area.

5 Impact Analysis and Mitigation Measures

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- d) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

5.1.1 Special-Status Plants

As discussed in Section 4.1.1, the CNDDDB and CNPS queries identified 24 special-status plants that have been previously recorded in either the four USGS 7.5-minute topographic quadrangles crossed by the BSA or within five miles of the BSA. Of these, one has a moderate potential to occur. The remaining 23 species are not expected to occur within the BSA based on the lack of suitable habitat and the non-detection of special-status plant species during field reconnaissance survey.

Lyon's pentachaeta has moderate potential to occur in the California buckwheat scrub community in the BSA north of Tierra Rejada Road and west of State Route 23, where the BSA is adjacent to critical habitat for this species. The project would occur within the existing road at these locations, which is greater than 20 feet away from suitable habitat for Lyon's pentachaeta. Similarly, the direct impacts to the southern California black walnut tree due to injury or mortality during construction are not anticipated given it is greater than 20 feet from the proposed work area.

Implementation of the project would result in impacts to the developed and ornamental land cover types that do not provide suitable habitat for these special-status plant species. Indirect impacts could result from habitat modifications by the introduction of invasive plants from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills and dust during construction.

Implementation of Measure BIO-1 is recommended to ensure all construction personnel are trained in identifying special-status plant species with potential to occur in the BSA. Indirect impacts to potential habitat for Lyon's pentachaeta would also be avoided via implementation of Measure BIO-2, which is to ensure adherence to general Best Management Practices (BMPs). In addition to general BMPs, the project would prepare and implement a stormwater pollution prevention plan (SWPPP) to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the CWA, which is necessary to receive NPDES permit coverage for stormwater discharges. Compliance with the project's SWPPP would avoid and/or minimize potential direct and indirect impacts to special-status species. With implementation of Measures BIO-1 and BIO-2 and the SWPPP, potential direct and indirect impacts to special-status plant species would be reduced to a less-than-significant level.

BIO-1 Biological and Environmental Awareness Training (BEAT) Program

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist, to assist workers in recognizing special-status biological resources which may

occur in the BSA. The specifics of the BEAT Program shall include information about nesting birds and identification of special-status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under Measure BIO-2, presented below. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project.

All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist.

The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program, if required for this project. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs will be explicitly addressed.

BIO-2 General Best Management Practices for Biological Resources

To avoid and/or minimize potential direct and indirect impacts to special-status species and potentially jurisdictional waters and water quality, the following BMPs shall be implemented. The proposed project will be phased and construction is anticipated to be conducted in a linear fashion along the alignment; thus BMPs shall be implemented as necessary along the alignment ahead of or during anticipated construction.

- No native vegetation with a diameter at breast height (DBH) of more than 4 inches shall be removed or damaged without approval by Calleguas.
- Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable.
- Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles.
- A speed limit of 15 miles per hour for construction vehicles shall be implemented on unpaved roads adjacent to native vegetation and potentially jurisdictional waters.
- All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.
- No project construction, activities, and equipment staging shall occur within the bed or banks of Calleguas Creek. No vegetation shall be removed from the channel, bed, or banks of Calleguas Creek.
- Excavated material from trenching along any potentially jurisdictional feature shall be side cast away to prevent sediment deposition within the feature.
- All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.

- All night-time lighting shall be shielded and downcast to avoid potential impacts to wildlife migration.
- No pets shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- While encounters with special-status species are not likely or anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction superintendent or biological monitor. The construction superintendent or biological monitor shall immediately notify Calleguas.
- Before starting or moving construction vehicles, especially after a few days of non-operation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.

5.1.2 Special-Status Wildlife

As discussed in Section 4.1.2, the CNDDDB query identified 30 special-status wildlife that have been previously recorded either in the four USGS 7.5-minute topographic quadrangles crossed by the BSA or within five miles of the BSA. Of these, six have a moderate potential to occur and the remaining 24 special-status species are not expected to occur based on a lack of suitable habitat.

Special-Status Amphibians and Reptiles

Marginally suitable habitat for western spadefoot toad, California legless lizard, and coastal whiptail, is limited to the natural habitats dominated by native shrubs (i.e., California buckwheat scrub, and purple sage scrub) on the margins of the BSA. These areas are not anticipated to be directly impacted by this project. Therefore, direct impacts to these species would not occur. If individuals are present during construction, potential indirect impacts could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes. Nonetheless, given the marginally suitable nature and limited amount of potential habitat adjacent to the project site, and the fact that project impacts would occur within existing developed areas subject to heavy traffic and ornamental landscaping, potential project impacts are unlikely to cause the regional populations of these species to drop below self-sustaining levels. Implementation of Measures BIO-1 and BIO-2 above would further reduce the potential for indirect impacts. Therefore, potential impacts to western spadefoot toad, California legless lizard, and coastal whiptail would be less than significant.

Special-Status and Nesting Birds

Marginally suitable habitat for southern California rufous-crowned sparrow and coastal California gnatcatcher is limited to the California buckwheat scrub and purple sage scrub habitats on the margins of the BSA. The Phase 4 alignment would traverse past several areas documented by the CNDDDB to support coastal California gnatcatcher. As described, the project would avoid natural communities and alliances/associations associated with coastal sage scrub vegetation.

In addition, marginally suitable arroyo willow – mulefat thicket habitat for least Bell's vireo occurs within Calleguas Creek. Phase 3 of the alignment within Camarillo along Santa Rosa Road passes

near Arroyo Conejo Creek where populations of least Bell's vireo have been documented according to the CNDDDB. As described, the project would avoid natural communities and alliances/associations associated with riparian vegetation. These areas are not anticipated to be directly impacted by this project; therefore, direct impacts to these species are not anticipated. If individuals are present during construction, potential indirect impacts could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes, or cause nest failures.

While impacts to common nesting birds do not generally rise to the level of significance under CEQA, the loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503 and must be avoided.

Therefore, in addition to BIO-1 and BIO-2 above, implementation of Measure BIO-3 is recommended to reduce potential indirect effects to special-status and nesting birds to a less than significant level.

BIO-3 Protection of Nesting Birds

Project-related activities shall occur outside of the bird breeding season (generally February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season and will impact potentially suitable nesting habitat (i.e., natural / ornamental habitats), then no more than seven days prior to initiation of ground-disturbing activities (including, but not limited to, vegetation removal, site preparation, grading, excavation, and trenching) within the project site, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-foot for potential raptor nesting habitat), where accessible and public. The proposed project will be phased and construction is anticipated to be conducted in a linear fashion along the alignment; thus pre-construction nesting bird surveys shall be completed as necessary along the alignment (i.e., rolling surveys) ahead of anticipated construction. Surveys shall be completed no more than seven days before anticipated construction activities.

Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to Calleguas.

If no nesting birds are observed during pre-construction surveys, no further actions are necessary. Modifications to the buffer size shall occur only in consultation with the qualified biologist. Active nests shall be monitored at a minimum of once per week while construction is occurring until it has been determined the young have fledged the nest. No ground disturbance or vegetation removal shall occur within this buffer until the qualified biologist confirms breeding/nesting has ended, and young are no longer dependent on the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.

If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA L_{eq} at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist

has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA L_{eq} at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.

5.2 Sensitive Natural Communities and Critical Habitat

The proposed project would have a significant effect on biological resources if it would:

- b) *Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*

No sensitive natural communities are located within the BSA. The BSA overlaps with critical habitat for coastal California gnatcatcher and is adjacent to critical habitat for Lyon's pentachaeta and Riverside fairy shrimp.

Critical habitat for coastal California gnatcatcher is present in the eastern portion of the BSA; however, the majority of the BSA within the area mapped as critical habitat consists of developed areas and ornamental plants not suitable for coastal California gnatcatcher. One small patch of California sagebrush scrub is present in this area, and additional coastal scrub communities potentially suitable for coastal California gnatcatcher are present to the north and south of the BSA.

Implementation of the project would result in impacts to the developed, disturbed, or ornamental land cover types. California sagebrush scrub is limited to hilly roadway shoulders approximately 15 to 20 feet from proposed construction areas, which are not anticipated to be affected by project activities. No direct impacts to natural areas that could potentially support coastal California gnatcatcher will occur. Further, implementation of BIO-1 and BIO-2 would reduce the potential for indirect impacts to adjacent habitat.

The designated critical habitat for Lyon's pentachaeta and Riverside fairy shrimp is defined by the extent of a vernal pool located uphill and outside the BSA. The nearby road shoulder within the BSA is characterized by upland vegetation consisting of California buckwheat scrub and purple sage scrub. If groundwater dewatering is required based on site conditions, the project would adhere to applicable rules and regulations related to discharge. Depending on the quality of the dewatered groundwater, water would be utilized on-site or trucked off-site for reuse for dust control and irrigation. Given that vernal pools are rain-fed ecosystems perched on a hard layer of soil (e.g., clay), they are not appreciably affected by fluctuations in groundwater levels. Thus, dewatering would not be expected to directly impact water levels within the vernal pool. In addition, implementation of BIO-1, BIO-2, and the project SWPPP would help assure direct and indirect impacts to critical habitat within the vernal pool are avoided.

In addition, the CRSMP has an existing National Pollution Discharge Elimination System (NPDES) permit for ocean outfall discharges via the Hueneme Outfall, located in the vicinity of Port Hueneme Beach, into the Pacific Ocean. The waters in this area support many resident and migratory fish, important marine plants such as eelgrass (*Zostera marina*), and special-status wildlife such as seabirds, marine mammals, and sea turtles. Potential impacts to these marine resources are described in the 2002 Final PEIR which provided CEQA clearance for the overall CRSMP and project-specific clearance for Phase 1 of the CRSMP. Discharge from Phases 3 and 4 would be subject to the same NPDES discharge requirements as existing conditions.

Based on the analysis above, impacts to sensitive natural communities and critical habitat would be less than significant.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

The reconnaissance field survey identified 15 potentially jurisdictional features in the BSA. Project construction will include a combination of trench excavation and trenchless methods (e.g., boring and jacking). Using trenchless methods, impacts to jurisdictional features would be minimized or avoided. Adherence to Measures BIO-1 and BIO-2 would reduce potential direct and indirect impacts to a less than significant level by educating construction personnel on protective measures for jurisdictional features, and implementation of BMPs that would reduce the potential for indirect impacts.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

- d) *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

The BSA is located within an Essential Connectivity Area which connects the Santa Monica Mountains to the south and the Los Padres National Forest to the north. However, the majority of the BSA located within the Essential Connectivity Area is characterized by paved roads, unvegetated road shoulders, and ornamental vegetation. Limited native vegetation is present, and direct impacts to these communities are not anticipated.

Calleguas Creek likely functions as a local route for wildlife movement. Pipe would be installed within existing utility conduit on the bridge over Calleguas Creek; therefore, no direct impacts would occur to this feature.

Project activities would not interfere with wildlife movement because the construction work areas would occur along existing roads and developed / disturbed areas, and the pipelines would be located below the soil surface following completion of the project. These temporary work areas would not exacerbate existing barriers to wildlife movement. Furthermore, project activities would mostly be avoided during dusk and dawn when wildlife movement and foraging is more likely. Therefore, direct impacts to wildlife movement are not anticipated to occur as a result of the project.

Potential indirect impacts to wildlife movement could occur through lighting of the project site temporarily during construction, which could deter wildlife migration at night. As such, implementation of Measure BIO-2, including the provision for all lighting to be shielded and downcast, is recommended to reduce indirect impacts to wildlife movement to a less than significant level.

5.5 Resources Protected by Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

Trees meeting the County of Ventura and/or cities of Camarillo, Moorpark, Simi Valley, or Thousand Oaks tree protection standards were observed throughout the BSA. A large portion of the project alignment is located within developed public rights-of-way which are lined with protected trees (e.g., coast live oak, California sycamore, southern California black walnut). Potential impacts to protected trees may include, but are not limited to, construction equipment compacting soil around the trees, disturbance of the canopy and the root zone, and trenching in the root zone.

The project is not anticipated to include tree-altering activities requiring a discretionary permit from the County (e.g., tree removal or damage), and a comprehensive arborist report is not required to fully survey and document all protected trees in the BSA. Should project construction necessitate a tree-altering activities, then an arborist-prepared study and Tree Protection Plan, as outlined under Measure BIO-4, would be prepared to address the tree protection measures during construction and mitigation requirements if protected trees are impacted by the project. Based on the current project description and construction methodologies, the project would not conflict with any local policies or ordinances protecting biological resources.

BIO-4 Arborist Report

Based on final design, if project construction is anticipated to impact protected trees, then prior to construction, an Arborist Report shall be prepared to address tree protection measures during construction and mitigation requirements for those protected trees impacted by the project. The report shall be prepared by an arborist certified by the International Society of Arboriculture (ISA) or a related professional, such as a landscape architect, with qualifying education, knowledge, and experience. The report shall meet the specific content requirements for Arborist Reports as outlined in any applicable municipal code. The Arborist Report shall include, at minimum, the following:

- An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating
- Representative photographs of each regulated tree which may be encroached upon
- Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes
- Requirements for protective tree fencing, and designated tree protection zones (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), and measures for addressing roots and limbs that are cut during trenching
- Description of activities prohibited/permitted within the tree protection zone, encroachment boundaries
- Description of any potential transplanting or replacement tree plantings.

5.6 Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The BSA is not located within any Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan area. Therefore, no impact would occur, and no mitigation measures are recommended.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have not been performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, review of potentially jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Regulatory Setting

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include the following:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States)
- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- Los Angeles Regional Water Quality Control Board (waters of the State)
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources)
- Ventura County General Plan
- City of Camarillo General Plan
- City of Moorpark General Plan
- Simi Valley General Plan

United States Army Corps of Engineers

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years, the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," which dates from 1986, remains in effect albeit with supplemental guidance interpreting applicable court decisions as described below.

Waters of the U.S.

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. 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;

Calleguas Regional Salinity Management Pipeline Phases 3 & 4

2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent 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 including any such waters:
 - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines 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" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned

wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Limitations on Jurisdiction based on Sackett v. USEPA Supreme Court Decision

On May 25, 2023, the Supreme Court issued its decision on the petition from the Sacketts, a family in Idaho that was subject to a compliance order from the USEPA for backfilling their lot near Priest Lake, which the USEPA claimed contained federally regulated wetlands. The wetlands in question were adjacent to a ditch that fed a creek that ultimately drained into Priest Lake, a navigable water body. The USEPA asserted that the Sacketts had violated the law by filling the wetlands on their property without a permit. The Court's decision addressed controversy over whether, and under what conditions, the CWA reaches navigable waters' tributaries or adjacent wetlands. The Supreme Court's decision in Sackett provides definitive guidance to the agencies in determining the limits of

their Clean Water Act authority. Major tenets of the decision have been incorporated into the agencies' current regulations through the September 2023 Conforming Rule.

The Court decided:

- "Adjacent wetlands" are WOTUS only if there is a continuous surface connection between the wetland and a navigable or relatively permanent water body, such that it is difficult to determine the boundary between the wetland and the water body. The opinion notes that "temporary interruptions to surface connection may sometimes occur because of phenomena like low tides or dry spells." The agencies addressed this element by defining the term "adjacent" to mean "having a continuous surface connection" in the Conforming Rule.
- The Significant Nexus Standard, introduced by the Court in prior decisions, is not mentioned in the Clean Water Act and should not be used. The Court determined that the standard applies ecological factors whose use in determining jurisdiction is not supported by the statute. The Conforming Rule removed significant nexus considerations from the definition.
- Although jurisdiction over tributaries was not addressed by the Court, the decision stated that "...the [Clean Water Act's] use of "waters" encompasses only those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as streams, oceans, rivers, and lakes." The Conforming Rule makes clear that only relatively permanent tributaries qualify as "waters of the United States."

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide

state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a “reasonable period of time” for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB’s *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act’s requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA’s *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

- (i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- (ii) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- (iii) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered wildlife species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to

engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes.
3. New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTA requires the USFWS to publish a list of all nonnative, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA's protections extend to candidate species during the period (typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFW determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
 - References "river," "stream," and "lake"
 - References "natural flow"
 - References "bed," "bank," and "channel"
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987)), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
 - Have a source and a terminus
 - Have banks and a channel
 - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
 - Represent the depression between the banks worn by the regular and usual flow of the water
 - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
 - Include the land that is covered by the water in its ordinary low stage
 - Include lands below the OHWM
- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
 - Flows at least periodically or intermittently
 - Flows through a bed or channel having banks
 - Supports fish or aquatic life
 - Can be dry for a period of time

- Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation
- **Guidance documents**, including *A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
 - A stream may flow perennially or episodically
 - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
 - Width of a stream course can reasonably be identified by physical or biological indicators
 - A stream may have one or more channels (single thread vs. compound form)
 - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
 - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
 - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic wildlife including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
 - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. The importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Local Jurisdictions

Ventura County

The Ventura County General Plan, which is mandated by State law, sets forth the goals, policies, and programs the County will implement to manage future growth and land uses. The General Plan, adopted by the Board of Supervisors, embodies the vision for the future of unincorporated Ventura County.

Ventura County Protected Trees

Ventura County regulations for protected trees outside the coastal zone apply in unincorporated portions of the County. In accordance with the County's tree protection ordinance, protected trees include oaks and sycamores that measure 9.5 inches in girth (circumference) or larger (generally measured 4.5 feet above ground), trees of any species that have "heritage" status because they measure 90 inches in girth or larger, and trees of any species with a historical designation.

City of Camarillo

The City of Camarillo's General Plan is a comprehensive, long-range guide for the development of the community. It consists of nine elements: CURB, Land Use, Circulation, Housing, Recreation, Open Space and Conservation, Community Design, Safety, and Noise. Each element contains specific goals, policies, and programs to be implemented. The General Plan, which is adopted by the City Council, establishes policy for the physical development of the city.

Applicable Ordinances (Ord. 663 § 2 (part), 1988.)

- Municipal Code 13.04.630 – Removal and/or trimming of trees.
- Municipal Code 13.12.060 – Maintenance and removal of trees and other plantings.
- Municipal Code 13.12.070 – Protection of trees and other plantings.

City of Moorpark

The City of Moorpark's General Plan is a long-range policy document that sets forth broad goals and objectives for the growth and development of the City of Moorpark. As required by state law, the General Plan takes a long-term view and is designed to guide growth and development in the city over the next 20 to 25 years.

Applicable Ordinances (Ord. 101 § 1, 1988)

- Municipal Code Chapter 12.12 – Historic Trees, Native Oak Trees and Mature Trees

City of Simi Valley

The City of Simi Valley's General Plan is intended to provide a meaningful guide for the future growth and development of Simi Valley over the next twenty years and fulfills statutory requirements. It is a comprehensive framework for the City's physical, economic, and social development that sustains natural environmental resources. It is also long range—looking ahead to 2030 and beyond—while at the same time presenting policies to guide day-to-day decisions.

Applicable Ordinances (Ord. 1085 § 5, 2006)

- Municipal Code Chapter 9-38 – Tree Preservation, Cutting, and Removal

City of Thousand Oaks

The Thousand Oaks General Plan provides a long-range comprehensive guide for the physical development of the City's Planning Area. The General Plan comprises a statement of goals and policies related to the community's development, and various elements which provide more detailed policies and standards in certain topic areas. Together, these serve as the foundation for guiding public and private activities related to the City's development.

Applicable Ordinances (Ord. 1610-NS, 2016)

- Municipal Code Section 9-4.42 – Oak Tree Preservation and Protection
- Municipal Code Section 9-4.43 – Landmark Tree Preservation and Protection

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Appendix B

Site Photographs



Photograph 1. Example of the ornamental and developed land cover types along Tierra Rejada Road. View facing southeast. October 6, 2022.



Photograph 2. Example of a potential heritage tree along Tierra Rejada Road. View facing southwest. October 6, 2022.



Photograph 3. Unnamed Feature No. 8. Concrete-lined roadside ditch along Sunset Valley Road. View facing southwest. October 6, 2022.



Photograph 4. California buckwheat scrub on hillside along the shoulder of Tierra Rejada Road. View facing northwest. October 6, 2022.



Photograph 5. View of Calleguas Creek crossing under Upland Road. Riverwash land cover type is shown in the active channel. View facing southeast. October 6, 2022.



Photograph 6. Arroyo willow – mulefat thickets on bank of Calleguas Creek. View facing southwest. October 6, 2022.



Photograph 7. Unnamed Feature No. 9. Concrete roadside ditch along Tierra Rejada Road. View facing northeast. October 6, 2022.



Photograph 8. Southern California black walnut. View facing south. October 6, 2022.

Appendix C

Floral and Faunal Compendiums

Floral Compendium

Scientific Name ¹	Common Name	Origin and Status ²
<i>Acmispon glaber</i>	deerweed	Native
<i>Artemisia californica</i>	California sagebrush	Native
<i>Arundo donax</i>	giant reed	Introduced; Cal-IPC - High
<i>Atriplex lentiformis</i>	big saltbush	Native
<i>Avena barbata</i>	slender oat	Introduced; Cal-IPC - Moderate
<i>Avena fatua</i>	wild oat	Introduced; Cal-IPC - Moderate
<i>Encelia californica</i>	California brittlebush	Native
<i>Baccharis pilularis</i>	coyote brush	Native
<i>Baccharis salicifolia</i>	mule fat	Native
<i>Bromus diandrus</i>	ripgut brome	Introduced; Cal-IPC - Moderate
<i>Agapanthus africanus</i>	lily of the Nile	Introduced
<i>Bromus hordeaceus</i>	soft chess	Introduced; Cal-IPC - Limited
<i>Muhlenbergia rigens</i>	deergrass	Native
<i>Cortaderia selloana</i>	pampas grass	Introduced; Cal-IPC - High
<i>Bromus rubens</i>	red brome	Introduced; Cal-IPC - High
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	Introduced
<i>Centaurea melitensis</i>	totalote	Introduced; Cal-IPC - Moderate
<i>Centaurea solstitialis</i>	yellow star-thistle	Introduced; Cal-IPC - High
<i>Erigeron bonariensis</i>	flax-leaved horseweed	Introduced
<i>Erigeron canadensis</i>	Canada horseweed	Native
<i>Carpobrotus edulis</i>	iceplant	Introduced; Cal-IPC - High
<i>Tamarix ramosissima</i>	tamarisk	Introduced; Cal-IPC - High
<i>Erodium cicutarium</i>	redstem filaree	Introduced; Cal-IPC - Limited
<i>Foeniculum vulgare</i>	fennel	Introduced; Cal-IPC - Moderate
<i>Hesperoyucca whipplei</i>	chaparral yucca	Native
<i>Hirschfeldia incana</i>	perennial mustard	Introduced; Cal-IPC - Moderate
<i>Hordeum murinum</i>	foxtail barley	Introduced; Cal-IPC - Moderate
<i>Pinus</i> spp.	ornamental pine	Introduced
<i>Bougainvillea</i> spp.	Bougainvillea	Introduced
<i>Jacaranda mimosifolia</i>	blue jacaranda	Introduced
<i>Juglans californica</i>	southern California black walnut	Native; CRPR 4.2
<i>Malva parviflora</i>	cheeseweed	Introduced
<i>Nicotiana glauca</i>	tree tobacco	Introduced; Cal-IPC - Moderate
<i>Platanus racemosa</i>	western sycamore	Native
<i>Platanus acerifolia</i>	London plane	Introduced
<i>Quercus agrifolia</i>	coast live oak	Native
<i>Acacia redolens</i>	bank catclaw	Introduced
<i>Quercus lobata</i>	valley oak	Native
<i>Rhus integrifolia</i>	lemonade berry	Native

Calleguas Municipal Water District
Calleguas Regional Salinity Management Pipeline Phases 3 & 4

Scientific Name ¹	Common Name	Origin and Status ²
<i>Rhus ovata</i>	sugarbush	Native
<i>Helianthus annuus</i>	annual sunflower	Native
<i>Ricinus communis</i>	castor bean	Introduced; Cal-IPC - Limited
<i>Salix lasiolepis</i>	arroyo willow	Native
<i>Salsola tragus</i>	Russian thistle	Introduced; Cal-IPC - Limited
<i>Salvia apiana</i>	white sage	Native
<i>Salvia leucophylla</i>	purple sage	Native
<i>Salvia mellifera</i>	black sage	Native
<i>Schinus molle</i>	Peruvian pepper	Introduced; Cal-IPC - Limited
<i>Tribulus terrestris</i>	puncture vine	Introduced; Cal-IPC - Limited
<i>Stephanomeria cichoriacea</i>	chicory leaved stephanomeria	Native
<i>Opuntia littoralis</i>	coastal prickly pear	Native
<i>Pennisetum setaceum</i>	fountain grass	Introduced; Cal-IPC - Watch
<i>Heterotheca grandiflora</i>	telegraph weed	Native
<i>Washingtonia robusta</i>	Mexican fan palm	Introduced; Cal-IPC - Moderate
<i>Ficus macrophylla</i>	Morton bay fig	Introduced
<i>Syagrus romanzoffiana</i>	queen palm	Introduced
<i>Cupaniopsis anacardioides</i>	carrotwood	Introduced
<i>Sequoia sempervirens</i>	redwood	Native
<i>Xanthium strumarium</i>	rough cocklebur	Native

¹Jepson Flora Project 2022.

² Cal-IPC 2022; CNPS 2022b.

CNPS California Rare Plant Rank (CRPR)

1A = Presumed extirpated in California, and rare or extinct elsewhere

1B = Rare, Threatened, or Endangered in California and elsewhere

4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% of occurrences threatened/ moderate degree and immediacy of threat)

Faunal Compendium

Scientific Name	Common Name	Status	Native or Introduced
Birds¹			
<i>Buteo jamaicensis</i>	red-tailed hawk	–	Native
<i>Calypte anna</i>	Anna’s hummingbird	–	Native
<i>Cathartes aura</i>	turkey vulture	–	Native
<i>Corvus brachyrhynchos</i>	American crow	–	Native
<i>Corvus corax</i>	common raven	–	Native
<i>Haemorhous mexicanus</i>	house finch	–	Native
<i>Psaltriparus minimus</i>	bushtit	–	Native
<i>Sayornis nigricans</i>	black phoebe	–	Native
<i>Zenaida macroura</i>	mourning dove	–	Native
Mammals			
<i>Canis lupus familiaris</i>	domesticated dog	–	Introduced
<i>Felis catus</i>	domesticated cat	–	Introduced
<i>Otospermophilus beecheyi</i>	California ground squirrel	–	Native
Reptiles²			
<i>Sceloporus occidentalis</i>	western fence lizard	–	Native

¹ Rodewald 2015

² California Herps 2022

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Appendix D

Special-status Species Evaluation Tables

Special-status Plant Species in the Regional Vicinity of the BSA

Scientific Name Common Name	Status Fed/State CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE/None G2/S2 1B.1	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. Elevations: 15-2100ft. (4-640m.) Blooms Jan-Aug.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited. Many CNDDDB occurrences are located within the surveyed quadrangles, including 12 from 2019 and 2020.
<i>Baccharis malibuensis</i> Malibu baccharis	None/None G1/S1 1B.1	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. Elevations: 490-1000ft. (150-305m.) Blooms Aug.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. Volcanic substrate is limited. The only CNDDDB located within the surveyed quadrangles is from 2008 and is located approximately 3.5 miles southeast of the BSA.
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa-lily	None/None G4T2T3/S2 S3 1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, valley and foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. Elevations: 1050-3280ft. (320-1000m.) Blooms Mar-Jun(Nov).	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. The BSA is outside the elevation range for this species. Both CNDDDB occurrences located within the surveyed quadrangles are from 2019, and the closest is located approximately 3.2 miles southeast of the BSA.
<i>Centromadia parryi</i> ssp. <i>australis</i> southern tarplant	None/None G3T2/S2 1B.1	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Elevations: 0-1575ft. (0-480m.) Blooms May-Nov.	Not expected	Potentially suitable grasslands are present in the BSA. However, these natural areas are very limited and dominated by dense non-native species. Vernal mesic areas are not present. The only CNDDDB occurrence located within the surveyed quadrangles is from 2003 and is located approximately 3.4 miles south of the BSA.
<i>Deinandra minthornii</i> Santa Susana tarplant	None/SCR G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. Elevations: 920-2495ft. (280-760m.) Blooms Jul-Nov.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited and sandstone outcrops are absent. The BSA is outside the elevation range for this species. Multiple CNDDDB occurrences are located within the surveyed quadrangles, the most recent of which is from 2019 and is located approximately 4.5 miles south of the BSA.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes. On rocky areas and dunes. Elevations: 0-655ft. (0-200m.) Blooms Apr-Jun.	Not expected	No suitable chaparral, coastal dunes, or rocky areas are present in the BSA. The only CNDDDB occurrence located within the surveyed quadrangles is an undated observation from before 1987 located approximately 8 miles south of the BSA.

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Scientific Name Common Name	Status Fed/State CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475ft. (5-450m.) Blooms Apr-Jun.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited. Serpentine soils are not present. Multiple CNDDDB occurrence are located within the surveyed quadrangles, the closest of which is from 2015 and is located approximately 2.3 miles south of the BSA.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i> Agoura Hills dudleya	FT/None G5T1/S1 1B.2	Perennial herb. Chaparral, cismontane woodland. Rocky, volcanic breccia. Elevations: 655-1640ft. (200-500m.) Blooms May-Jun.	Not expected	No suitable chaparral or woodland are present in the BSA, and rocky volcanic breccia is absent. Multiple CNDDDB occurrence are located within the surveyed quadrangles, all of which are over 7 miles south of the BSA.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> marcescent dudleya	FT/SCR G5T2/S2 1B.2	Perennial herb. Chaparral. On sheer rock surfaces and rocky volcanic cliffs. Elevations: 490-1705ft. (150-520m.) Blooms Apr-Jul.	Not expected	No suitable chaparral or sheer rock surfaces or cliffs are present in the BSA. Two CNDDDB occurrences are located within the surveyed quadrangles. Both are from 2010 and are over 8.5 miles south of the BSA.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica dudleya	FT/None G5T1/S1 1B.1	Perennial herb. Chaparral, coastal scrub. In canyons on volcanic or sedimentary substrates; primarily on north-facing slopes. Elevations: 490-5495ft. (150-1675m.) Blooms Mar-Jun.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. No CNDDDB occurrences are located within the surveyed quadrangles.
<i>Dudleya parva</i> Conejo dudleya	FT/None G1/S1 1B.2	Perennial herb. Coastal scrub, valley and foothill grassland. In clay or volcanic soils on rocky slopes and grassy hillsides. Elevations: 195-1475ft. (60-450m.) Blooms May-Jun.	Low potential	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including several within 0.5 miles of the BSA.
<i>Dudleya verityi</i> Verity's dudleya	FT/None G1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. Elevations: 195-395ft. (60-120m.) Blooms May-Jun.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited and rock outcrops are absent. Multiple CNDDDB occurrences are located within the surveyed quadrangles, the closest of which is located approximately 3 miles south of the BSA.
<i>Eriogonum crocatum</i> Conejo buckwheat	None/SCR G1/S1 1B.2	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. Elevations: 165-1905ft. (50-580m.) Blooms Apr-Jul.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and volcanic outcrops are absent. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including several located approximately 0.5 miles south of the BSA.

Scientific Name Common Name	Status Fed/State CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660ft. (70-810m.) Blooms Feb-Jul(Sep).	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. Three CNDDDB occurrences are located within the surveyed quadrangles, the closest of which is from 2011 and is located approximately 1 mile north of the BSA.
<i>Lupinus paynei</i> Payne's bush lupine	None/None G1Q/S1 1B.1	Perennial shrub. Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. Elevations: 720-1380ft. (220-420m.) Blooms Mar-Apr(May-Jul).	Not expected	Potentially suitable coastal scrub, riparian scrub, and grasslands are present in the BSA. However, these natural areas are very limited. The only CNDDDB occurrence is from 2008 and is located approximately 1.2 miles north of the BSA.
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> white-veined monardella	None/None G4T3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Dry slopes. Elevations: 165-5005ft. (50-1525m.) Blooms (Apr)May-Aug(Sep-Dec).	Not expected	No suitable chaparral or woodlands are present in the BSA. The only CNDDDB occurrence located within the surveyed quadrangles is from 2008 and is located approximately 6.5 miles south of the BSA.
<i>Monardella sinuata</i> ssp. <i>gerryi</i> Gerry's curly-leaved monardella	None/None G3T1/S1 1B.1	Annual herb. Coastal scrub. Sandy openings. Elevations: 490-805ft. (150-245m.) Blooms Apr-Jun.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. Three CNDDDB occurrences are located within the surveyed quadrangles, including one from 2015 which is located approximately 1 mile north of the BSA.
<i>Navarretia ojaiensis</i> Ojai navarretia	None/None G2/S2 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Elevations: 900-2035ft. (275-620m.) Blooms May-Jul.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited. The BSA is outside the elevation range for this species. Three CNDDDB occurrences are located within the surveyed quadrangles, including one from 2014 located approximately 2.2 miles south of the BSA.
<i>Nolina cismontana</i> chaparral nolina	None/None G3/S3 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. Elevations: 460-4185ft. (140-1275m.) Blooms (Mar)May-Jul.	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2017 that is located approximately 3.6 miles southeast of the BSA.
<i>Orcuttia californica</i> California Orcutt grass	FE/SCE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 50-2165ft. (15-660m.) Blooms Apr-Aug.	Not expected	No suitable vernal pools are present in the BSA. Three CNDDDB occurrences are located within the surveyed quadrangles, including one from 2011 that is located approximately 0.8 miles north of the BSA.

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Scientific Name Common Name	Status Fed/State CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	FE/SE G1/S1 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. Elevations: 100-2265ft. (30-690m.) Blooms (Feb)Mar-Aug.	Moderate potential	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited. The BSA is adjacent to critical habitat for this species. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2011 which overlaps the BSA.
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	None/None G4/S2 2B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy, gravelly sites. Elevations: 0-6890ft. (0-2100m.) Blooms (Jul)Aug-Nov(Dec).	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. The only CNDDDB occurrence located within the surveyed quadrangles is from 1959 and is located approximately 4.5 miles south of the BSA.
<i>Quercus dumosa</i> Nuttall's scrub oak	None/None G3/S3 1B.1	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. Elevations: 50-1310ft. (15-400m.) Blooms Feb-Apr(May-Aug).	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. The only CNDDDB occurrence located within the surveyed quadrangles is from 2016 and is located approximately 6 miles south of the BSA.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr(May).	Not expected	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2016 that is located approximately 1.3 miles south of the BSA.

Regional Vicinity refers to within the four USGS 7.5-minute topographic quadrangles crossed by the BSA

Status (Federal/State)

- FE = federal Endangered
- FT = federal Threatened
- SE = state Endangered
- SCE = state Candidate Endangered
- SR = state Rare
- SCR = state Candidate Rare

CRPR (CNPS California Rare Plant Rank)

- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2B = Rare, Threatened, or Endangered in California, but more common elsewhere
- 4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

- .1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
- .2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
- .3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant
- GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Special-status Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	None/None G2/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low potential	Potential food sources are located in small portions of the BSA. Four CNDDDB occurrences are located within the quadrangles surveyed, including three from 2019 and 2020.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE/None G1G2/S1S2	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Not expected	No swales or vernal pools are present in the BSA. The BSA is adjacent to critical habitat for this species. The only CNDDDB occurrence located within the surveyed quadrangles is from 2011 and is located approximately 300 feet north of the BSA, west of Moorpark Freeway and north of Tierra Rejada Road.
<i>Trimerotropis occidentiloides</i> Santa Monica grasshopper	None/None G1G2/S1S2	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.	Not expected	The BSA is isolated from the Santa Monica Mountains. Two CNDDDB occurrences are located within the surveyed quadrangles. The closest is from 1974 and is located approximately 5.4 miles south of the BSA.
Fish				
<i>Gila orcuttii</i> arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not expected	Natural drainages in the BSA are dry most of the year. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2000 located in Conejo Creek approximately 500 feet south of the BSA.
<i>Oncorhynchus mykiss irideus</i> pop. 10 steelhead - southern California DPS	FE/None G5T1Q/S1	federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Not expected	Natural drainages in the BSA are dry most of the year. The only CNDDDB occurrence located within the surveyed quadrangles is from 2013 and is located in Conejo Creek approximately 2 miles 2 south of the BSA.

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Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
Amphibians				
<i>Spea hammondi</i> western spadefoot toad	None/None G2G3/S3 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Moderate potential	Potentially suitable grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to roadways. No vernal pools are present within the BSA; however several vernal pools are present within a mile of the BSA. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2013 that is located approximately 0.3 mile north of the BSA.
Reptiles				
<i>Anniella</i> spp. California legless lizard	None/None G3G4/S3S4 SSC	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of <i>Anniella</i> not yet assigned to new species within the <i>Anniella pulchra</i> (northern California legless lizard) complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Moderate potential	Potentially suitable habitats with open soil are present in the BSA, though these natural areas are very limited and are adjacent to roadways. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2014 that is located within 0.4 mile of the BSA and one from 1982 that overlaps the BSA.
<i>Anniella stebbinsi</i> southern California legless lizard	None/None G3/S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Low potential	Potentially suitable natural areas with sparse vegetation are present in the BSA; however, these natural areas are very limited and are adjacent to roadways. Three CNDDDB occurrences are located within the surveyed quadrangles, including one from 2015 that is located approximately 3.8 miles south of the BSA.
<i>Arizona elegans occidentalis</i> California glossy snake	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to roadways. The only CNDDDB occurrence located within the surveyed quadrangles is from 1995 and is located approximately 3.5 miles north of the BSA.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate potential	Potentially suitable natural areas with sparse vegetation are present in the BSA, however these natural areas are very limited and are adjacent to roadways. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 1996 that is located approximately 0.8 mile north of the BSA.

Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	None/None G5T2T3/S2?	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	Low potential	Potentially suitable natural areas with sparse vegetation are present in the BSA, however these natural areas are very limited and are adjacent to roadways. The only CNDDDB occurrence located within the surveyed quadrangles, is from 2015 and is located approximately 0.8 mile north of the BSA.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected	Irrigation and drainage ditches are present in the BSA. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2000 that is located along Conejo Creek, adjacent to the BSA.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low potential	No suitable sand washes with alluvial scrub vegetation are present in the BSA. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 2007 that is located approximately 0.8 miles north of the BSA.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not expected	No streams with permanent fresh water are present in the BSA. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 1993 that is located approximately 0.3 mile north of the BSA.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not expected	No lakes or ponds are present in the BSA. The only CNDDDB occurrence located within the surveyed quadrangles is from 1995 and is located approximately 7 miles south of the BSA, along Lake Sherwood.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Moderate potential	Potentially suitable coastal sage scrub is present in the BSA; however, these natural areas are very limited and are adjacent to roadways. Three CNDDDB occurrences are located in the surveyed quadrangles, including one from 2017 that is located approximately 0.6 mile north of the BSA.

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Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Low potential	The BSA crosses primarily flat residential and agricultural areas. Tall trees are present. Three CNDDDB occurrences are located within the surveyed quadrangles. All three occurrences are from 1989, and the closest is approximately 5.6 miles southeast of the BSA.
<i>Artemisospiza belli belli</i> Bell's sage sparrow	None/None G5T2T3/S3 WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Low potential	Potentially suitable coastal sage scrub is present in the BSA; however, these natural areas are very limited and are adjacent to roadways. The only CNDDDB occurrence located within the surveyed quadrangles is from 2015 and is located approximately 1.5 miles northeast of the BSA.
<i>Athene cunicularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not expected	Potentially suitable coastal sage scrub and grasslands are present in the BSA; however, these natural areas are very limited and are adjacent to roadways. Multiple CNDDDB occurrences are located within the surveyed quadrangles, the closest of which is from 1990 and is located approximately 3.6 miles northeast of the BSA.
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low potential	The BSA crosses primarily flat residential and agricultural areas. Tall trees are present. Two CNDDDB occurrences are located within the surveyed quadrangles, one of which is from 2011 and is located approximately 1.5 miles north of the BSA.
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Low potential	The BSA crosses primarily flat residential and agricultural areas. The only CNDDDB occurrence located within the surveyed quadrangles is from 2002 and is located approximately 5.8 miles west of the BSA.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not expected	The BSA crosses primarily flat residential and agricultural areas. No bodies of water or cliffs are present. The only CNDDDB occurrence is from 2017 and is located approximately 6.6 miles west of the BSA.

Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Poliotila californica californica</i> coastal California gnatcatcher	FT/None G4G5T3Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Moderate potential	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to roadways. The BSA overlaps critical habitat for this species. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including two from 2012 which are adjacent to the BSA.
<i>Riparia riparia</i> bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not expected	Potentially suitable riparian areas are present in the BSA along Calleguas Creek. However, this species is considered extirpated as a breeder from southern California.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Moderate potential	Potentially suitable riparian areas are present in the BSA along Calleguas Creek. Multiple CNDDDB occurrences are located within the surveyed quadrangles, including one from 1940 which overlaps the BSA and one from 2017 that is located approximately 0.3 mile south of the BSA in Conejo Creek.
Mammals				
<i>Antrozous pallidus</i> pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to busy roadways. Rocky areas are absent, but many buildings and trees are present. A bridge over Calleguas Creek is present but significantly disturbed by vehicle traffic. The only CNDDDB occurrence within the surveyed quadrangles is from 2004 and is located approximately 4.4 miles southeast of the BSA.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G4G5T4/S3S 4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to busy roadways. Rocky areas are absent, but many buildings and trees are present. The only CNDDDB occurrence within the surveyed quadrangles is from 2004 and is located approximately 4.4 miles southeast of the BSA.

Calleguas Municipal Water District
Calleguas Regional Salinity Management Pipeline Phases 3 & 4

Scientific Name Common Name	Status Fed/State CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Myotis ciliolabrum</i> western small-footed myotis	None/None G5/S3	Occurs in a wide range of arid and semiarid habitats including woodlands, open forests, riparian zones, and desert shrub. Roosts in rock crevices in caves, tunnels, and mines, also found beneath loose bark and in buildings. Forages for insects over water sources.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to busy roadways. Rocky areas are absent, but many buildings and trees are present. The only CNDDDB occurrence within the surveyed quadrangles is from 2004 and is located approximately 4.4 miles southeast of the BSA.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.	Low potential	Potentially suitable coastal scrub is present in the BSA. However, these natural areas are very limited and are adjacent to busy roadways. Three CNDDDB occurrences are located within the surveyed quadrangles, the closest of which is from 1992 and is located approximately 0.6 mile north of the BSA. is from 2004 and is located approximately 4.4 miles southeast of the BSA.
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected	Potentially suitable coastal scrub and grasslands are present in the BSA. However, these natural areas are very limited and are adjacent to busy roadways. The only CNDDDB occurrence within the surveyed quadrangles is from 2013 and is located approximately 2.5 miles south of the BSA.

Regional Vicinity refers to within the four USGS 7.5-minute topographic quadrangles crossed by the BSA

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- FD = Federal Delisted
- SE = State Endangered
- ST = State Threatened
- SD = State Delisted
- SSC = CDFW Species of Special Concern
- FP = CDFW Fully Protected
- WL = CDFW Watch List

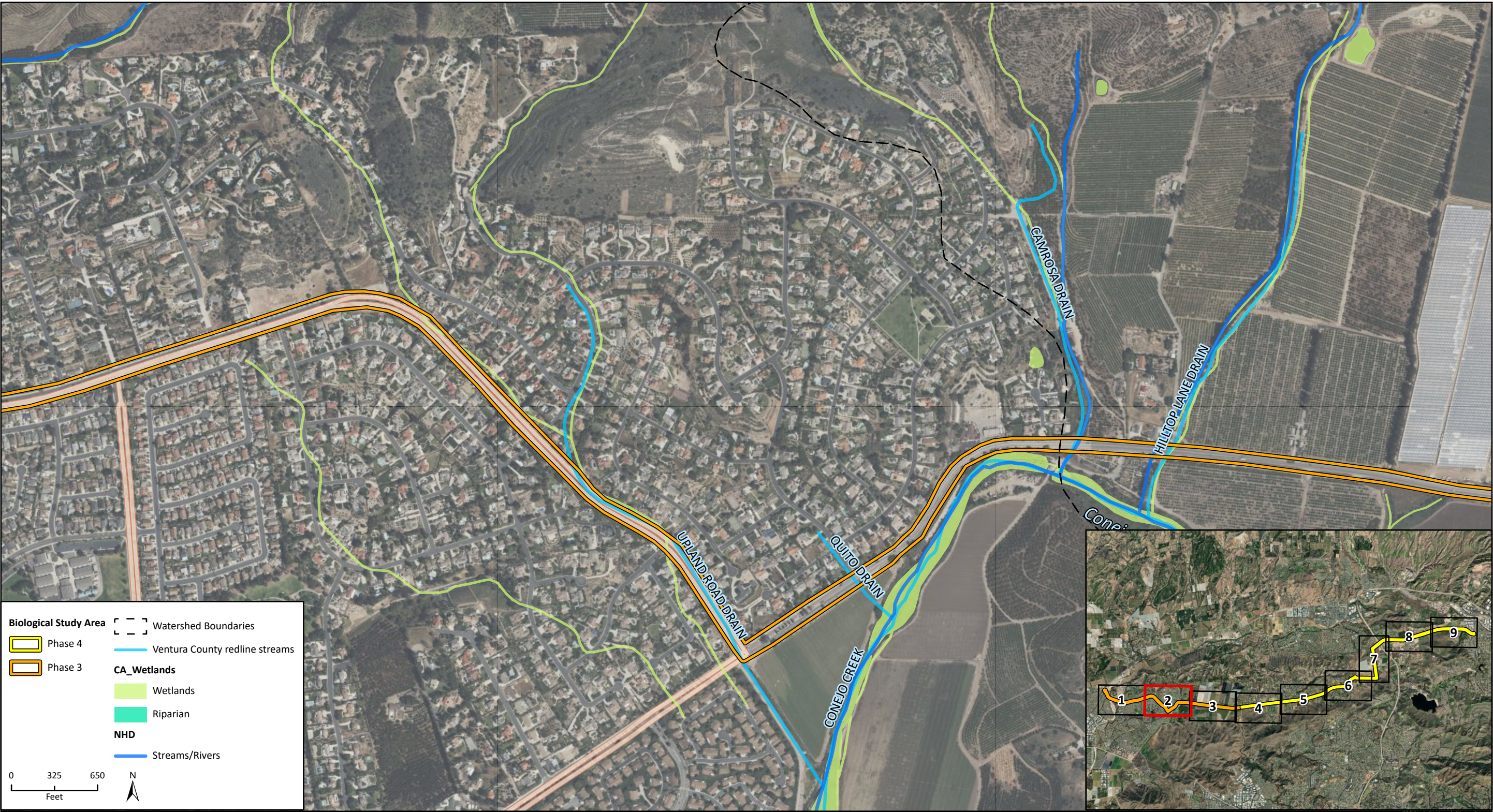
Other Statuses

- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant
- GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Appendix E

Figures





Biological Study Area

- Phase 4
- Phase 3

Watershed Boundaries

- Watershed Boundaries

Ventura County redline streams

- Ventura County redline streams

CA_Wetlands

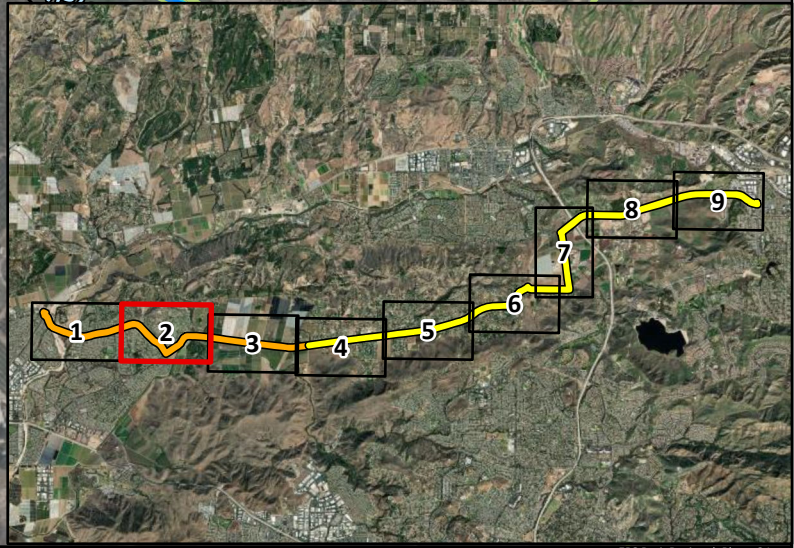
- Wetlands
- Riparian

NHD

- Streams/Rivers

0 325 650
Feet

N





Biological Study Area

- Phase 4
- Phase 3

CA_Wetlands

- Wetlands
- Riparian

NHD

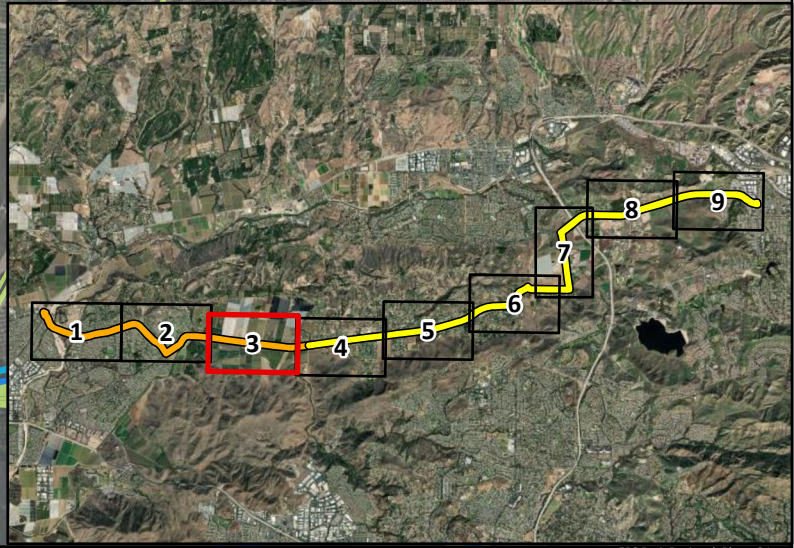
- Streams/Rivers

Watershed Boundaries

Ventura County redline streams

0 325 650
Feet

N





Biological Study Area [- -] Watershed Boundaries

Phase 4

Phase 3

CA_Wetlands

Wetlands

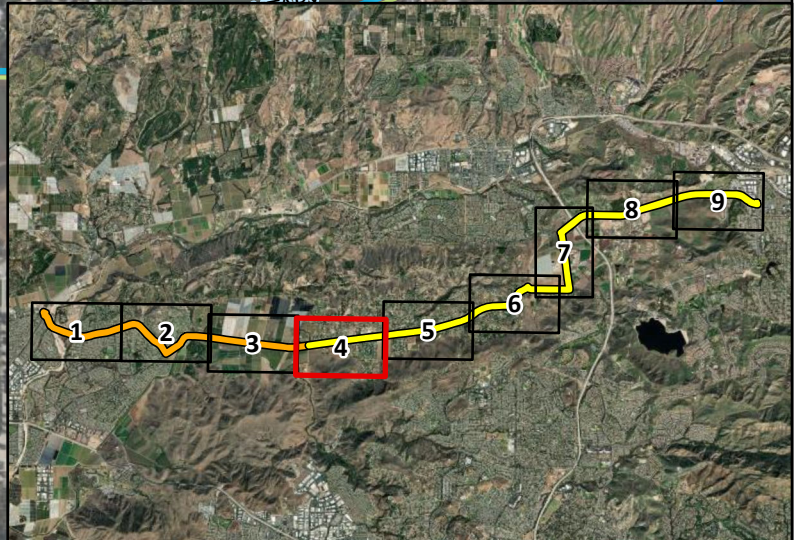
Riparian

NHD

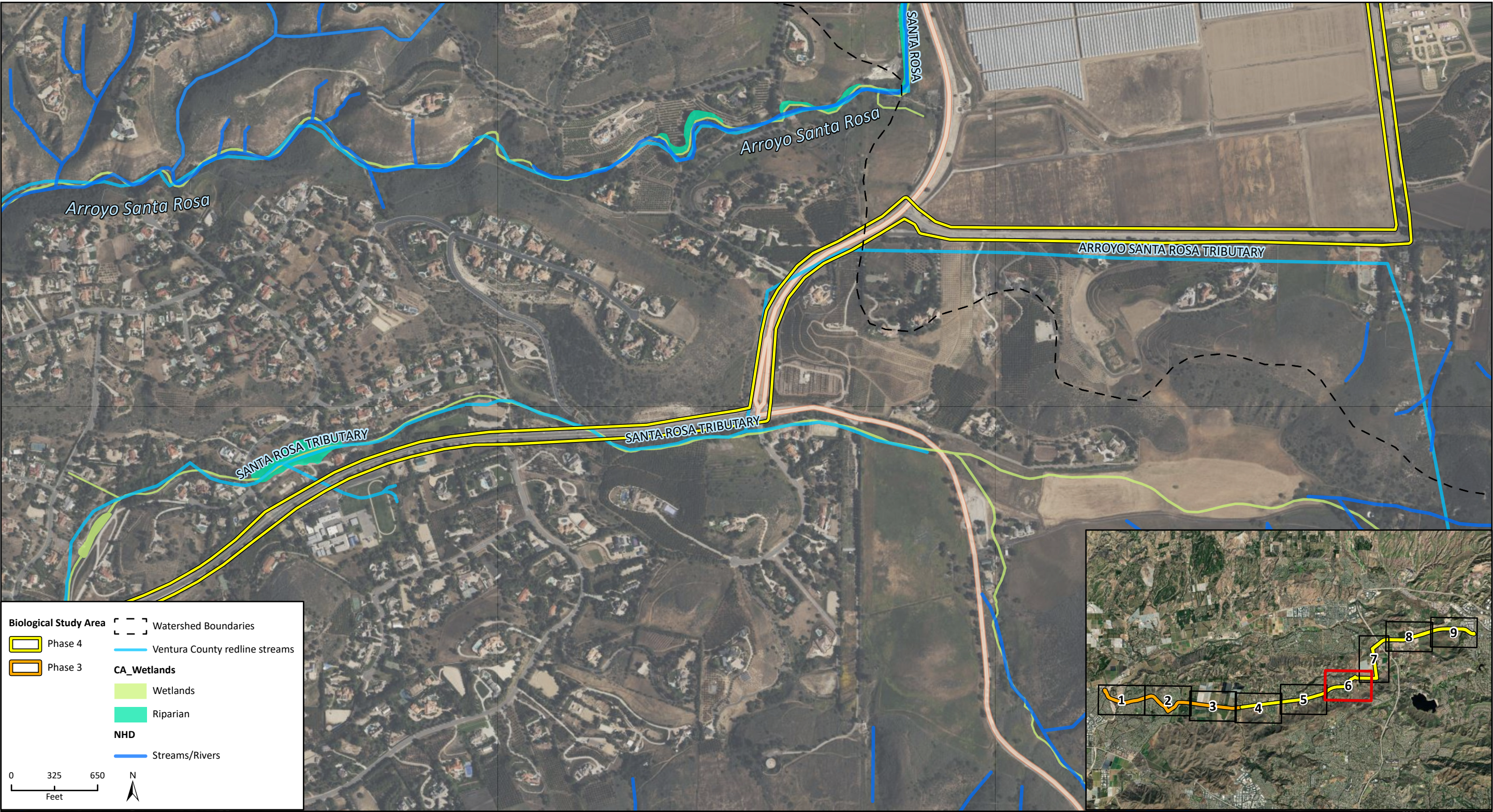
Streams/Rivers

0 325 650
Feet

N







Biological Study Area

- Phase 4
- Phase 3

CA_Wetlands

- Wetlands
- Riparian

NHD

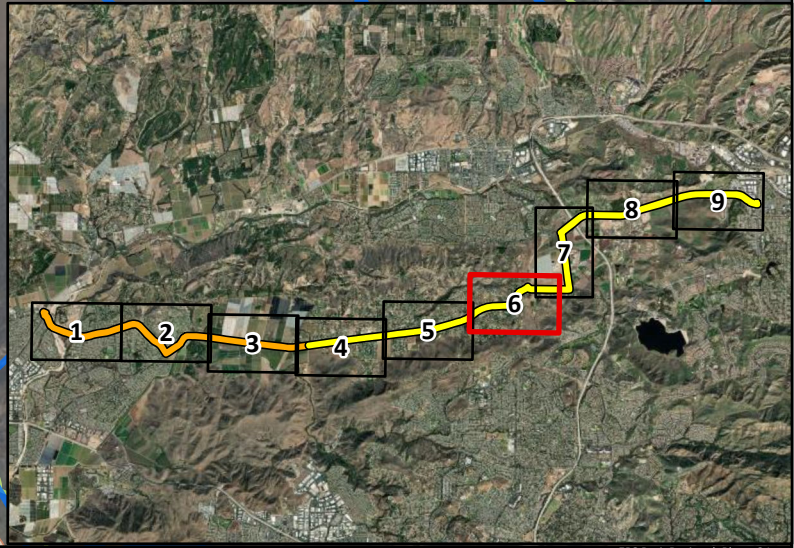
- Streams/Rivers

Watershed Boundaries

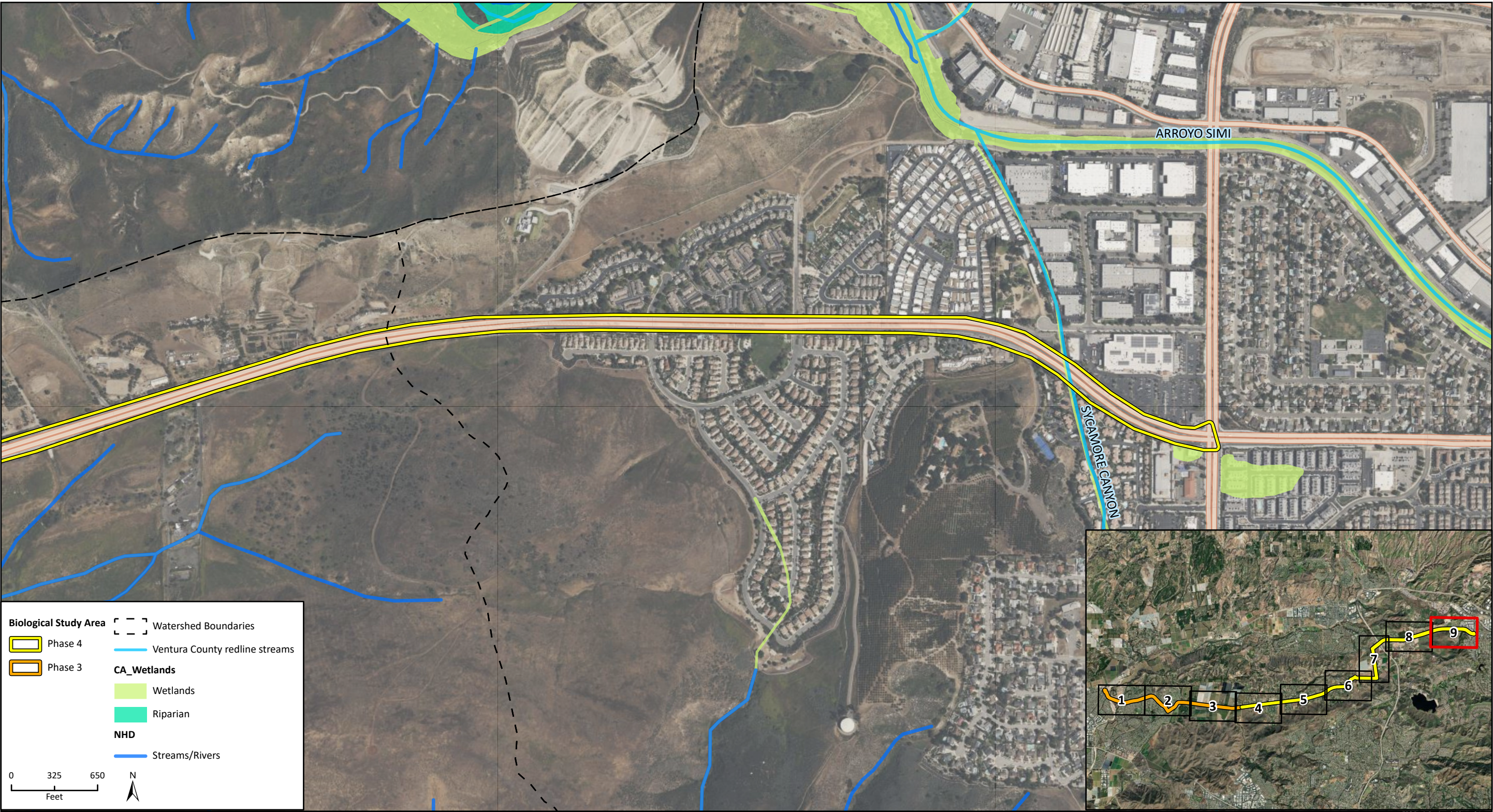
Ventura County redline streams

0 325 650
Feet

N







Biological Study Area

- Phase 4
- Phase 3

Watershed Boundaries

- Watershed Boundaries

CA_Wetlands

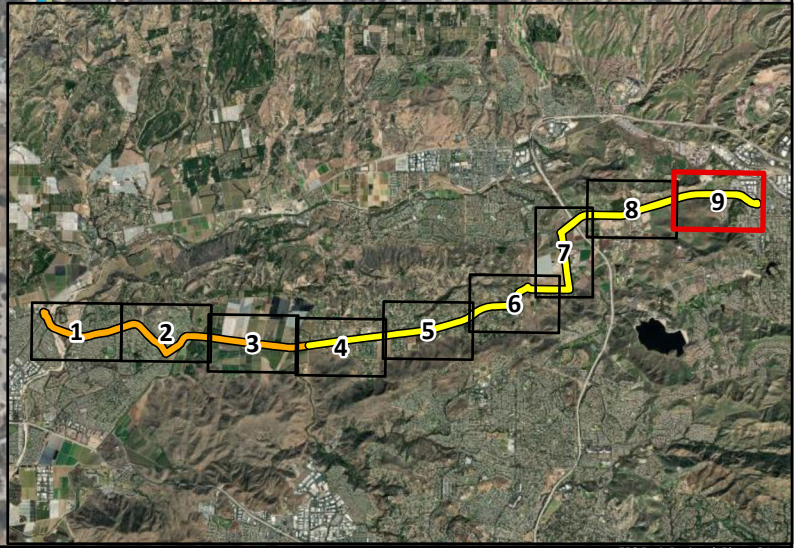
- Wetlands
- Riparian

NHD

- Streams/Rivers

0 325 650
Feet

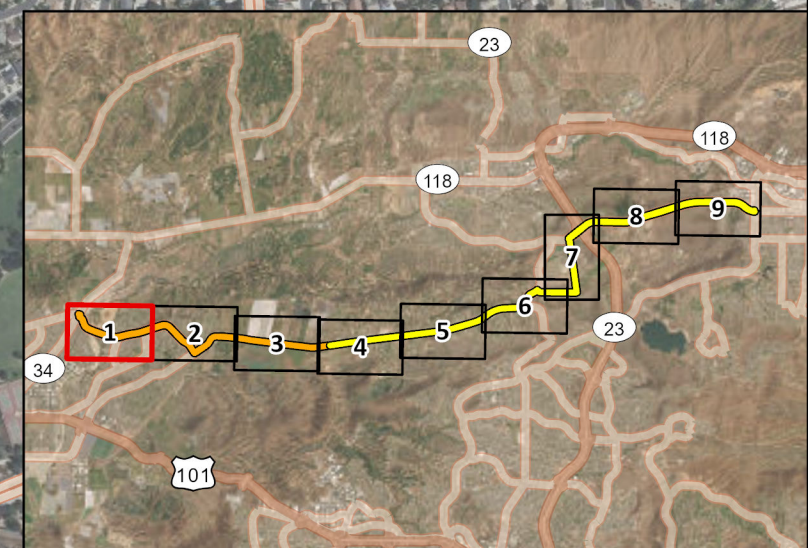
N





Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Protected native trees	Arroyo Willow - Mulefat Thickets
Phase 4		Developed
		Ornamental
		Riverwash

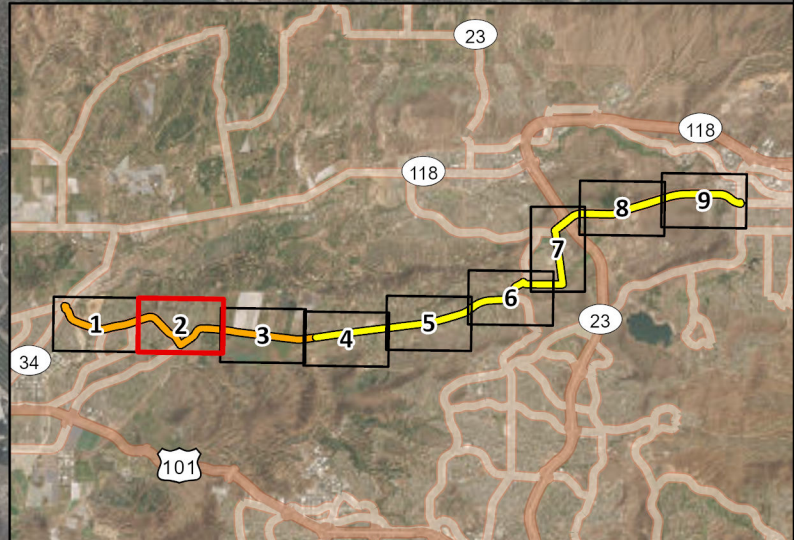
0 375 750 N
Feet





Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Potential heritage trees	California Buckwheat Scrub
Phase 4	Protected native trees	Developed
		Ornamental

0 375 750 N
Feet





Hilltop Ln

Rosita Rd

Gerty Rd

Burret Ranch Rd

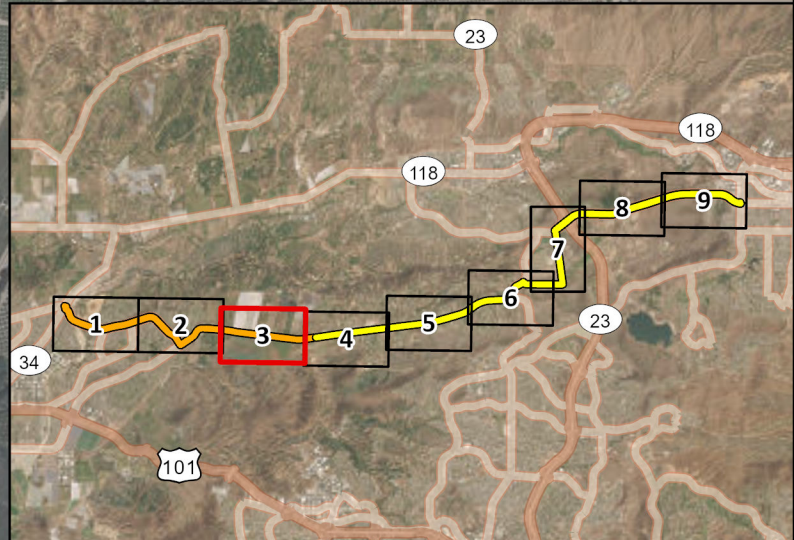
Access
Churchman Ln

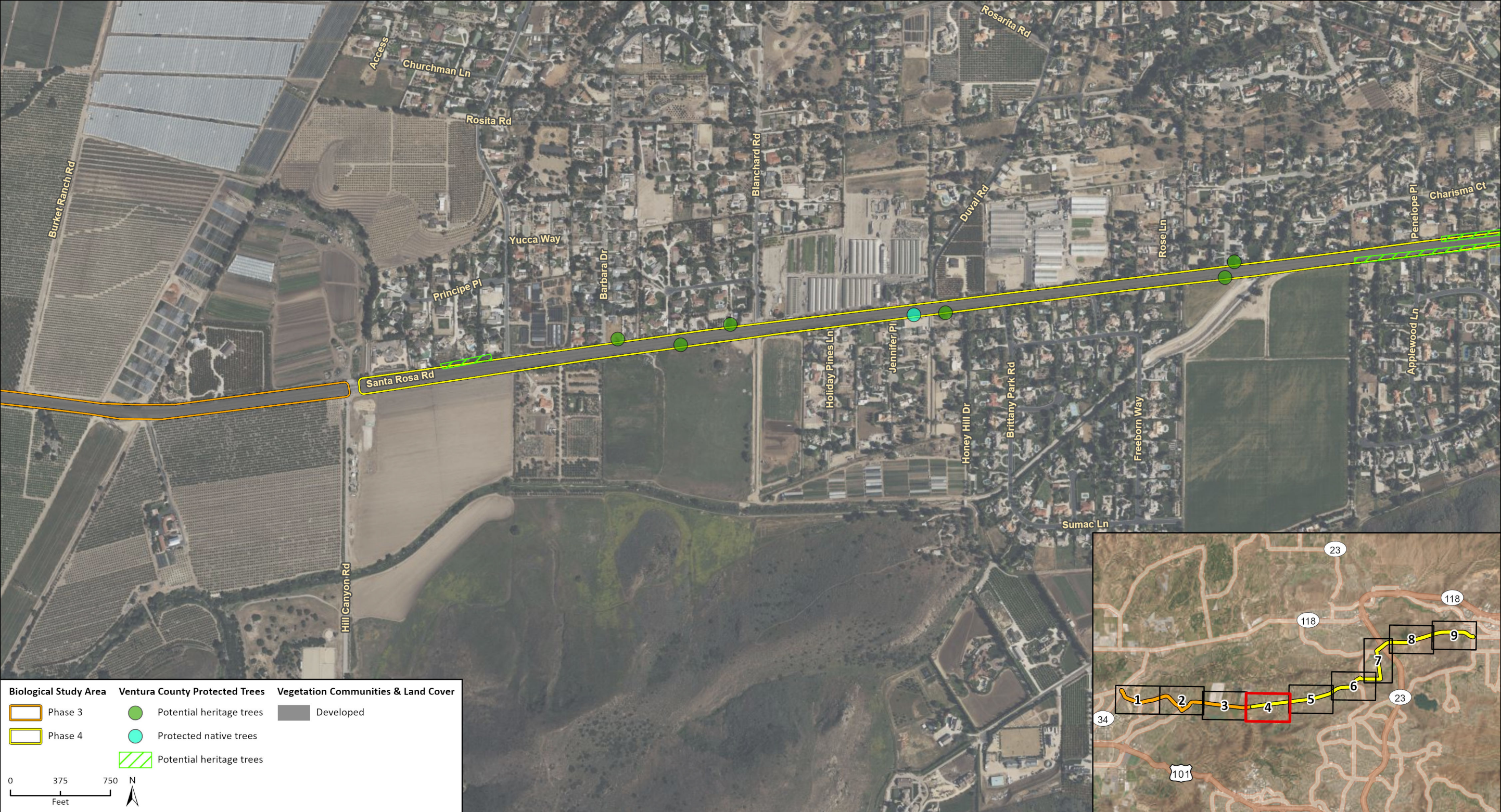
Principe Pl

Santa Rosa Rd

Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Protected native trees	California Buckwheat Scrub
Phase 4	Protected native trees	Developed
		Ornamental

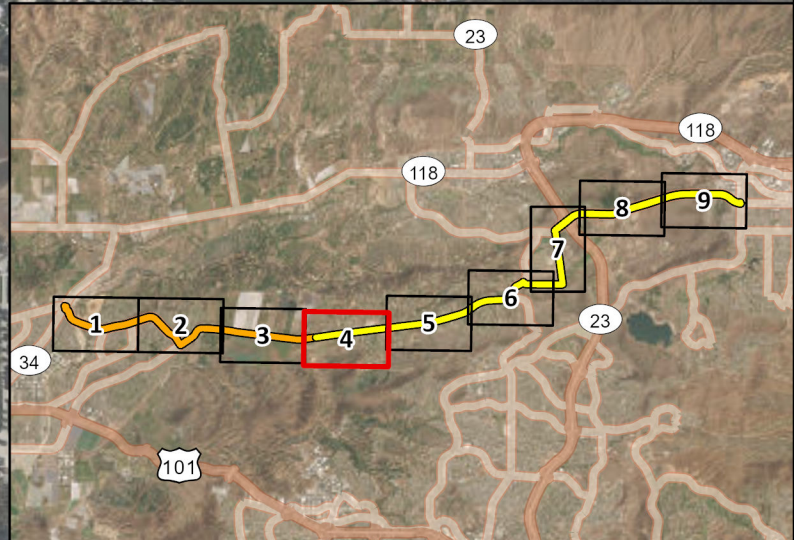
0 375 750 N
Feet





Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Potential heritage trees	Developed
Phase 4	Protected native trees	
	Potential heritage trees	

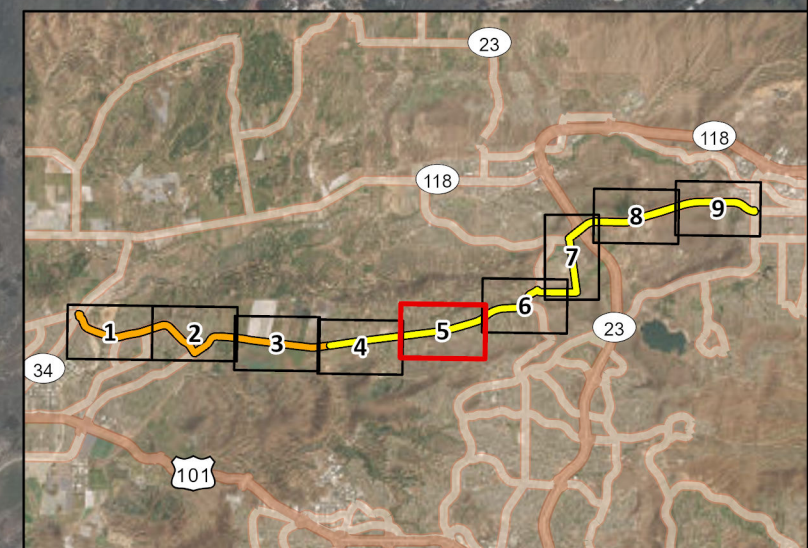
0 375 750 N
Feet

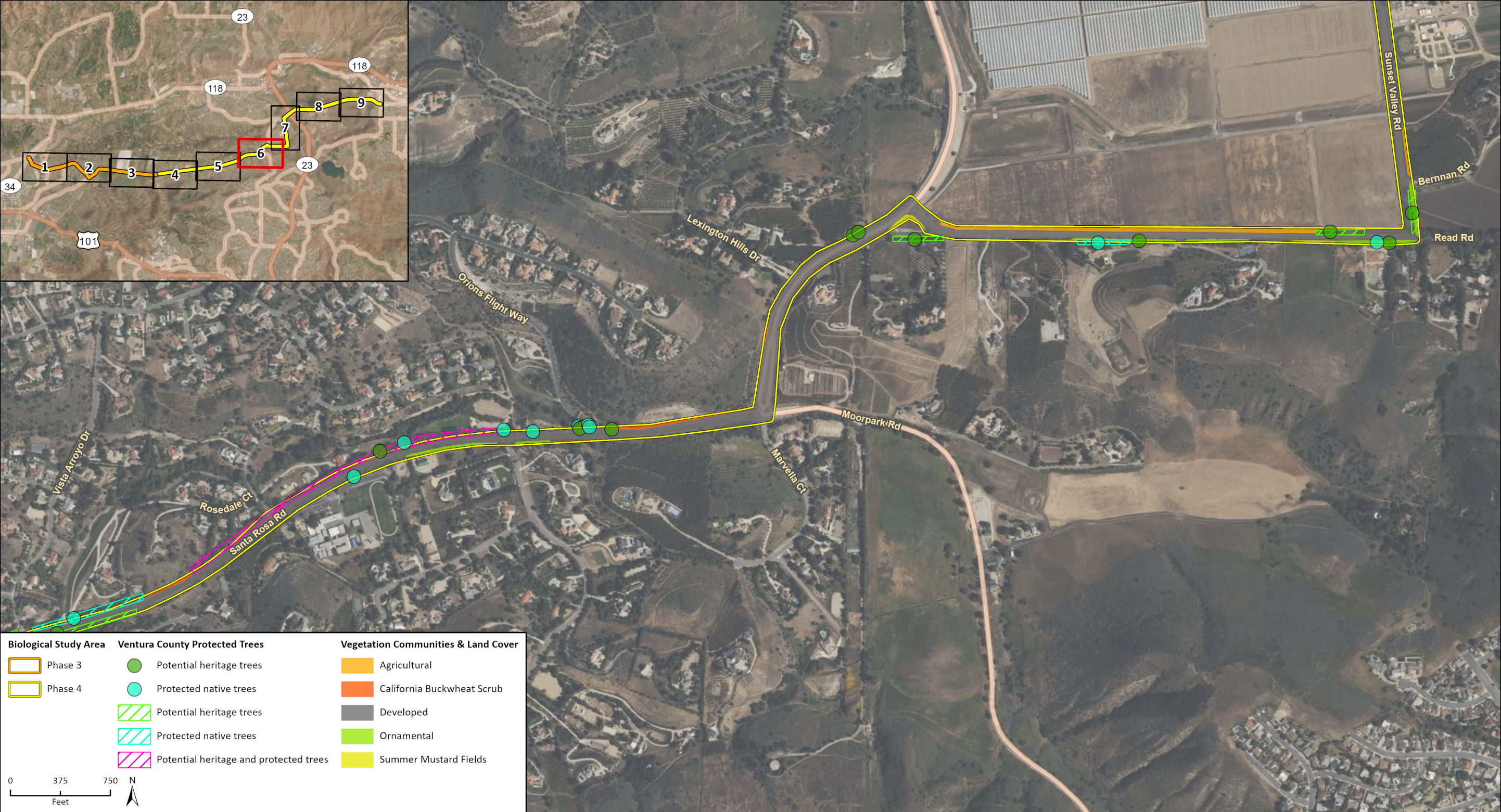




Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Potential heritage trees	California Buckwheat Scrub
Phase 4	Protected native trees	Developed
	Potential heritage trees	Ornamental
	Protected native trees	
	Potential heritage and protected trees	

0 375 750 N
Feet



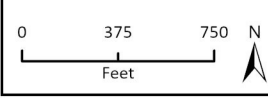


Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Potential heritage trees	Agricultural
Phase 4	Protected native trees	California Buckwheat Scrub
	Potential heritage trees	Developed
	Protected native trees	Ornamental
	Potential heritage and protected trees	Summer Mustard Fields

0 375 750 N
Feet



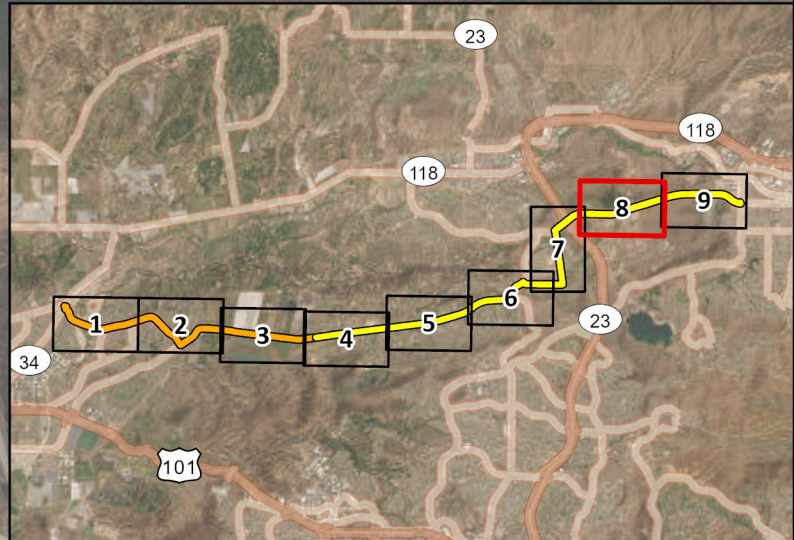
Biological Study Area		Ventura County Protected Trees		Vegetation Communities & Land Cover	
	Phase 4		Potential heritage trees		Agricultural
	Phase 3		Protected native trees		California Buckwheat Scrub
	Potential heritage trees		Developed		Ornamental
	Protected native trees		Purple Sage Scrub		Summer Mustard Fields
			Wild Oats and Annual Brome Grasslands		

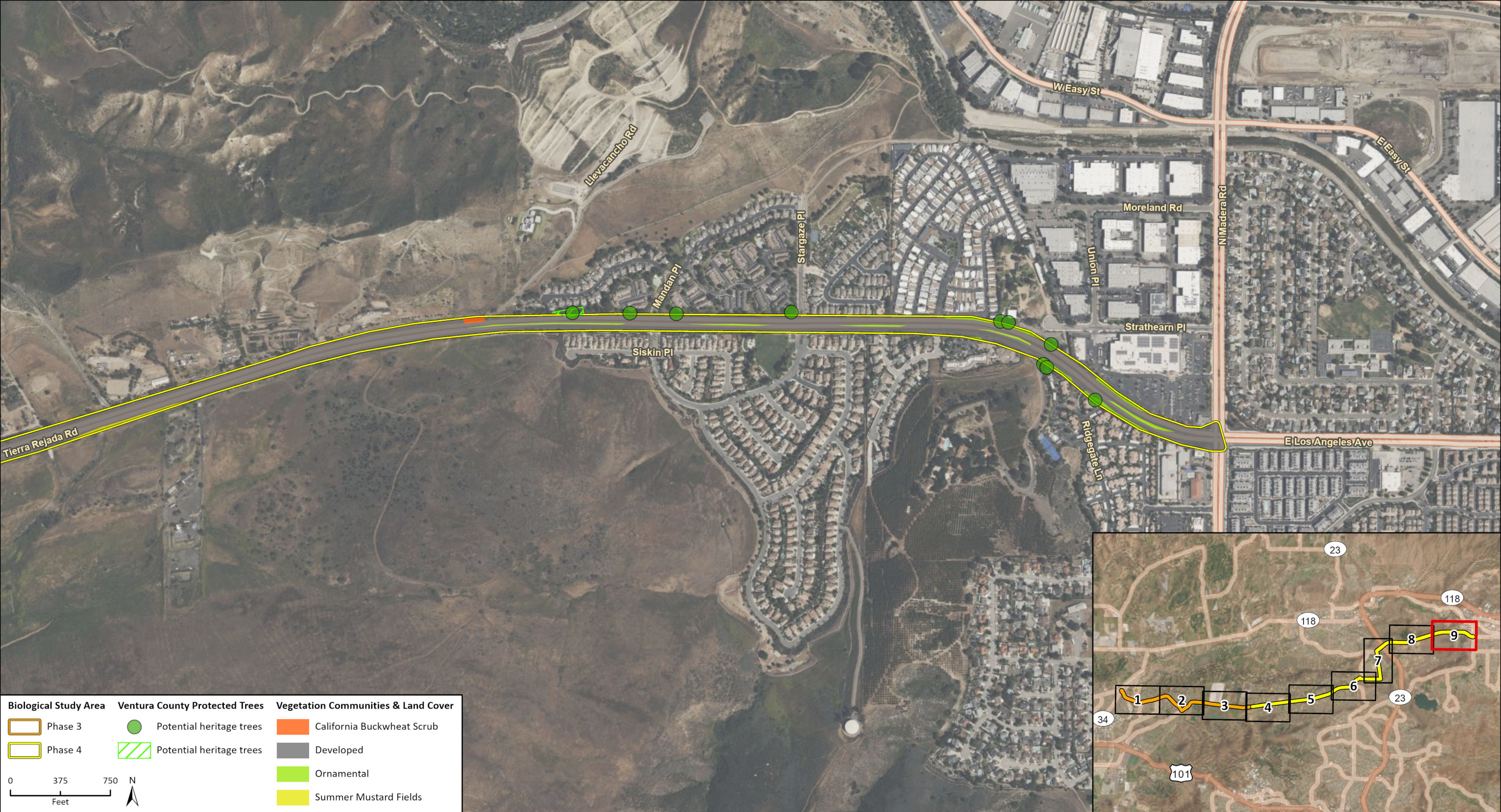




Biological Study Area		Ventura County Protected Trees		Vegetation Communities & Land Cover	
	Phase 3		Potential heritage trees		Developed
	Phase 4		Protected native trees		Fountain Grass Swards
			Potential heritage trees		Ornamental
			Protected native trees		Summer Mustard Fields
					Wild Oats and Annual Brome Grasslands

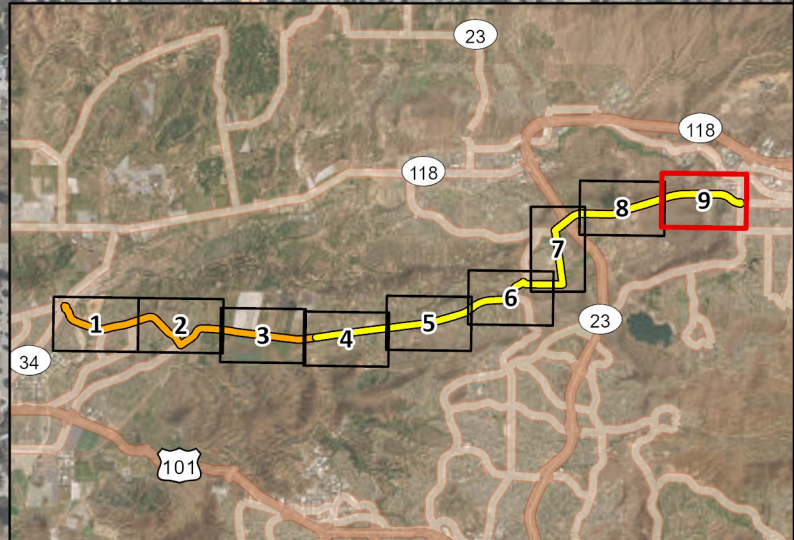
0 375 750 N
Feet



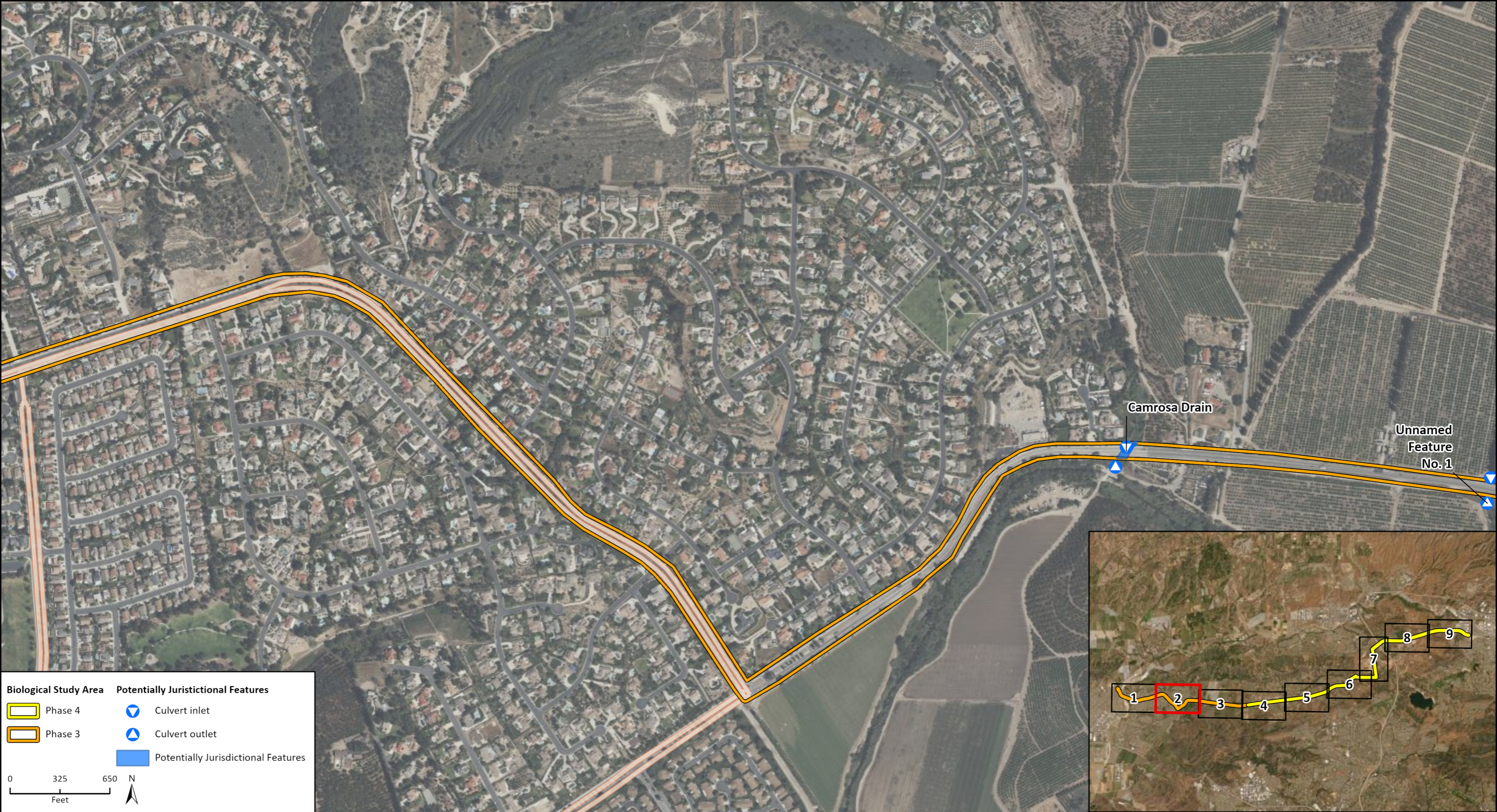


Biological Study Area	Ventura County Protected Trees	Vegetation Communities & Land Cover
Phase 3	Potential heritage trees	California Buckwheat Scrub
Phase 4	Potential heritage trees	Developed
		Ornamental
		Summer Mustard Fields

0 375 750 N
Feet



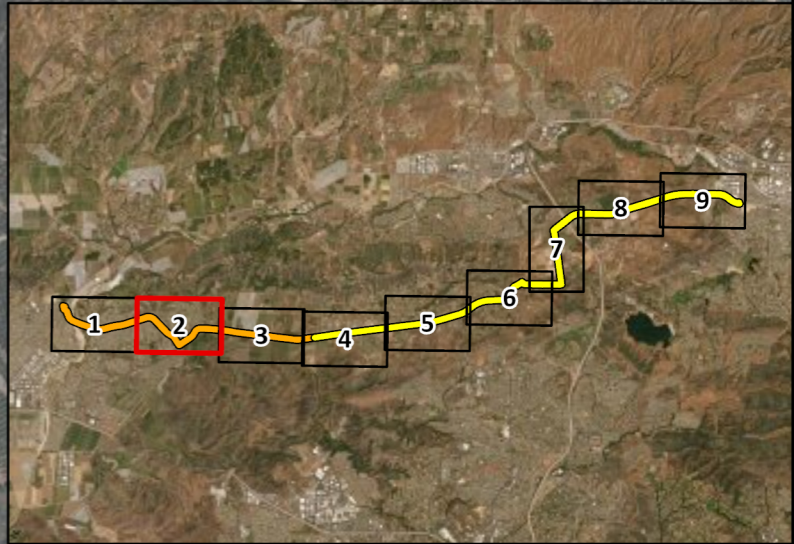




Biological Study Area		Potentially Jurisdictional Features	
	Phase 4		Culvert inlet
	Phase 3		Culvert outlet
			Potentially Jurisdictional Features

0 325 650 Feet

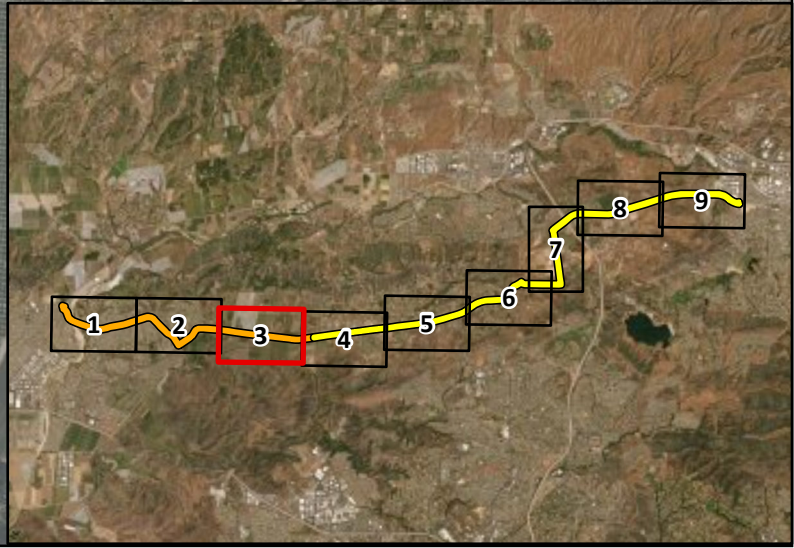
N





Biological Study Area		Potentially Jurisdictional Features	
	Phase 4		Culvert inlet
	Phase 3		Culvert outlet
			Potentially Jurisdictional Features

0 325 650 N
Feet





Unnamed Feature No. 4

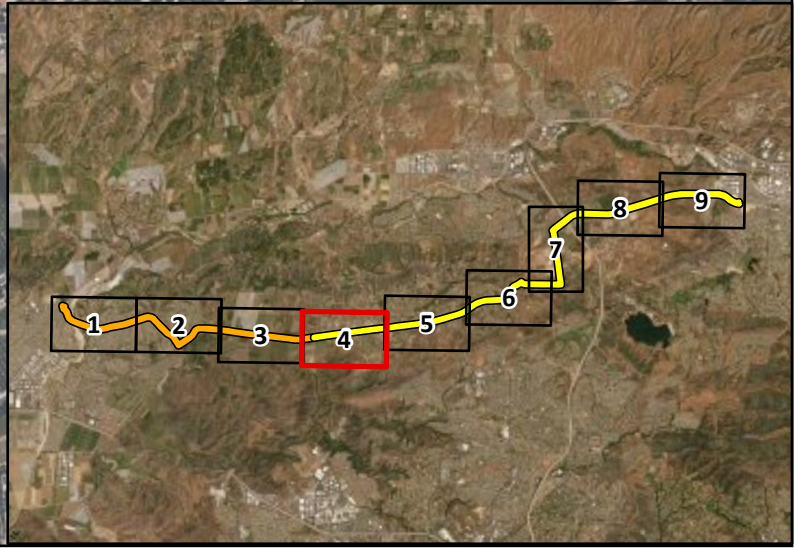
Unnamed Feature No. 4

Unnamed Feature No. 5

Santa Rosa

Biological Study Area		Potentially Jurisdictional Features	
	Phase 4		Culvert inlet
	Phase 3		Culvert outlet
			Potentially Jurisdictional Features

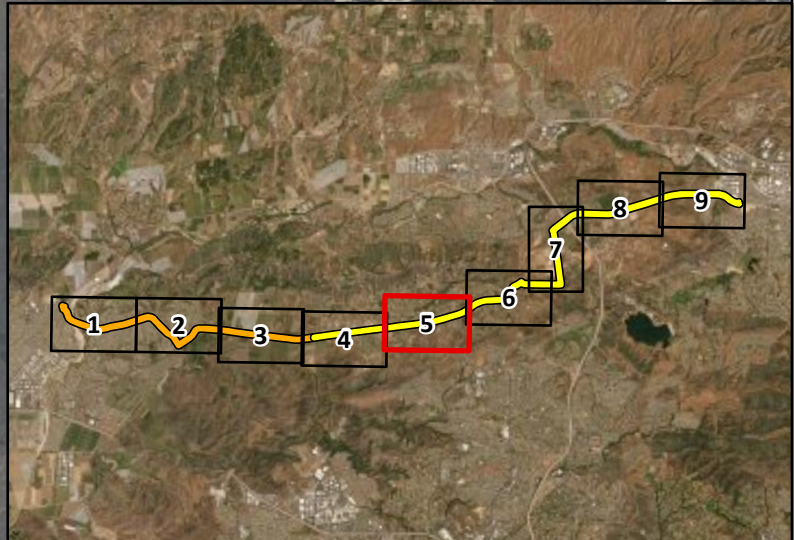
0 325 650 N
Feet





Biological Study Area	Potentially Jurisdictional Features
Phase 4	Culvert inlet
Phase 3	Culvert outlet
	Potentially Jurisdictional Features

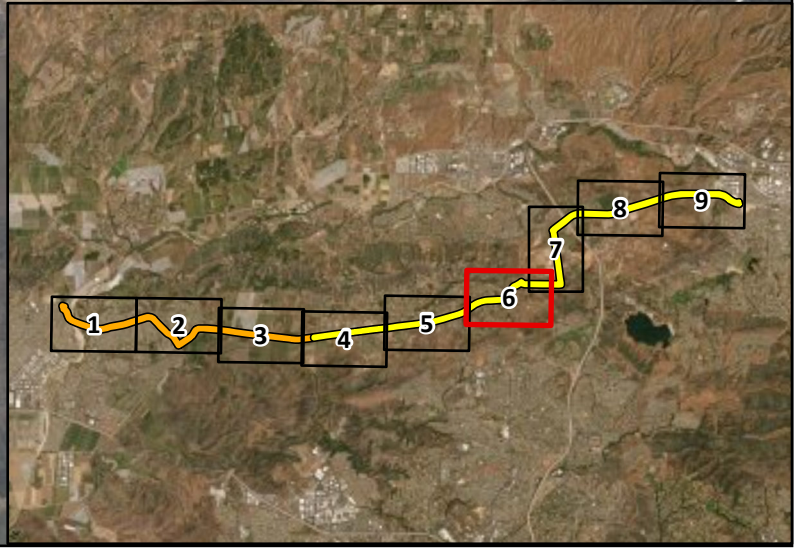
0 325 650 N
Feet










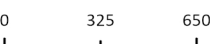

Biological Study Area	Potentially Jurisdictional Features
Phase 4	Culvert inlet
Phase 3	Culvert outlet
	Potentially Jurisdictional Features

0 325 650 N
Feet





Biological Study Area		Potentially Jurisdictional Features	
	Phase 4		Culvert inlet
	Phase 3		Culvert outlet
			Potentially Jurisdictional Features

0	325	650	N
			
Feet			

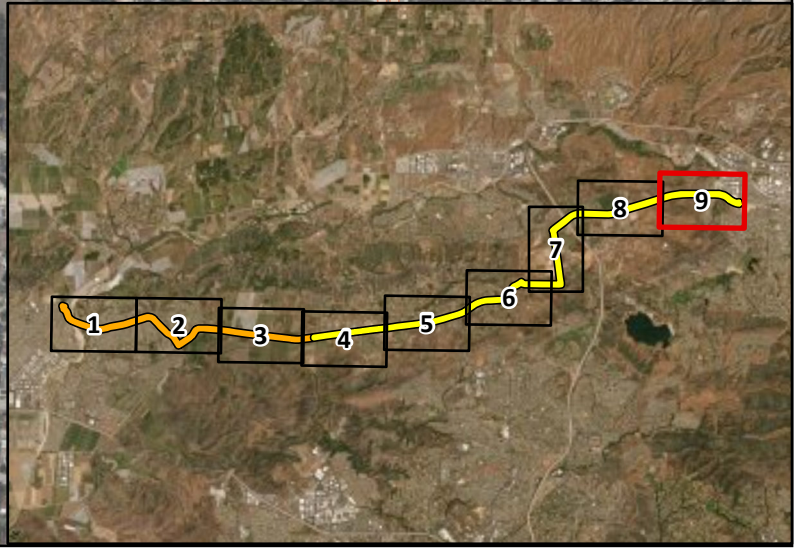




Unnamed
Feature
No. 11

Biological Study Area	Potentially Jurisdictional Features
Phase 4	Culvert inlet
Phase 3	Culvert outlet
	Potentially Jurisdictional Features

0 325 650 N
Feet



Appendix D

Noise Sheets

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/5/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
Residential Residential	70	70	70

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	15	0
Backhoe	No	40		77.6	15	0
Dump Truck	No	40		76.5	15	0
Pickup Truck	No	40		75	15	0
Dump Truck	No	40		76.5	15	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance			
	*Lmax	Leq	Day	Evening		Night		Day		Evening	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	91.2	87.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	88	84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	85.5	81.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	91.2	91.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date #####

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Baselines (dBA)

Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	3100	0
Backhoe	No	40		77.6	3100	0
Dump Truck	No	40		76.5	3100	0
Pickup Truck	No	40		75	3100	0
Dump Truck	No	40		76.5	3100	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax
Excavator	44.9	40.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	41.7	37.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	40.6	36.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	39.2	35.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	40.6	36.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	44.9	44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Equipment					
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	200	0
Backhoe	No	40		77.6	200	0
Dump Truck	No	40		76.5	200	0
Pickup Truck	No	40		75	200	0
Dump Truck	No	40		76.5	200	0

Equipment	Results										
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance	
	*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	65.5	61.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.4	60.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	63	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.4	60.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.7	68.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	300	0
Backhoe	No	40		77.6	300	0
Dump Truck	No	40		76.5	300	0
Pickup Truck	No	40		75	300	0
Dump Truck	No	40		76.5	300	0

		Results									
Equipment	Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance			
	*Lmax	Leq	Day	Evening	Night	Day	Evening	Day	Evening	Night	
Excavator	65.1	61.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	59.4	55.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.1	65.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

Description	Equipment					
	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	800	0
Backhoe	No	40		77.6	800	0
Dump Truck	No	40		76.5	800	0
Pickup Truck	No	40		75	800	0
Dump Truck	No	40		76.5	800	0

Equipment	Calculated (dBA)		Results						Noise Limit Exceedance		
	*Lmax	Leq	Day		Evening		Night		Day		Evening
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Excavator	56.6	52.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	52.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pickup Truck	50.9	46.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	52.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	56.6	56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/5/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Paver	No	50		77.2	15	0
Paver	No	50		77.2	15	0
Roller	No	20		80	15	0

		Results											
		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance					
Equipment		*Lmax	Leq	Day		Evening		Night		Day		Evening	
				Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		87.7	84.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver		87.7	84.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		90.5	83.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		90.5	89.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	2400	0
Paver	No	50		77.2	2400	0
Roller	No	20		80	2400	0

Equipment	Calculated (dBA)		Results						Noise Limit Exceedance		
	*Lmax	Leq	Day		Evening		Night		Day		Evening
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	43.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	43.6	40.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	46.4	39.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	46.4	45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: #####

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Baselines (dBA)

Descriptor Land Use	Daytime	Evening	Night
Residential Residential	70	70	70

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Paver	No	50		77.2	200	0
Paver	No	50		77.2	200	0
Roller	No	20		80	200	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance	
	*Lmax	Leq	Day	Evening		Night		Day	Evening		
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	65.2	62.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.2	62.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	68	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/16/2023

Case Description: Calleguas SMP Phase 3-4

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

		Equipment				
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Paver	No	50		77.2	300	0
Paver	No	50		77.2	300	0
Roller	No	20		80	300	0

		Results									
		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance		
Equipment		*Lmax	Leq	Day	Evening		Night		Day	Evening	
				Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver		61.7	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver		61.7	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		64.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		64.4	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	800	0
Paver	No	50		77.2	800	0
Roller	No	20		80	800	0

Equipment	Results											
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	
Paver	53.1	50.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Paver	53.1	50.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	55.9	48.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	55.9	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/5/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Baselines (dBA)

Descriptor	Land Use	Daytime	Evening	Night
Residential	Residential	70	70	70

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Excavator	No	40		80.7	15	0
Excavator	No	40		80.7	15	0
Dump Truck	No	40		76.5	15	0
Crane	No	16		80.6	15	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance		
	*Lmax	Leq	Day		Evening		Night		Day		Evening
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	91.2	87.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	91.2	87.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	91	83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	91.2	91.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Excavator	No	40		80.7	3250	0
Excavator	No	40		80.7	3250	0
Dump Truck	No	40		76.5	3250	0
Crane	No	16		80.6	3250	0

Equipment	Results												
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance				
	*Lmax		Leq		Day		Evening		Night		Day		Evening
Excavator	44.5	40.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	44.5	40.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	40.2	36.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	44.3	36.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	44.5	44.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0
Dump Truck	No	40		76.5	200	0
Crane	No	16		80.6	200	0

Equipment	Results											
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance		
	*Lmax	Leq	Day Lmax	Evening Lmax	Night Lmax	Day Lmax	Evening Lmax	Night Lmax	Day Lmax	Evening Lmax	Night Lmax	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dump Truck	64.4	60.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane	68.5	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	68.7	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	300	0
Excavator	No	40		80.7	300	0
Dump Truck	No	40		76.5	300	0
Crane	No	16		80.6	300	0

Equipment	Results											
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance		
	*Lmax	Leq	Day Lmax	Evening Lmax	Night Lmax	Day Leq	Evening Leq	Night Leq	Day Lmax	Evening Lmax	Night Lmax	
Excavator	65.1	61.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	65.1	61.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dump Truck	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Crane	65	57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	65.1	65.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 3/16/2023

Case Descr Calleguas SMP Phase 3-4

---- Receptor #1 ----

Descriptor Land Use	Baselines (dBA)		
	Daytime	Evening	Night
Residential Residential	70	70	70

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Excavator	No	40		80.7	800	0
Excavator	No	40		80.7	800	0
Dump Truck	No	40		76.5	800	0
Crane	No	16		80.6	800	0

Equipment	Results												
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance				
	*Lmax		Leq		Day		Evening		Night		Day		Evening
Excavator	56.6	52.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	56.6	52.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	52.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	56.5	48.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	56.6	57.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Appendix E

AB 52 Consultation

RAUL AVILA, DIRECTOR
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ANDY WATERS, DIRECTOR
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GENERAL MANAGER

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December 8, 2022

Barbareño/Ventureño Band of Mission Indians
Annette Ayala, MLD
188 S. Santa Rosa Street
Ventura, CA 93001
Via Email: annetteayala78@yahoo.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear MLD Ayala,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Lancaster". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

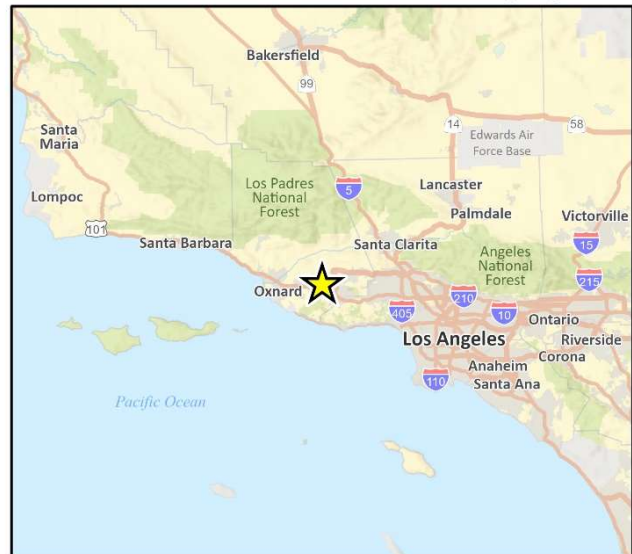
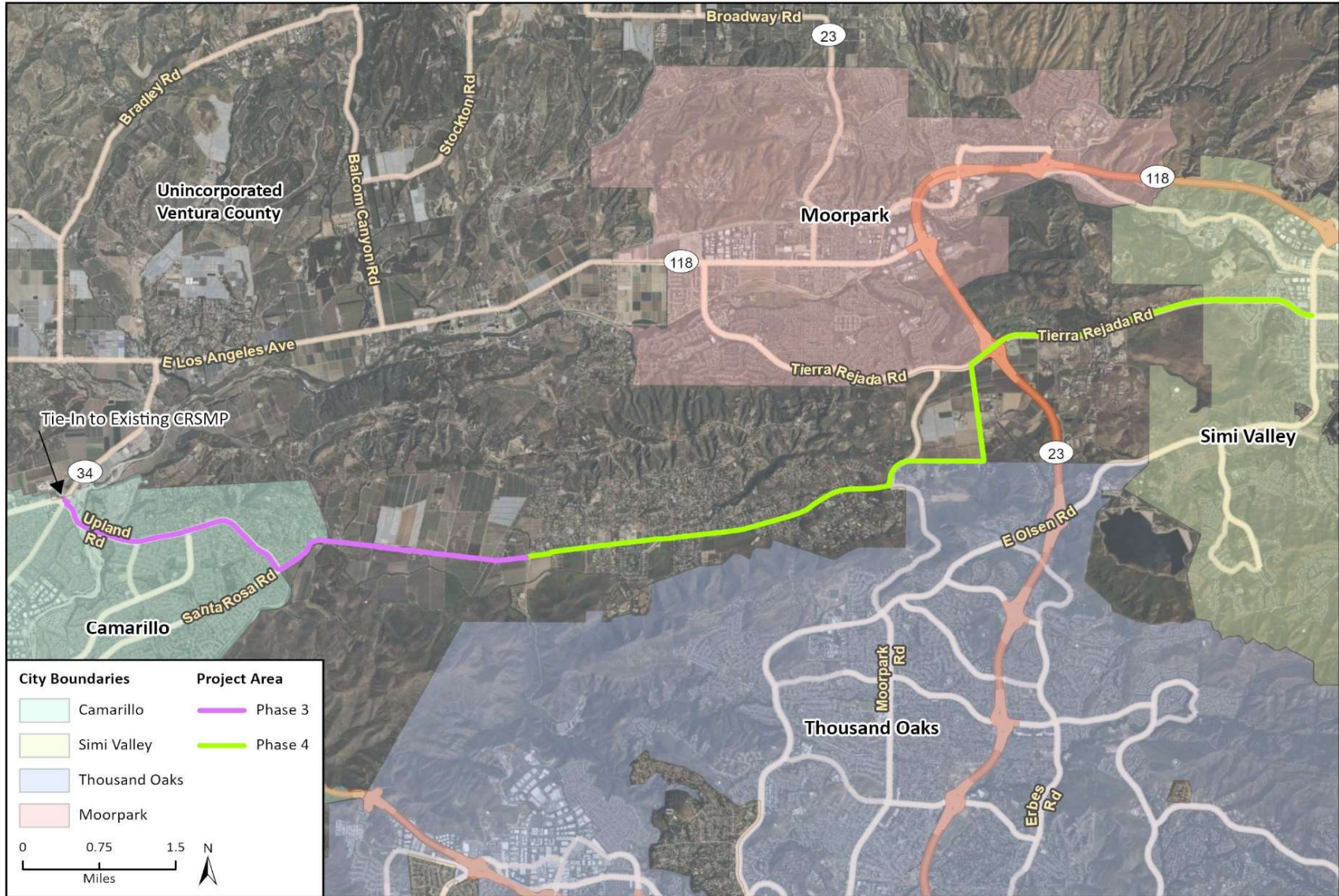


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

Proj. Regional, Phase 3 Locn
 Fig. 2.2 Project Location

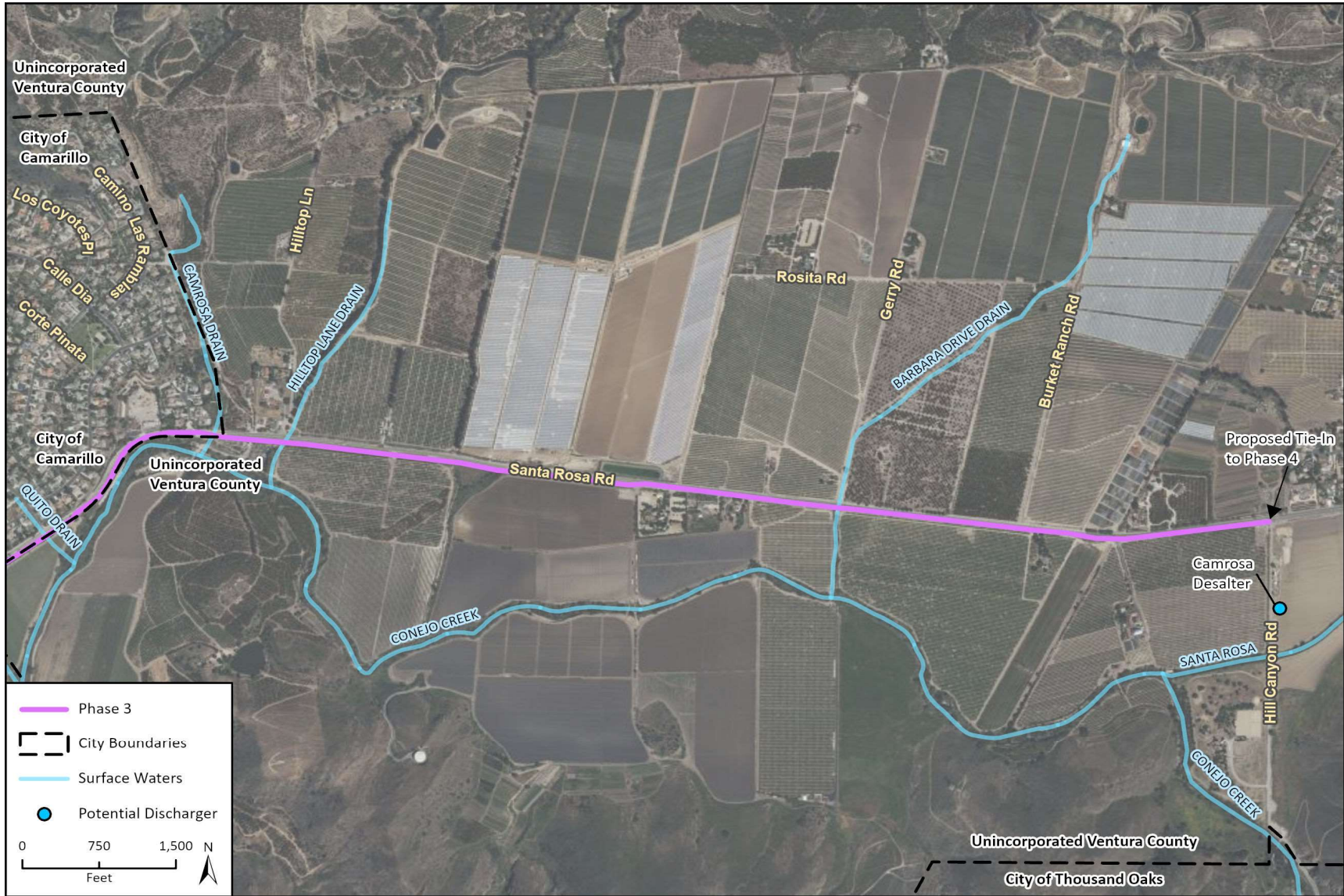
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

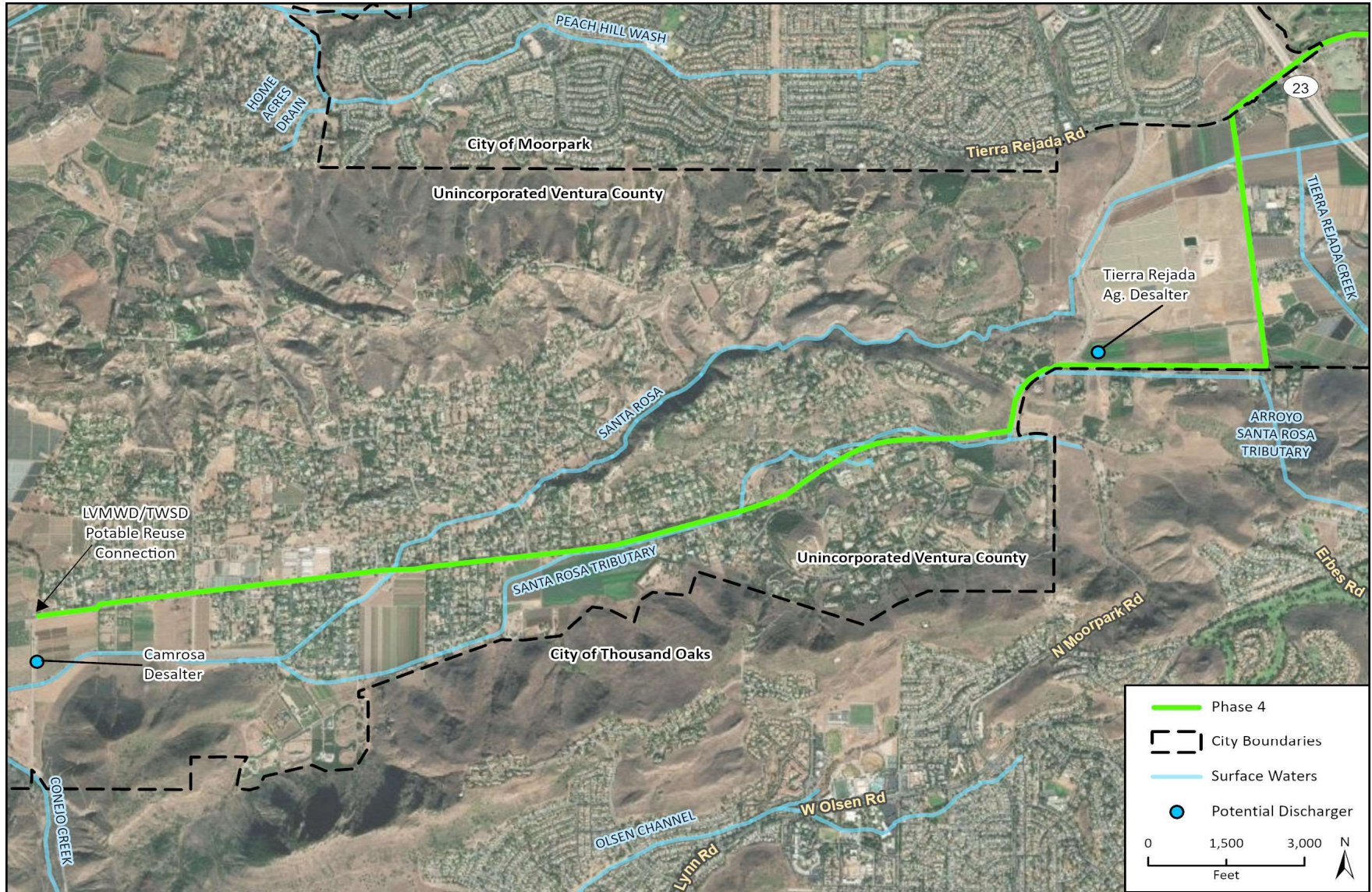
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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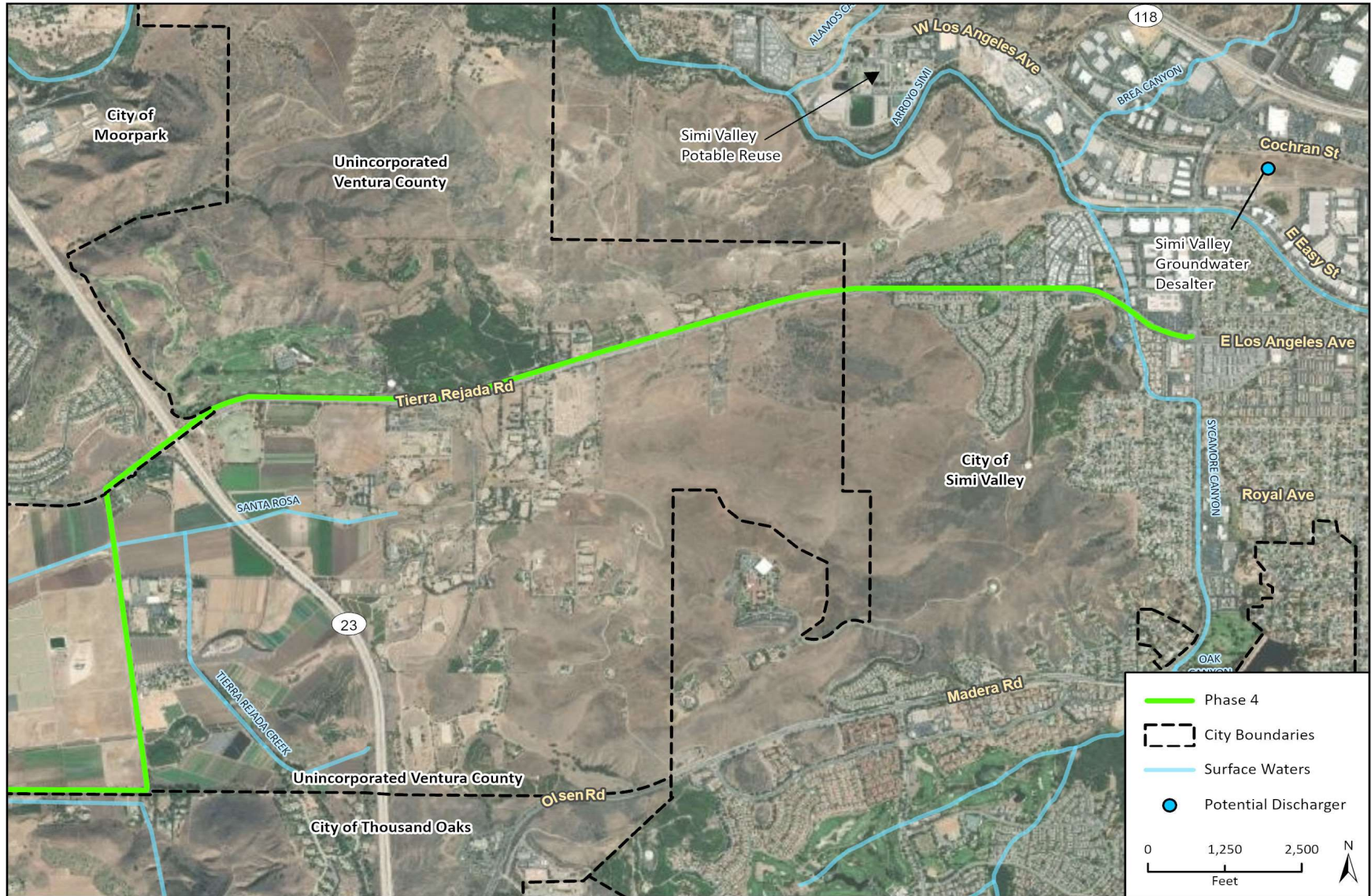
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Barbareño/Ventureño Band of Mission Indians
Dayna Barrios, Chairperson
365 North Poli Ave
Ojai, CA, 93023
Via Email: barrios_dayna@yahoo.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Barrios,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Lancaster". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

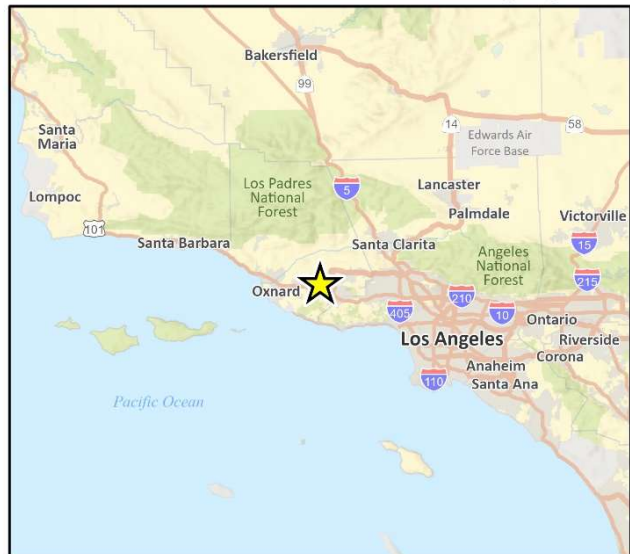
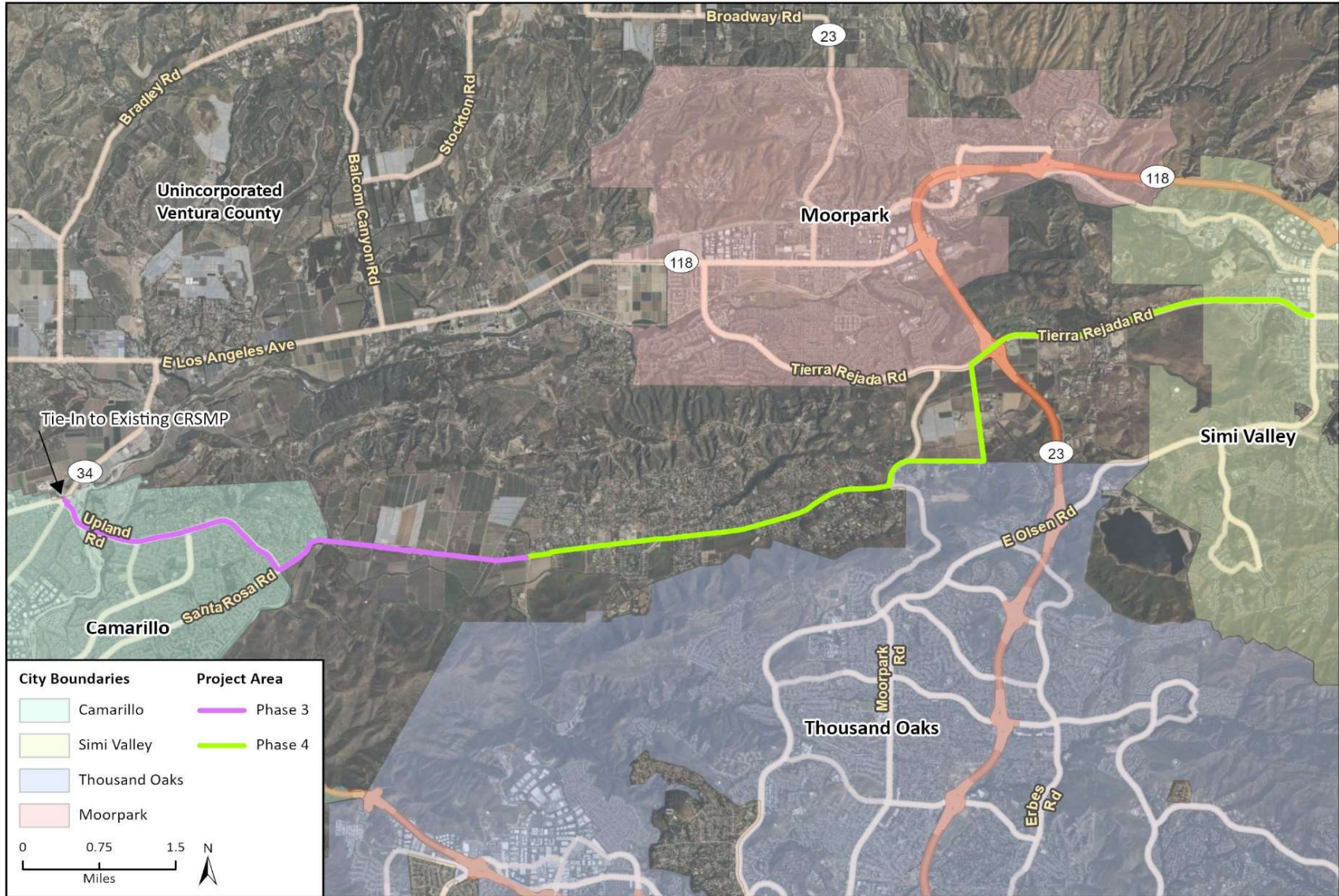


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

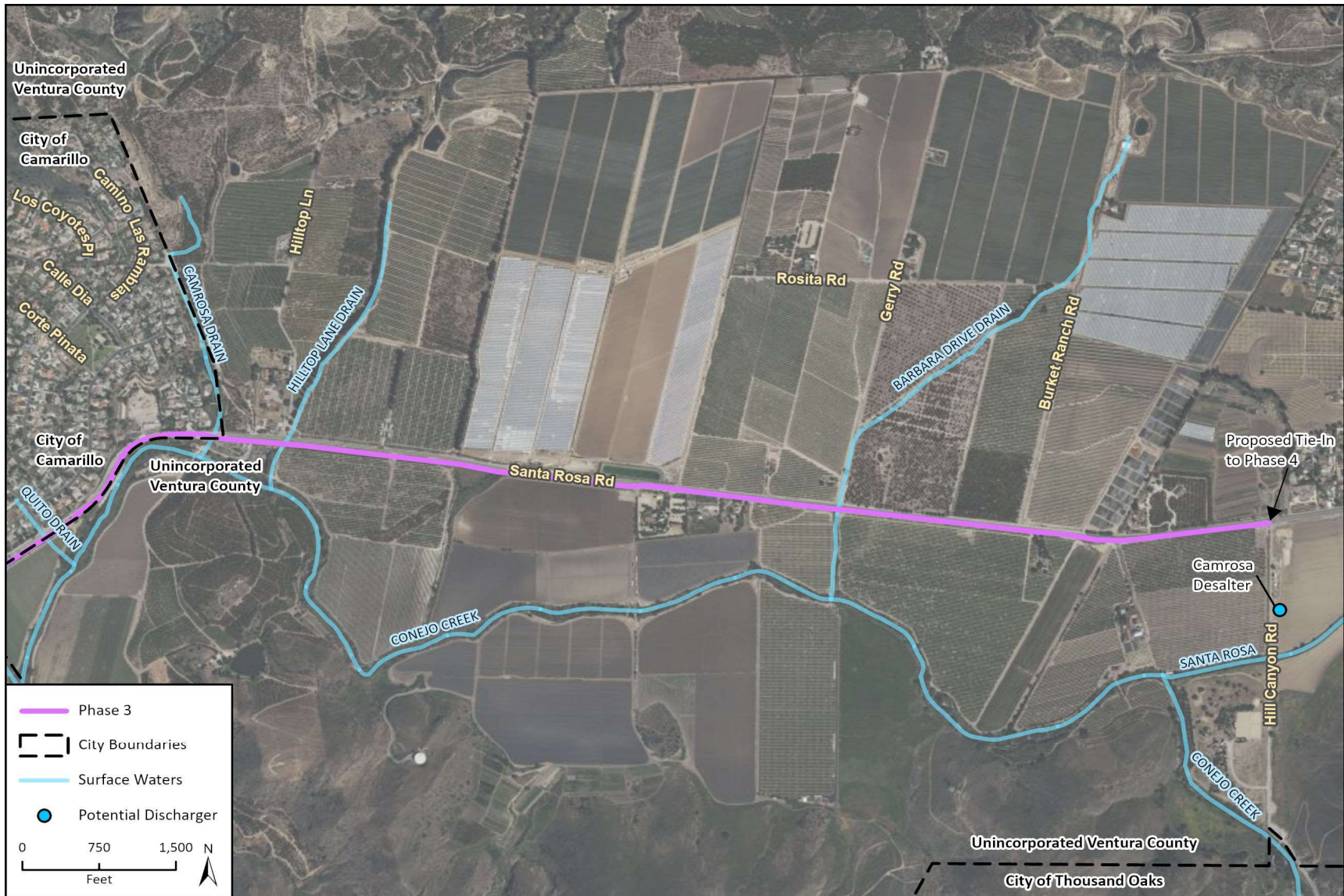
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

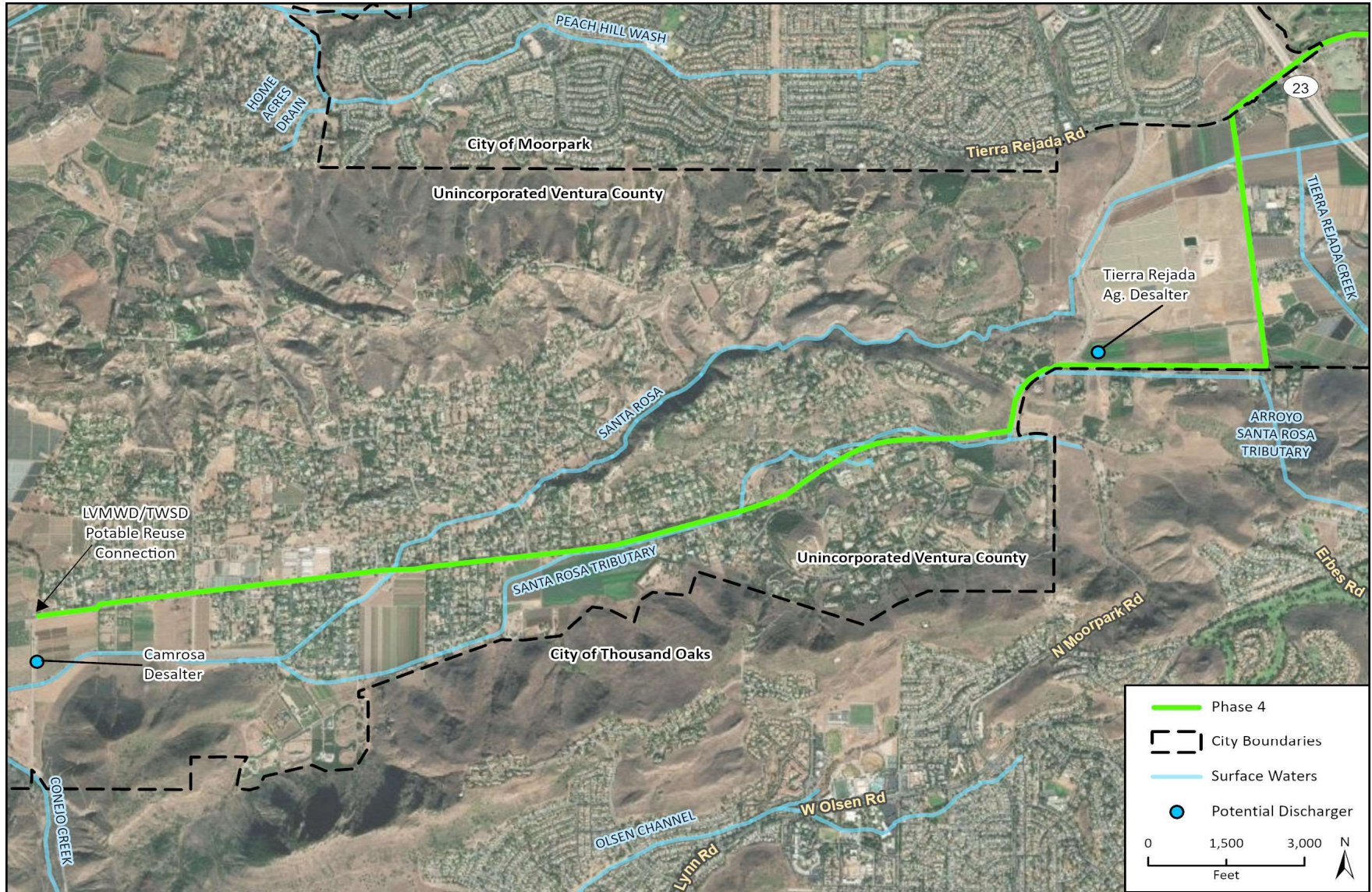
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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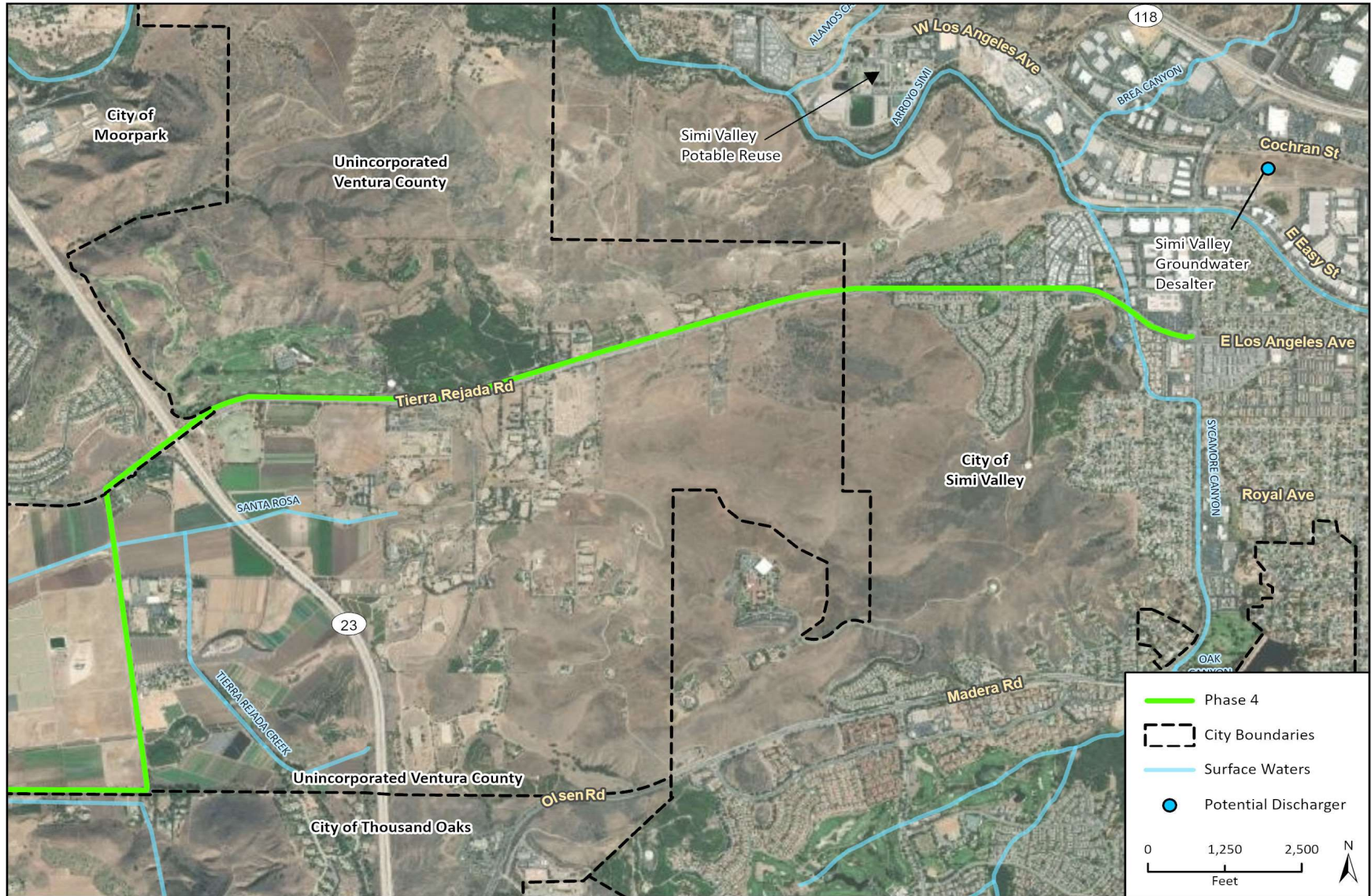
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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ANTHONY GOFF
GENERAL MANAGER

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December 8, 2022

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA 93307
Via Email: chumashtribe@sbcglobal.net

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Quair,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

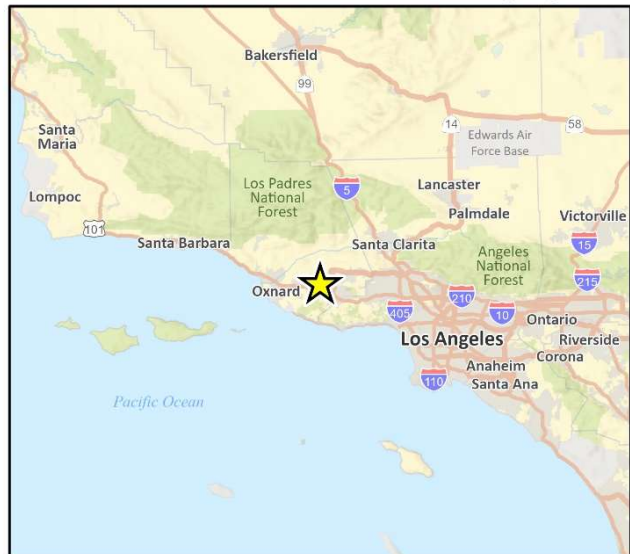
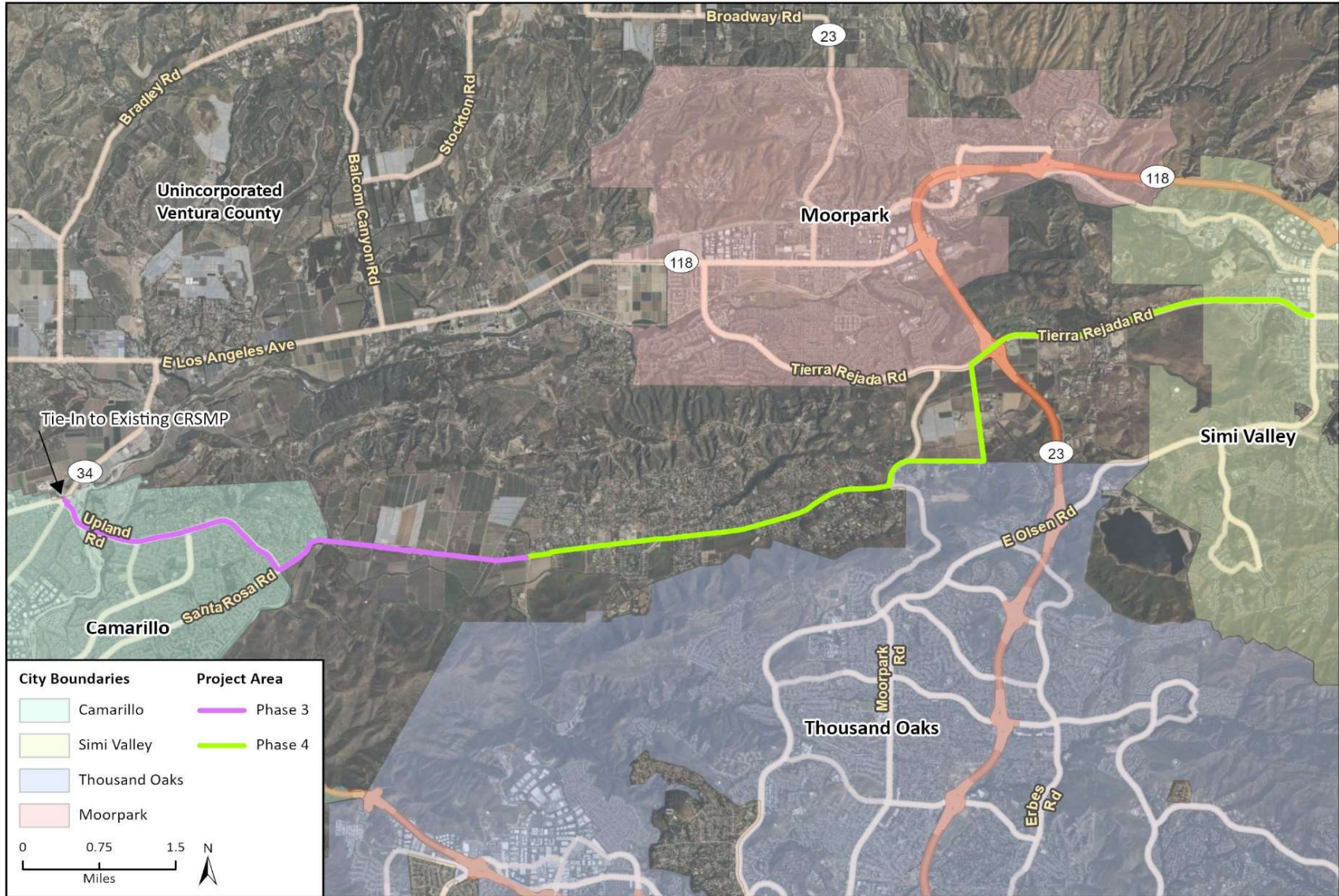


Figure 2 Project Site Location



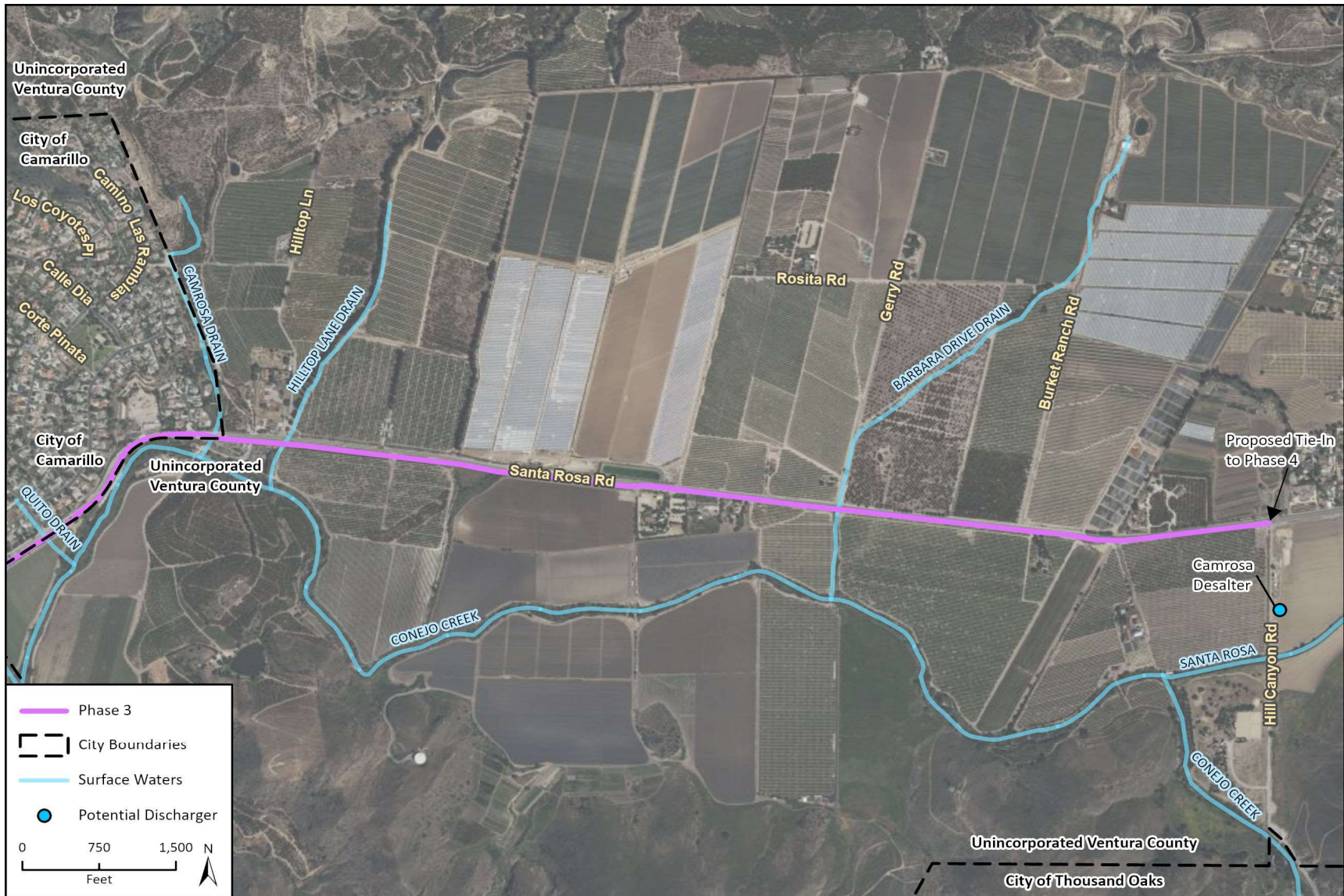
Imagery provided by Microsoft Bing and its licensors © 2022.
Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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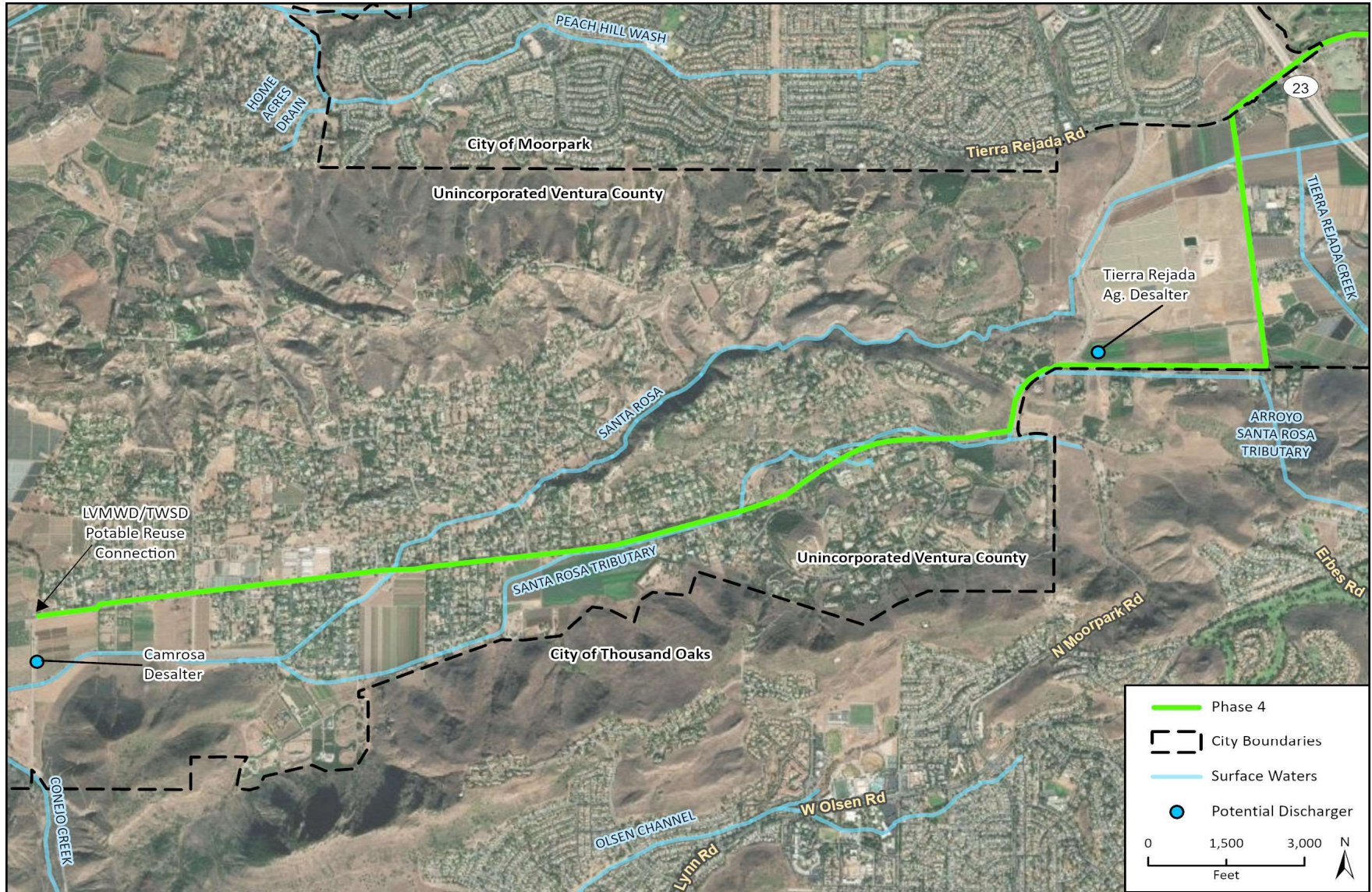
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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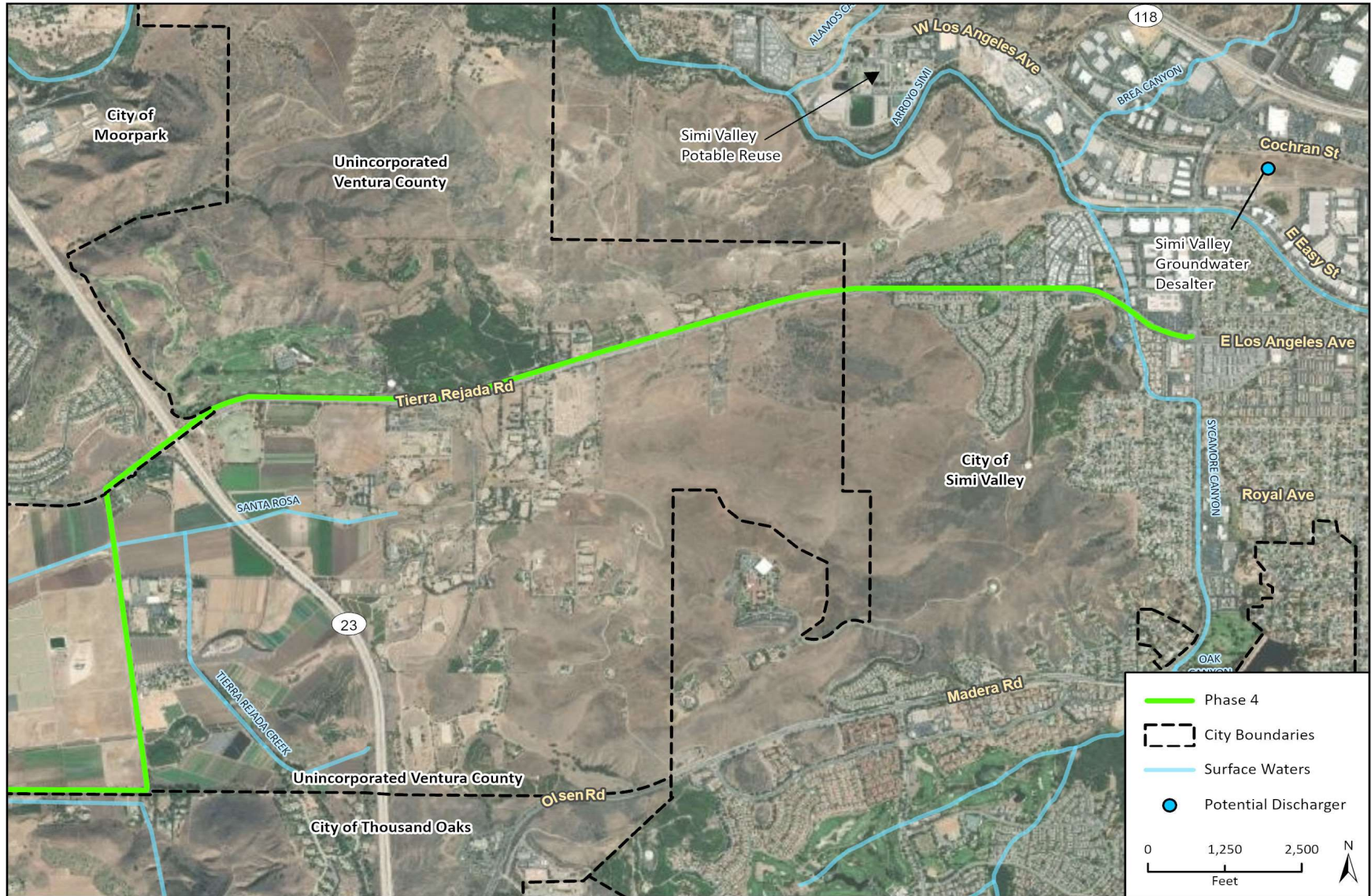
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Coastal Band of the Chumash Nation
Gabe Frausto, Vice Chair
P.O. Box 4464
Santa Barbara, CA, 93140
Via Email: cbcn22vicechair@gmail.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Vice Chair Frausto,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District




Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

-  Phase 3 Pipeline
-  Phase 4 Pipeline
-  Existing Salinity Management Pipeline

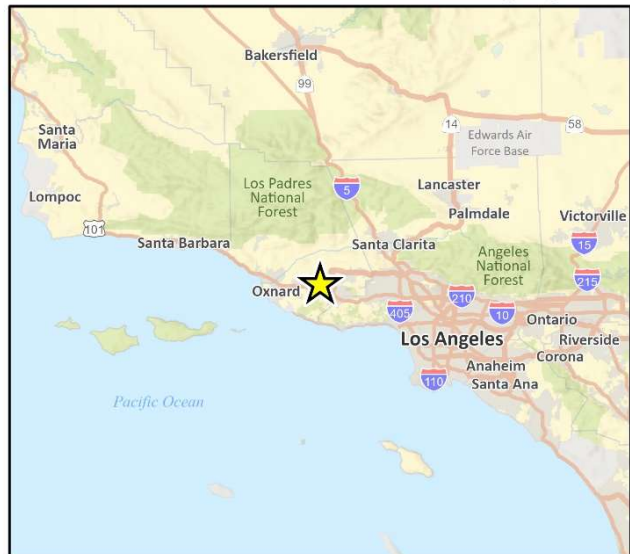
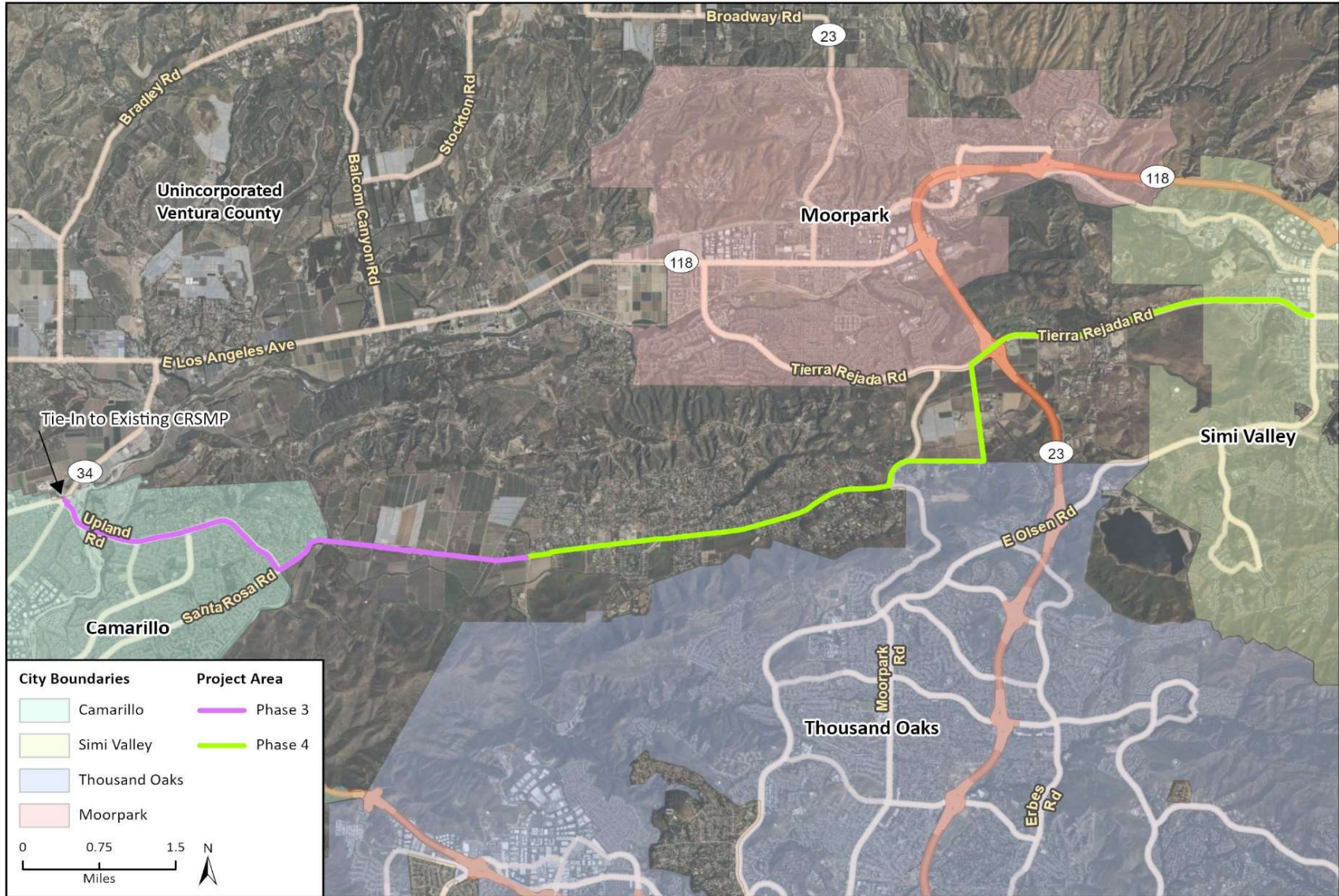


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

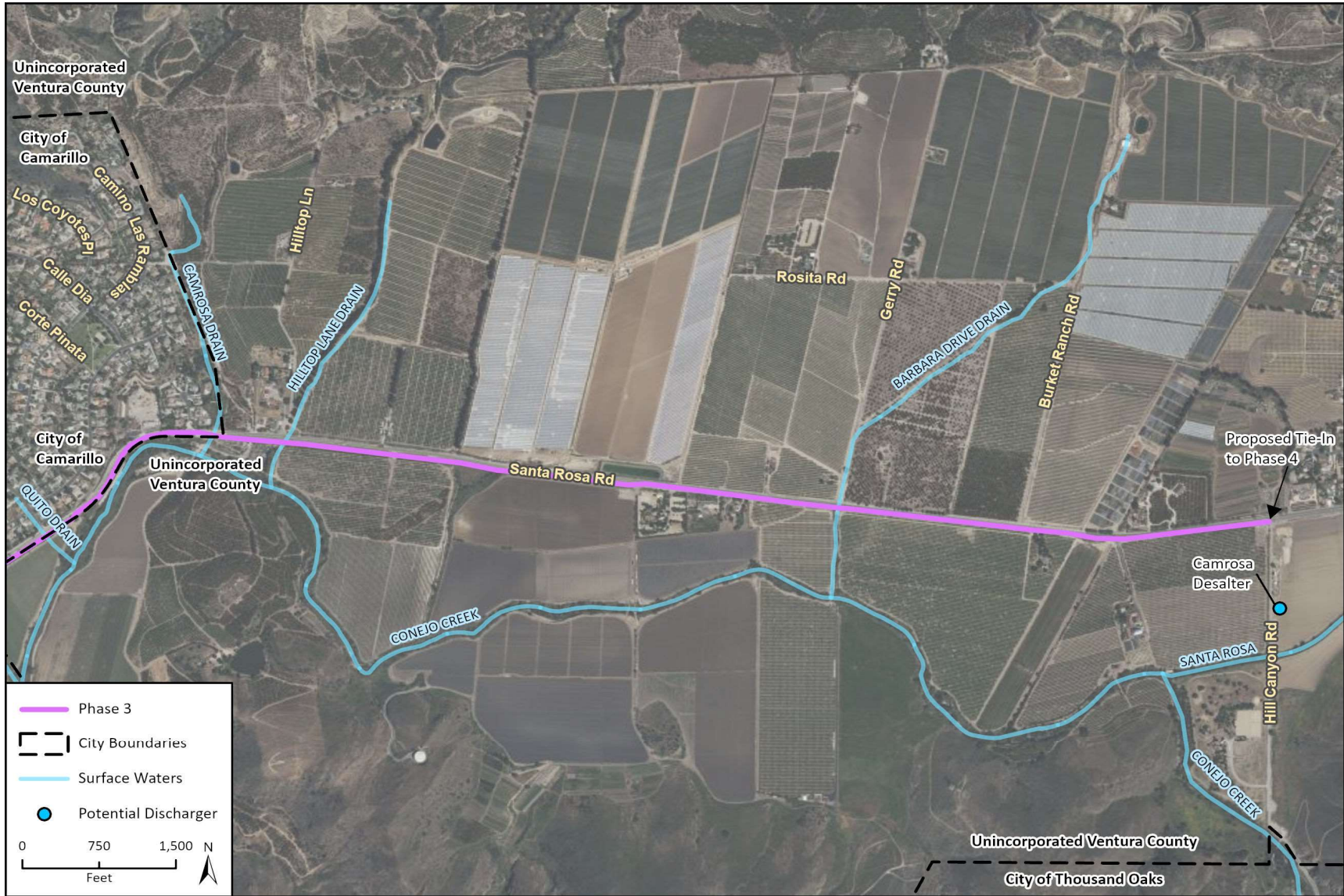
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

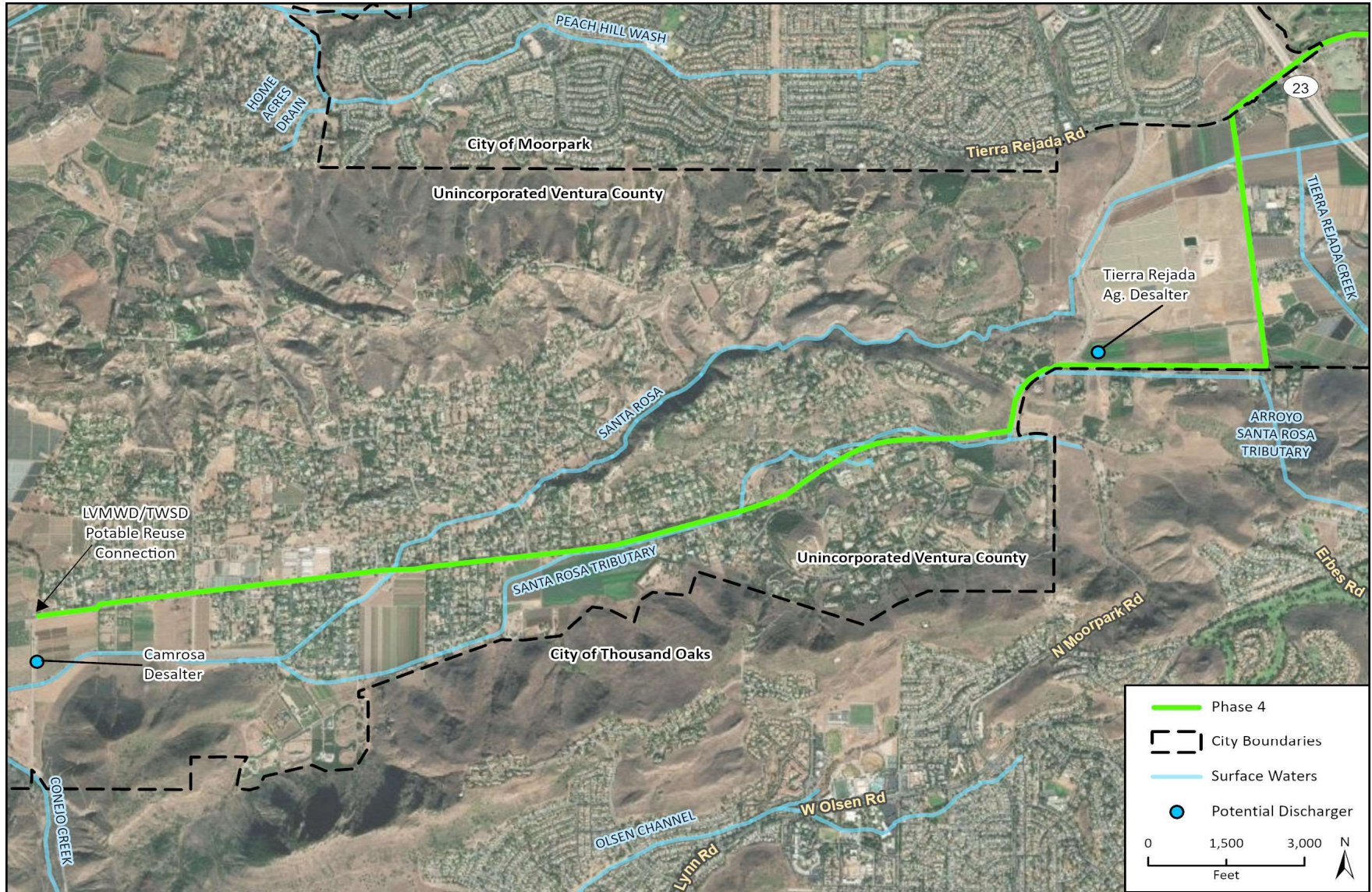
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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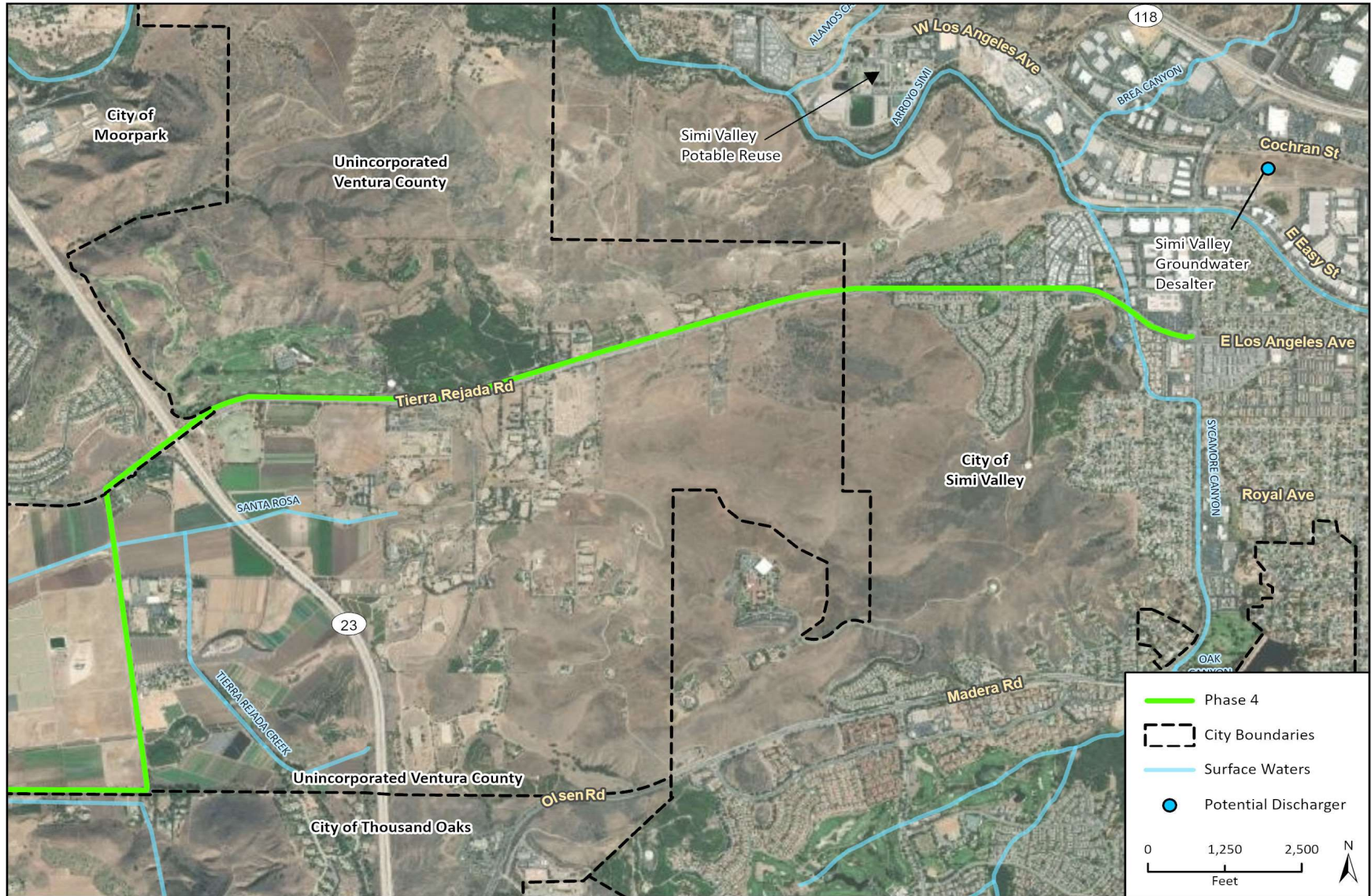
EPS Proj, Regional, Phase 3 Locn Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Coastal Band of the Chumash Nation
Mia Lopez, Chairperson
P.O. Box 4464
Santa Barbara, CA 93140
Via Email: cbcntribalchair@gmail.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Lopez,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
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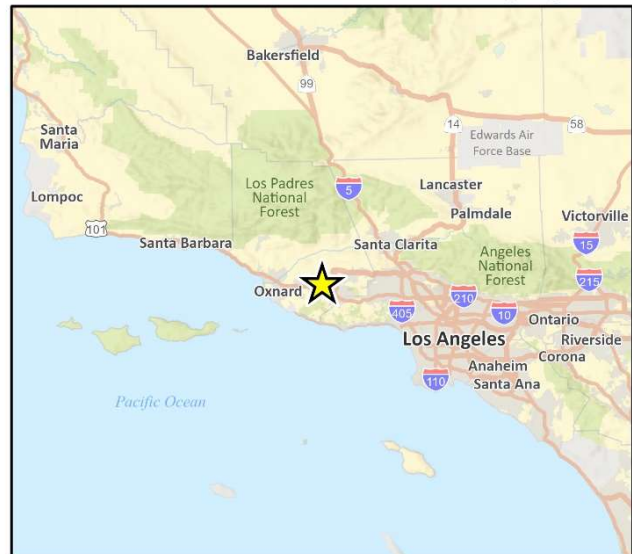
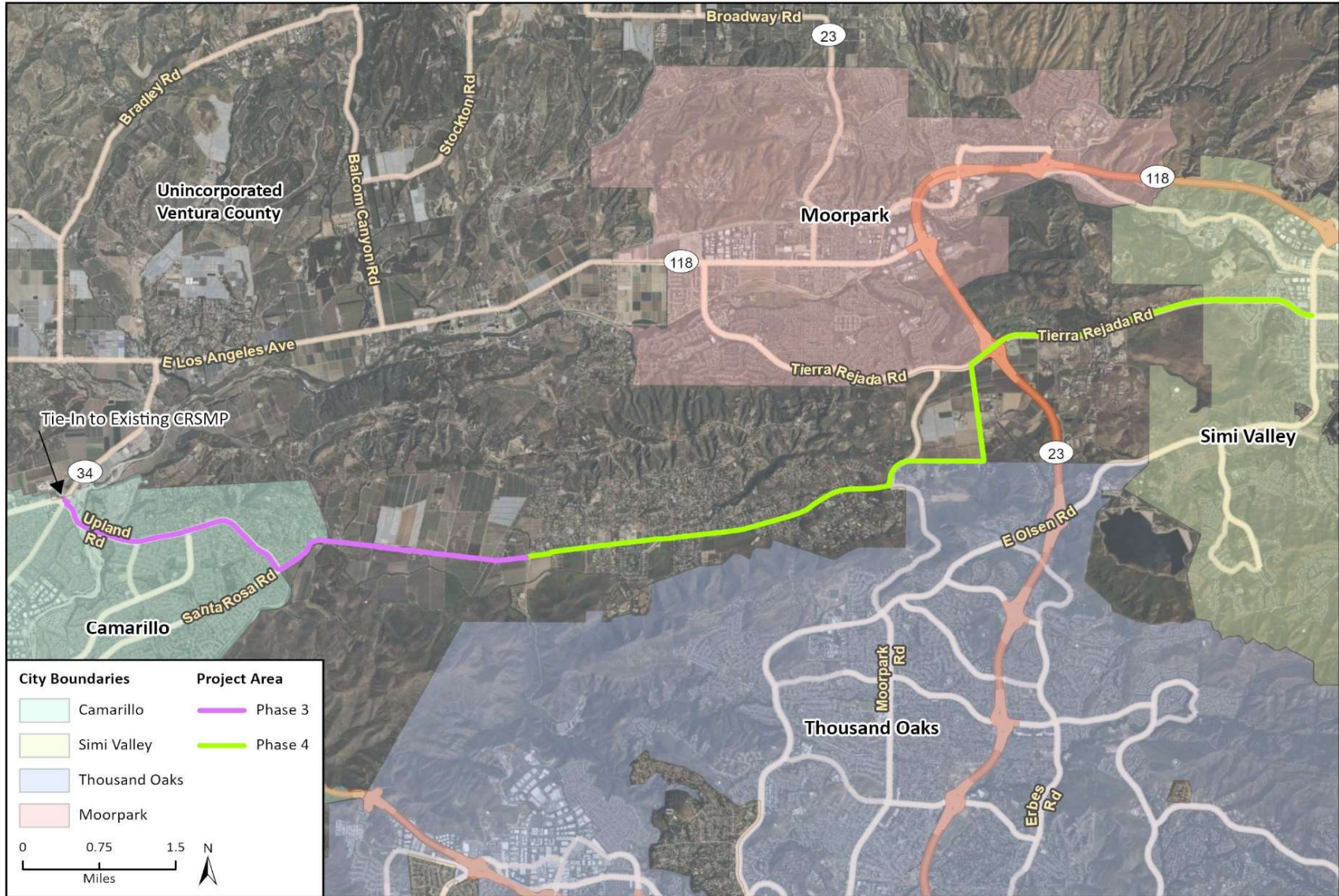


Figure 2 Project Site Location



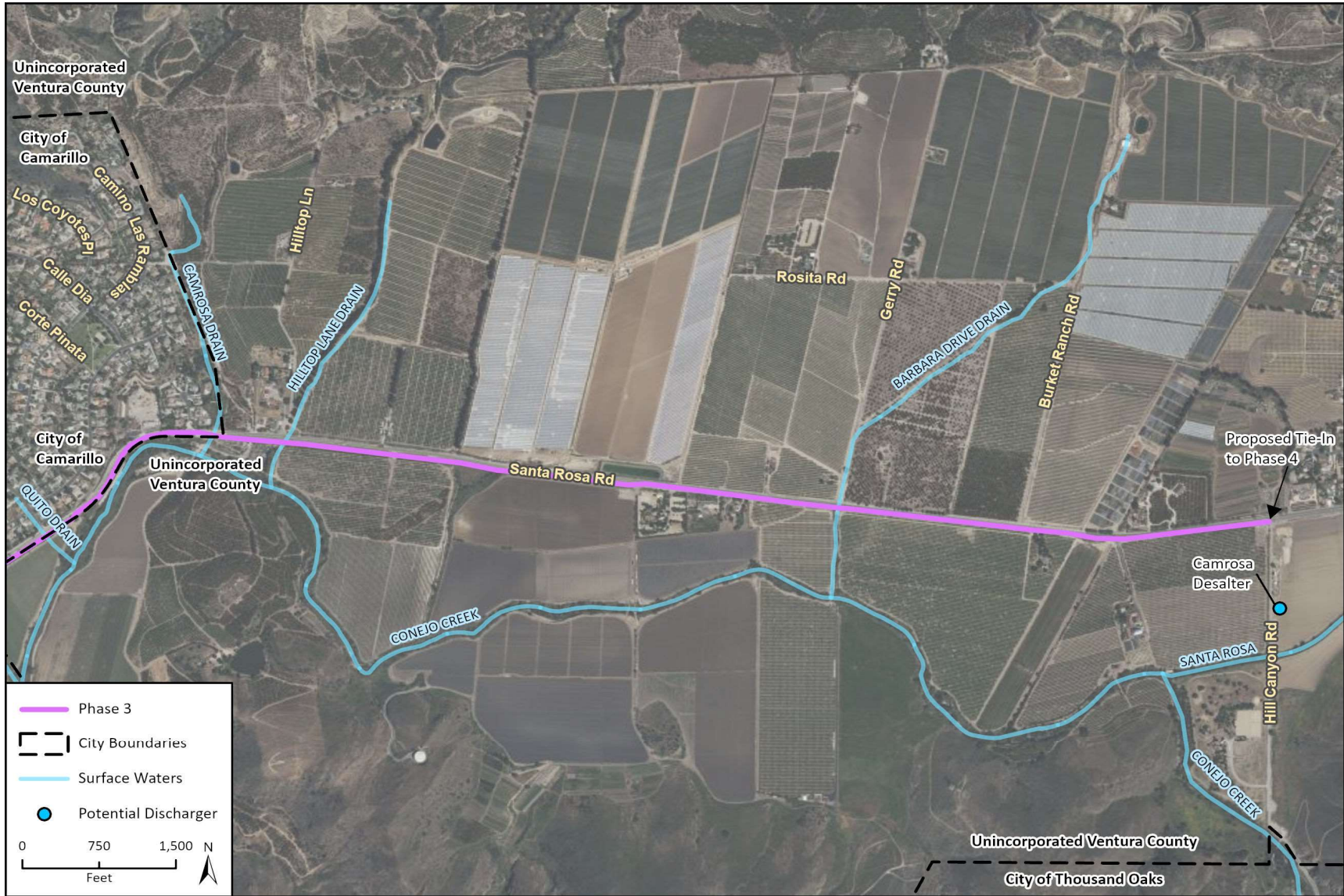
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 Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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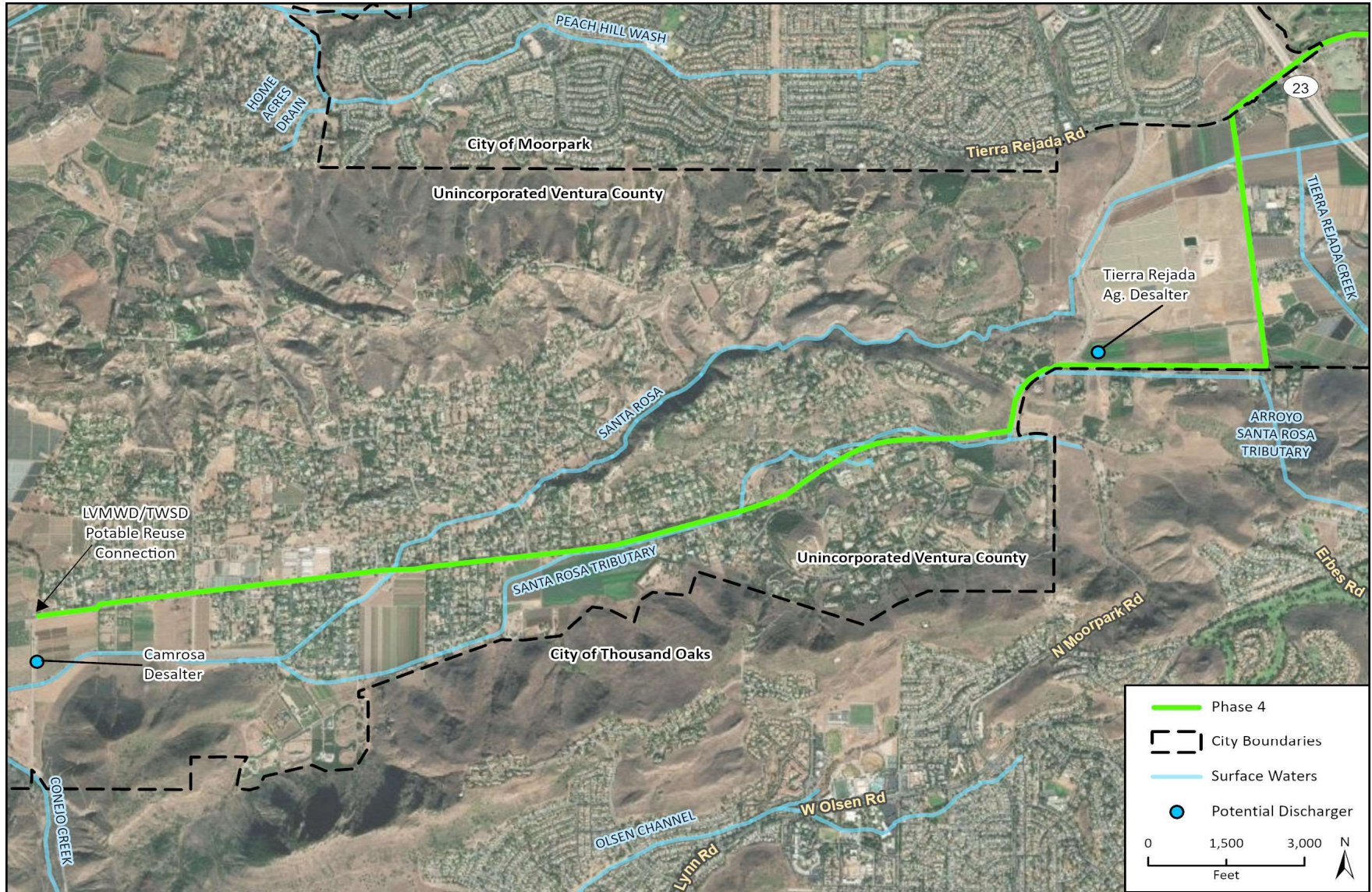
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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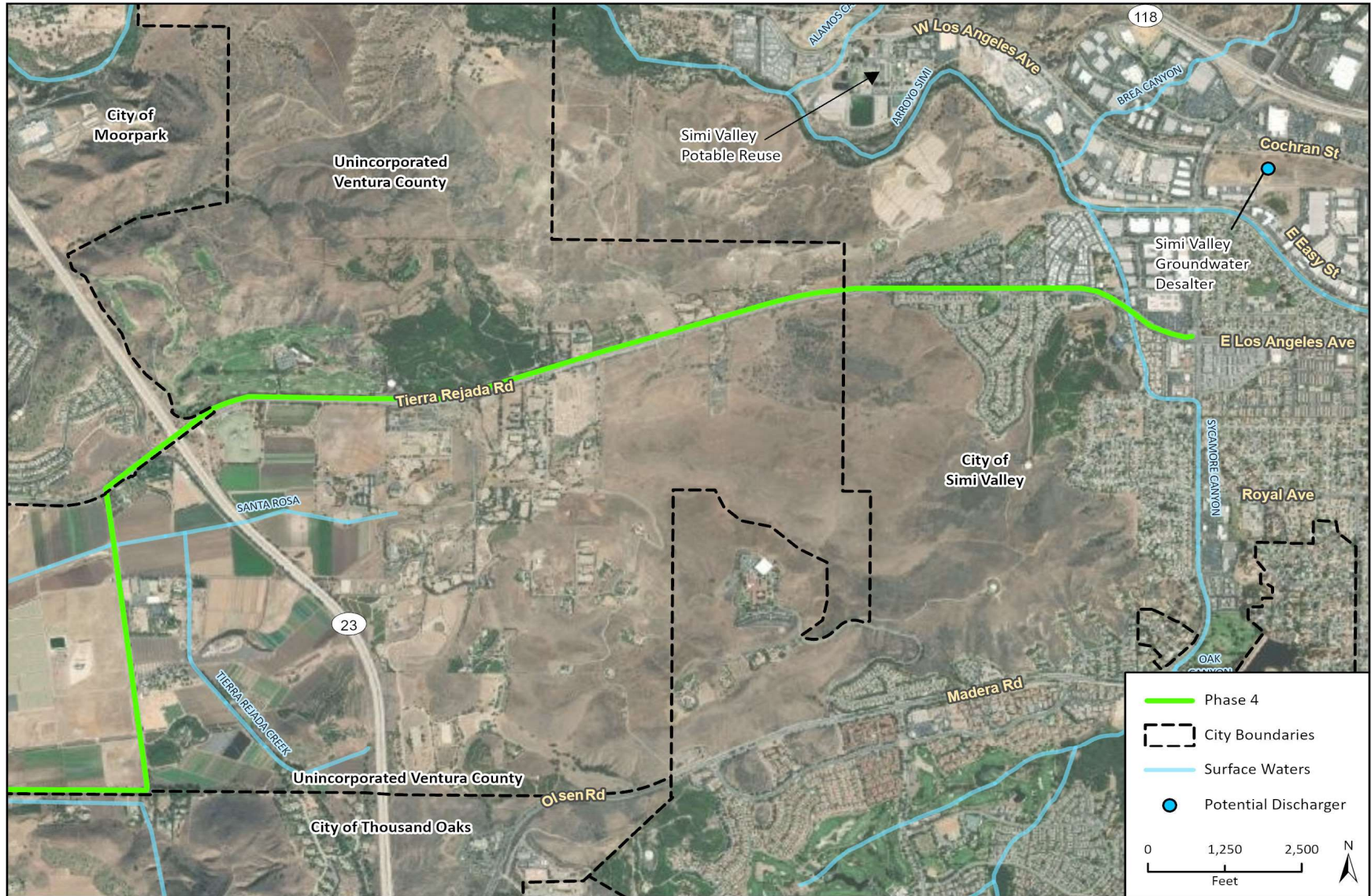
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Fernandeño Tataviam Band of Mission Indians
Rudy Ortega, Tribal President
1019 Second Street, Suite 1
San Fernando, CA, 91340
Via Email: thcp@tataviam-nsn.us

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Tribal President Ortega,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

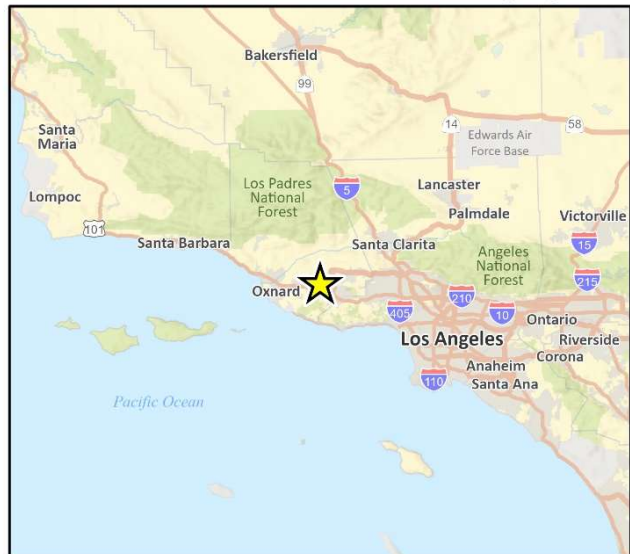
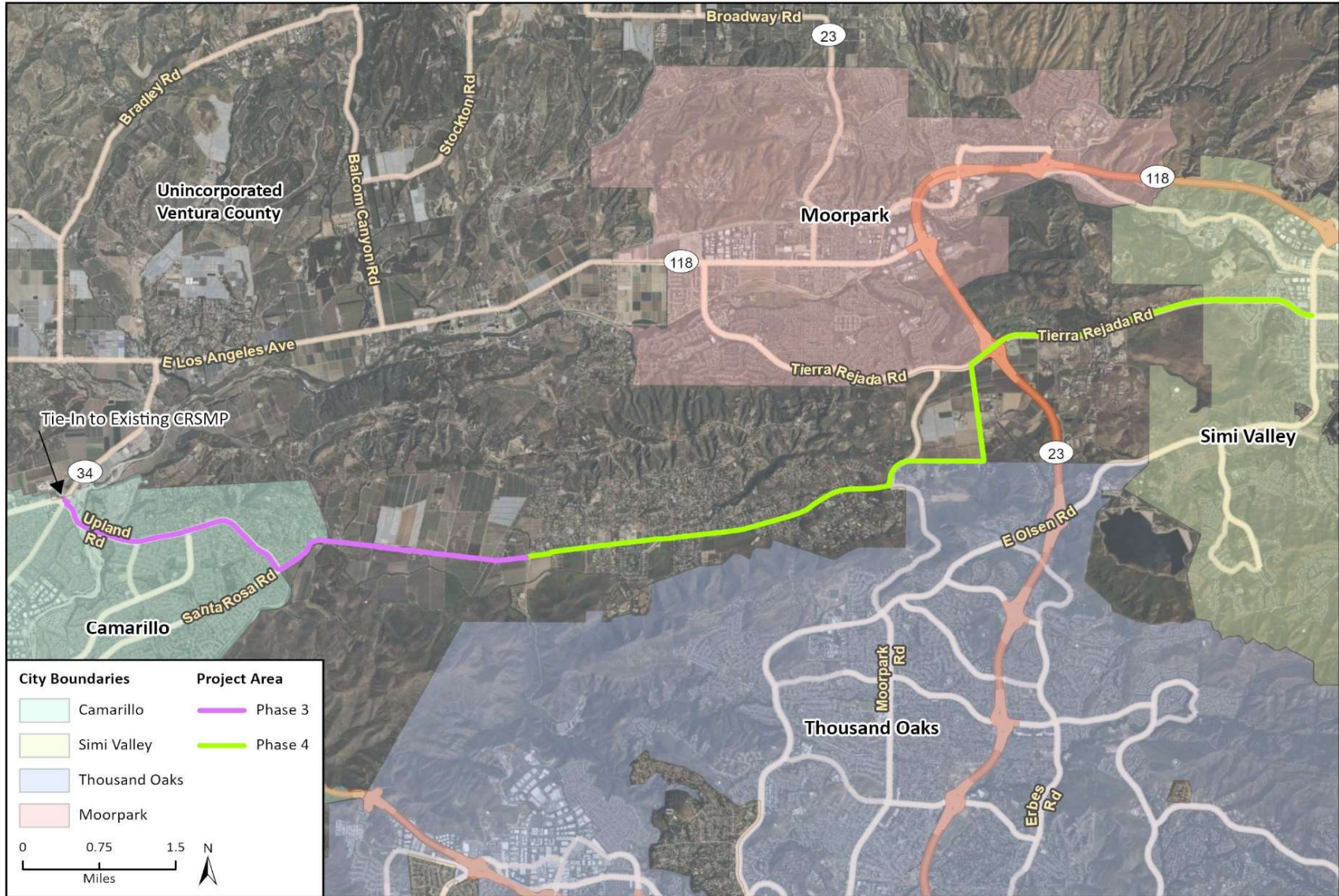


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

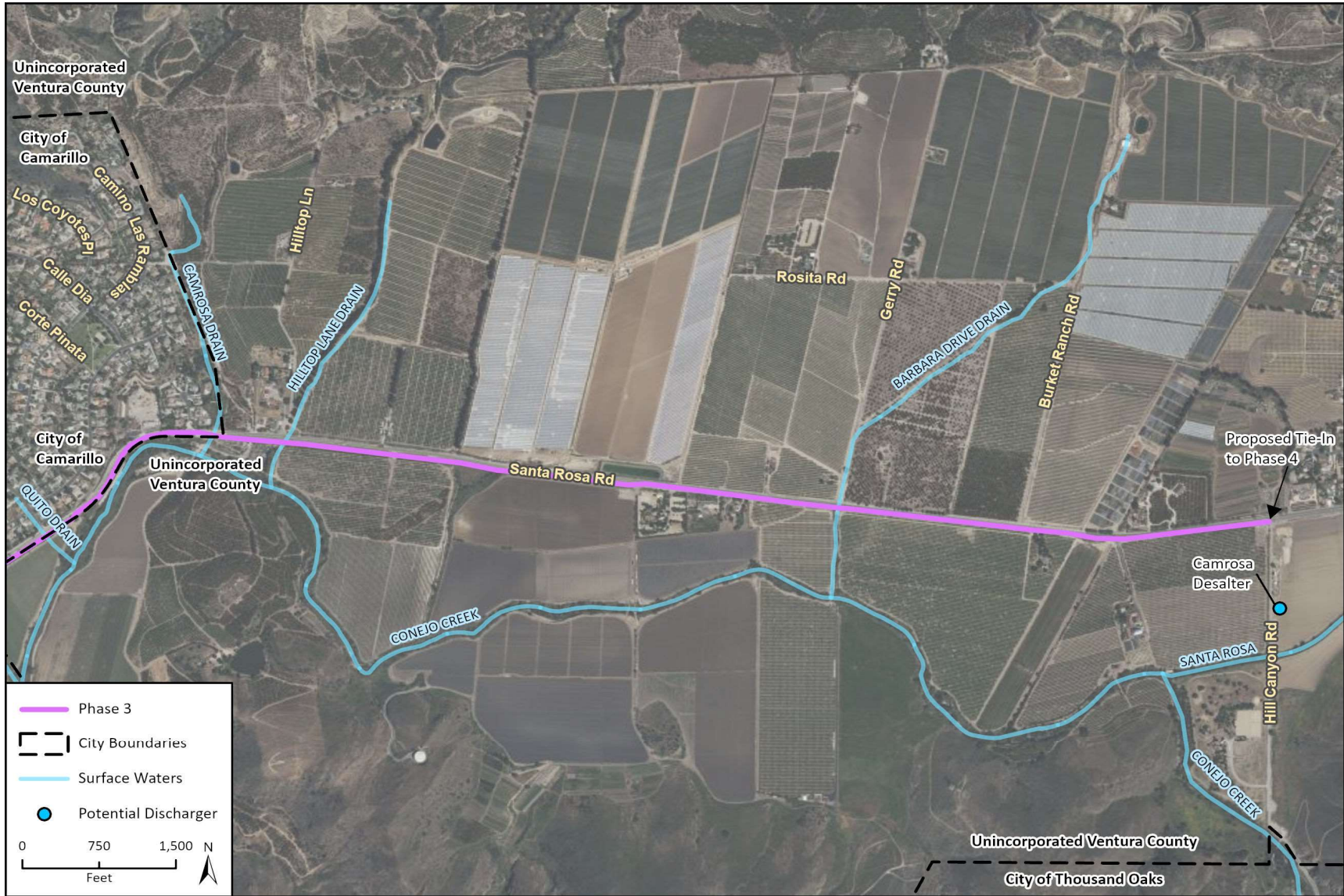
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

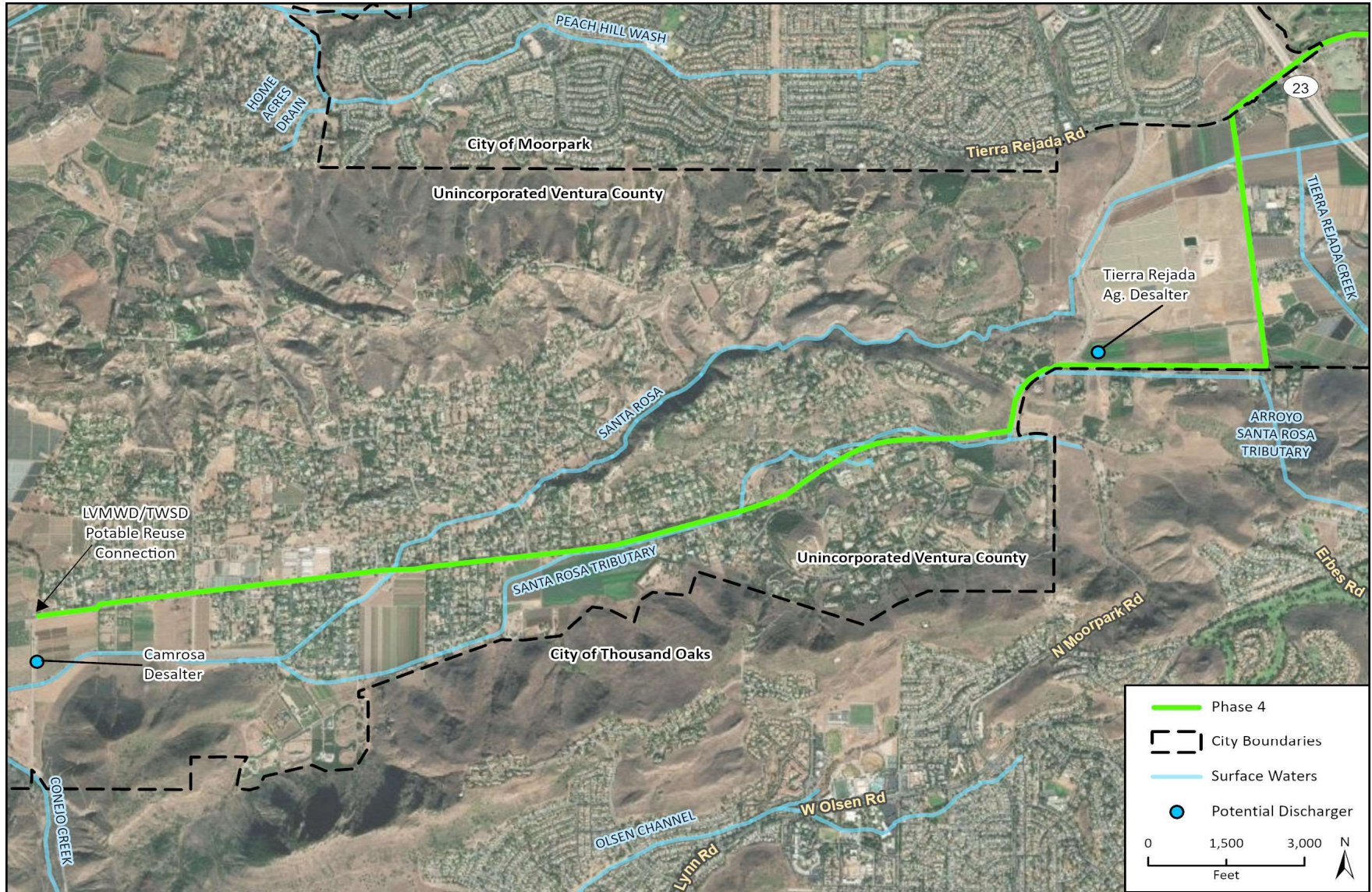
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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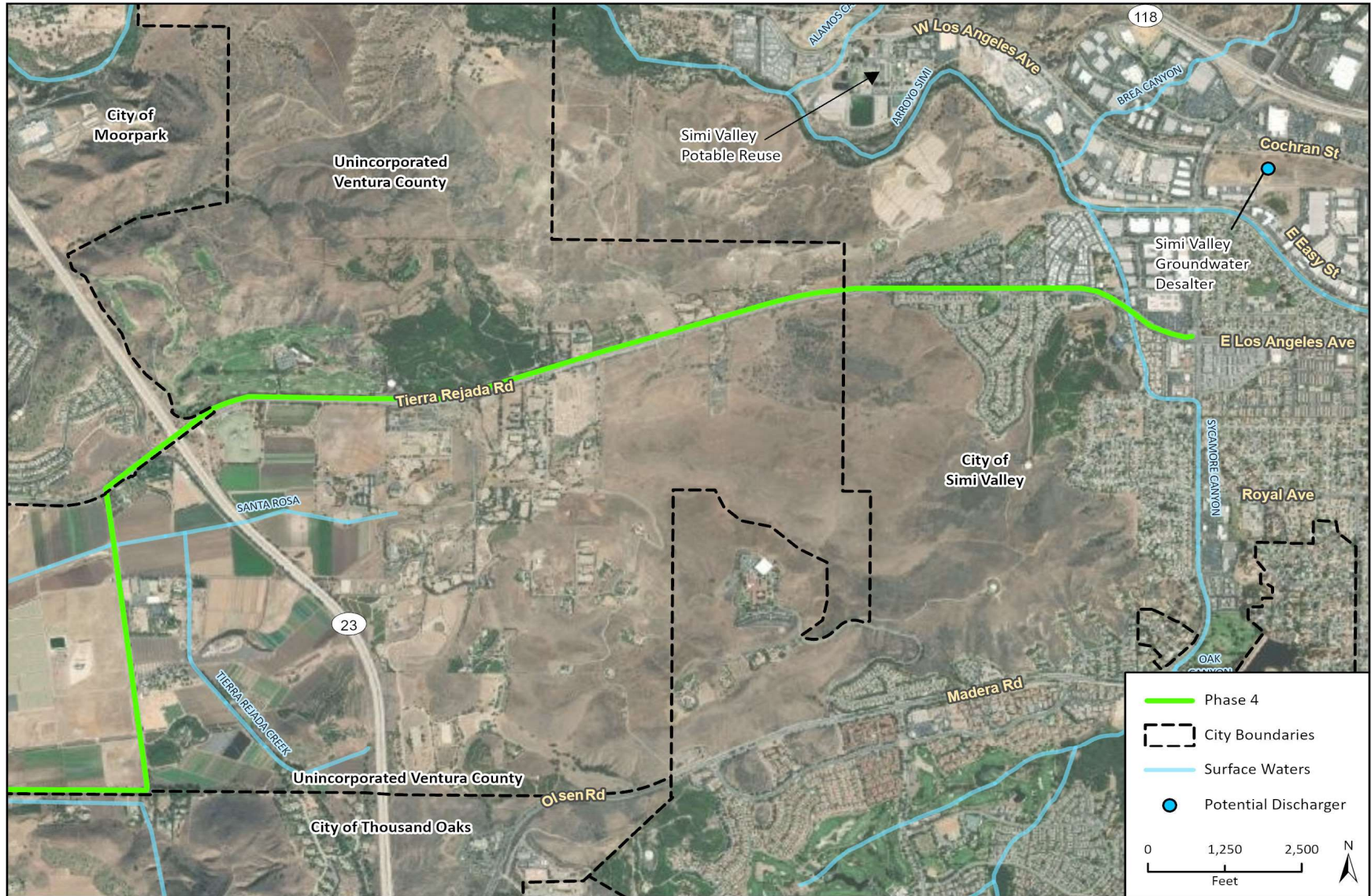
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Gabrieleño Band of Mission Indians – Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA, 91723
Via Email: admin@gabrielenoindians.org

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Salas,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District




Enclosure: Project Location Maps

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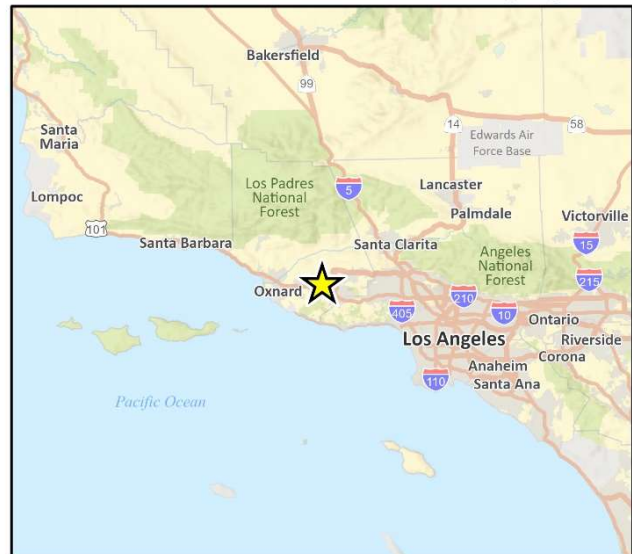
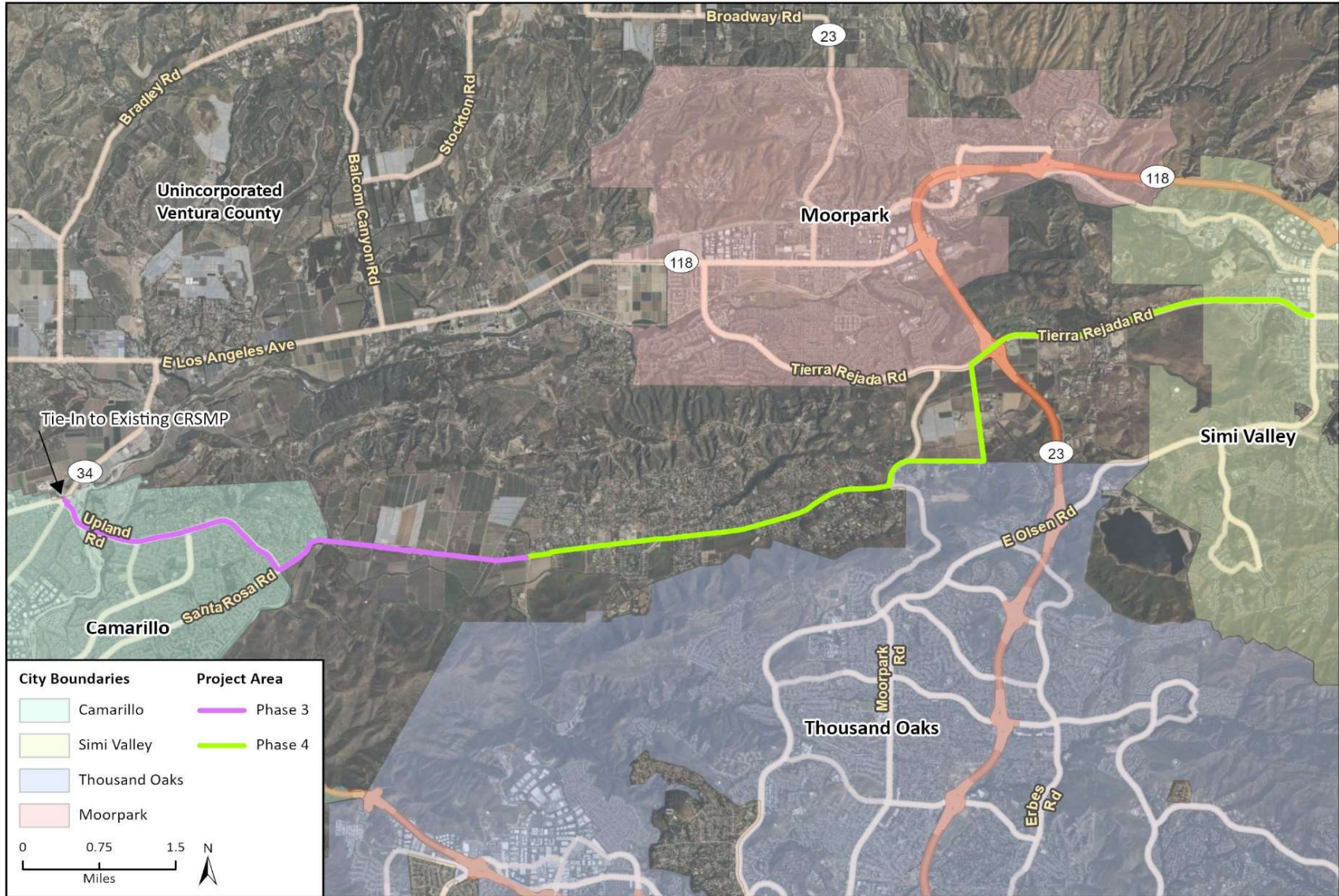


Figure 2 Project Site Location



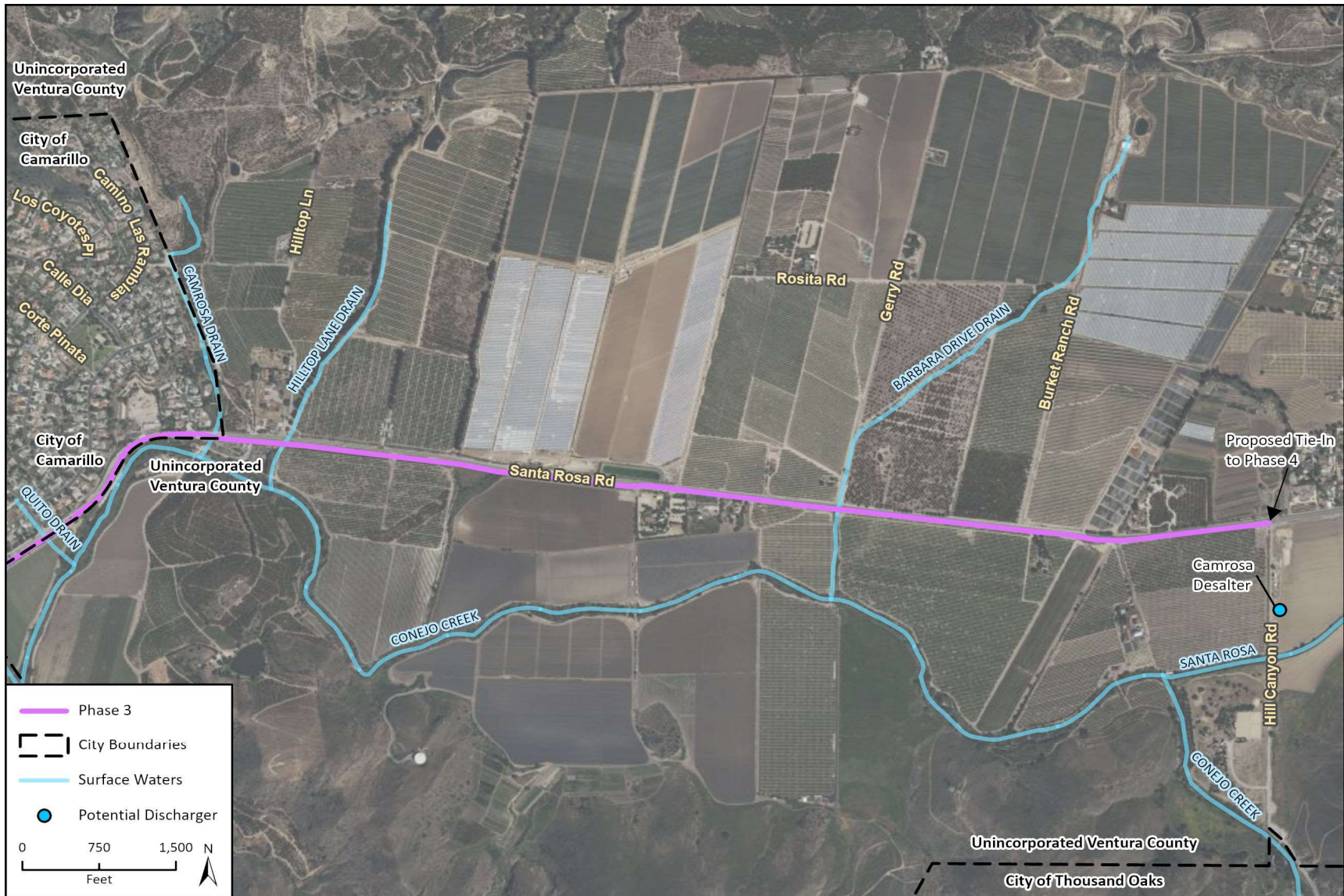
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Figure 3 Phase 3 Pipeline Location, Western Portion



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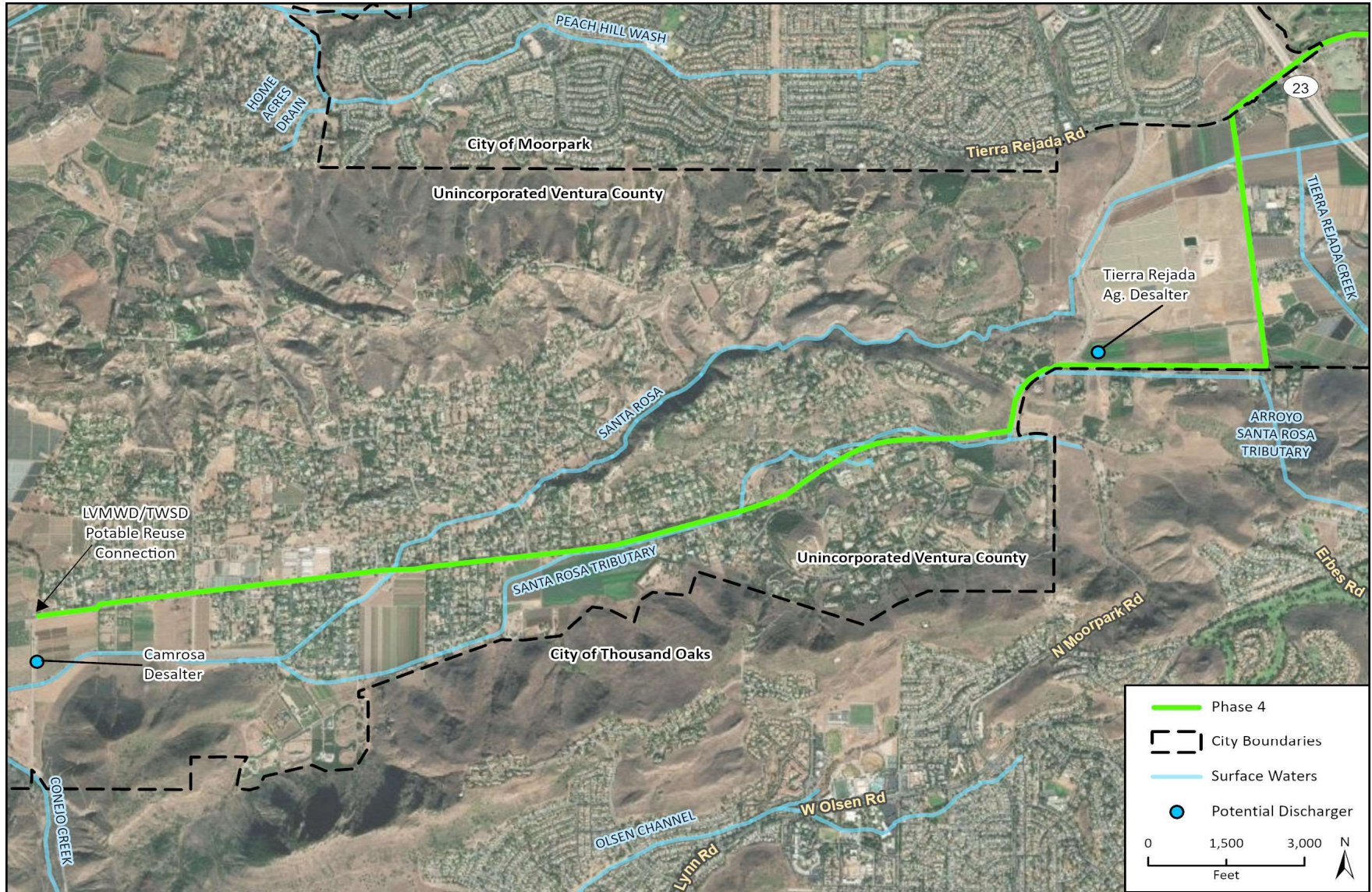
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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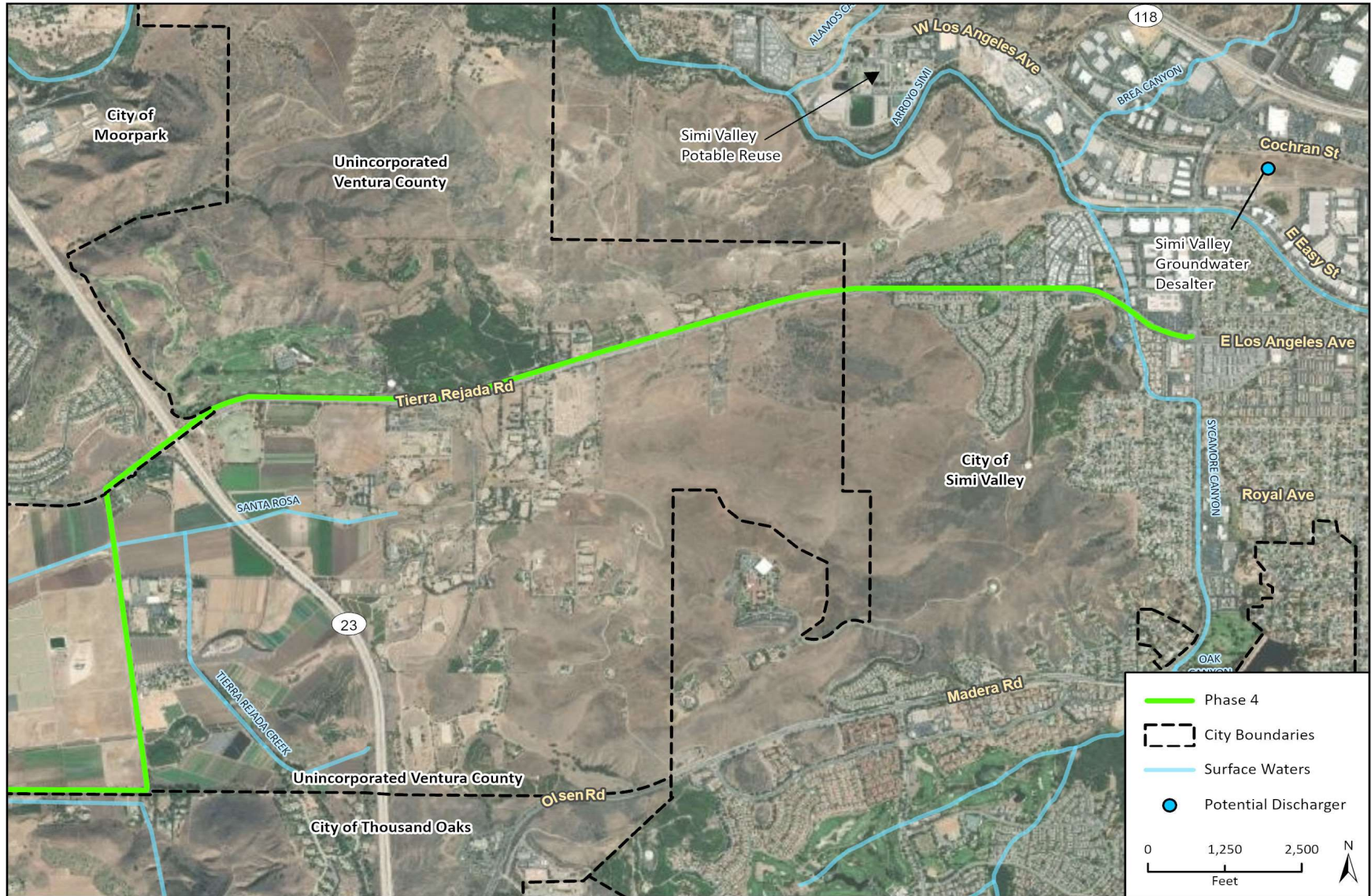
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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GENERAL MANAGER

web site: www.calleguas.com

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December 8, 2022

Gabrielino-Tongva Tribe
Charles Alvarez, Chairman
23454 Vanowen Street
West Hills, CA, 91307
Via Email: roadkingcharles@aol.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Alvarez,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Lancaster". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

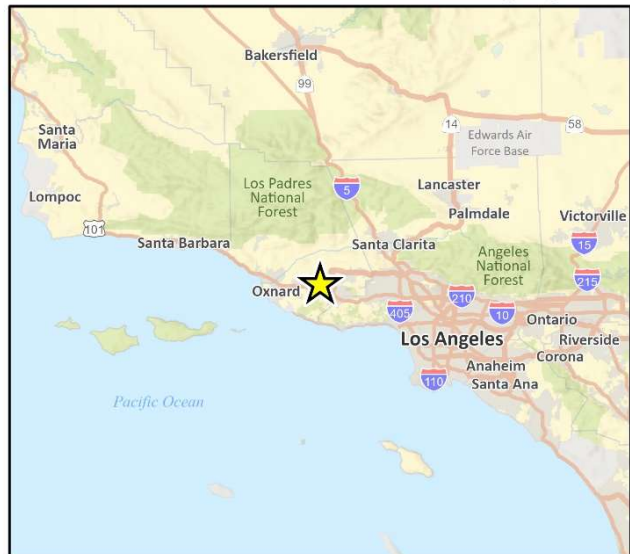
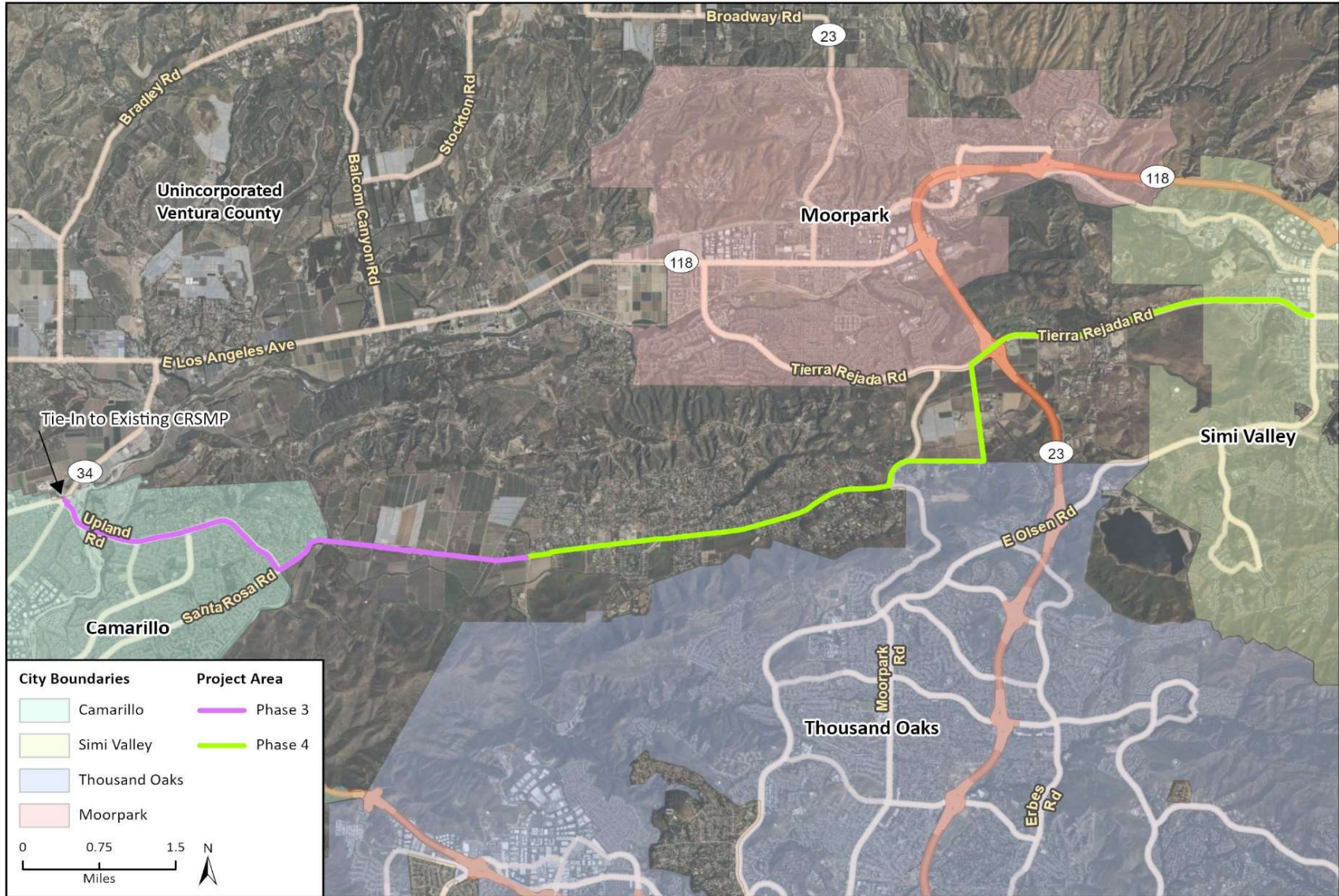


Figure 2 Project Site Location



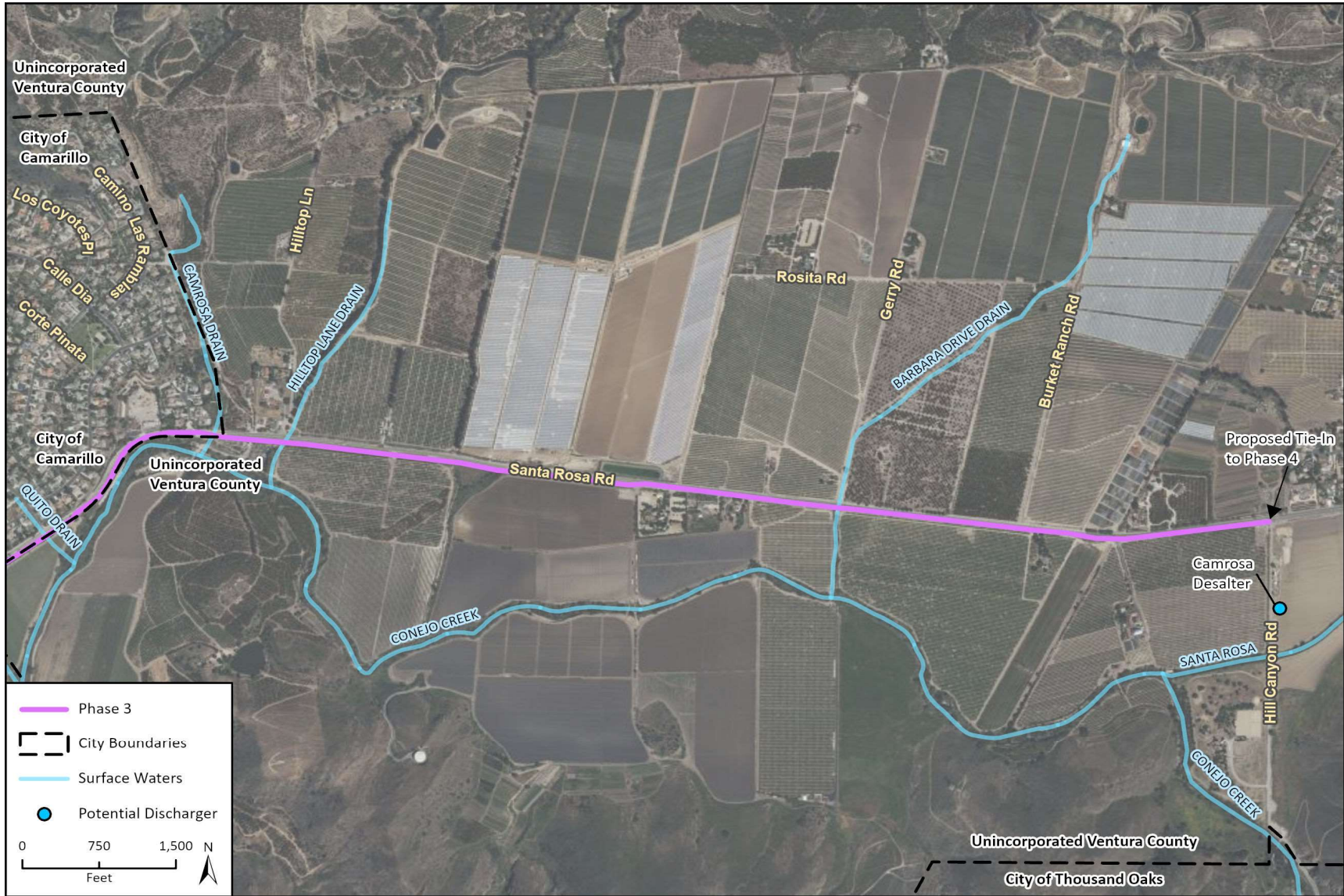
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 Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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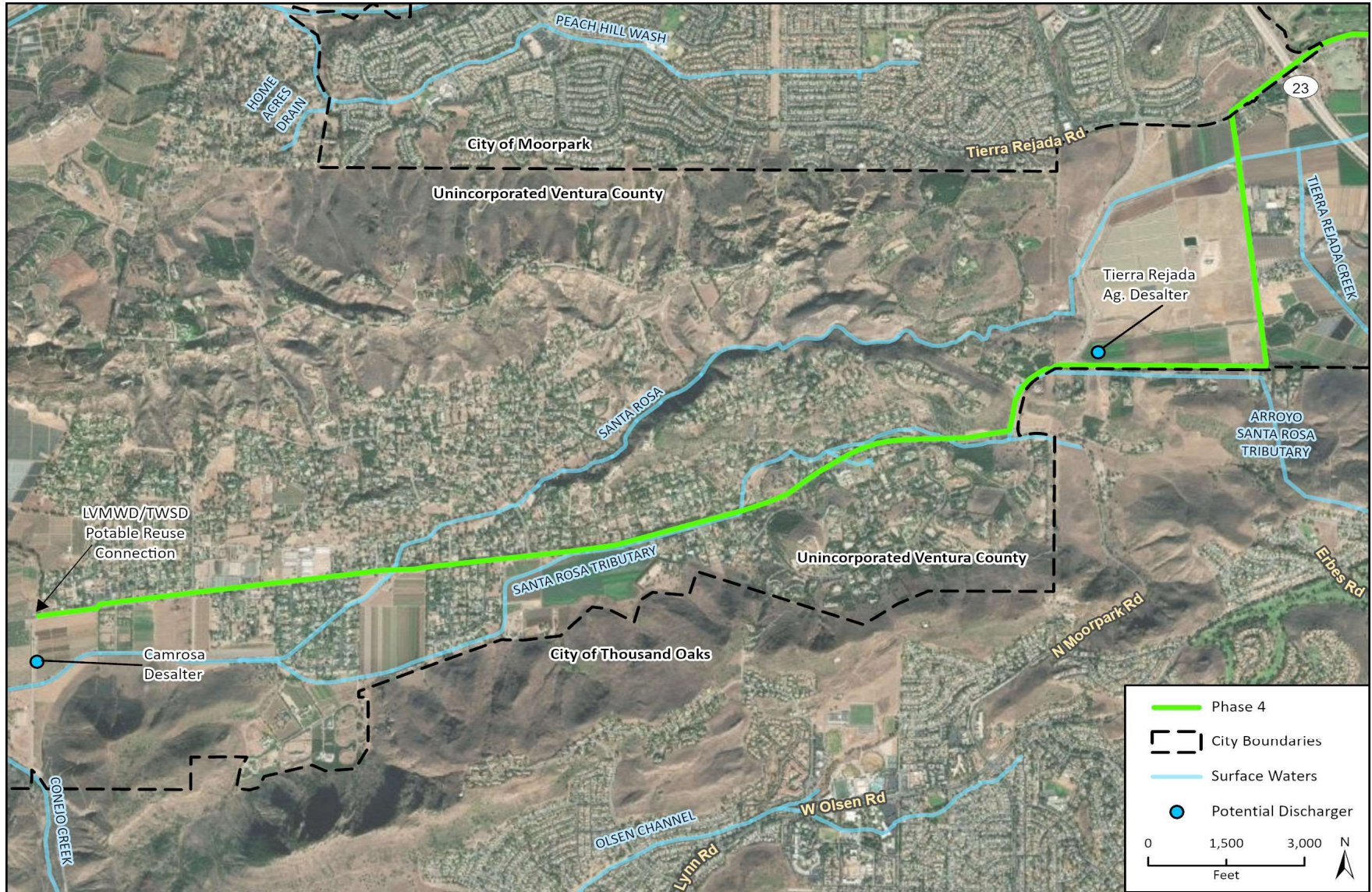
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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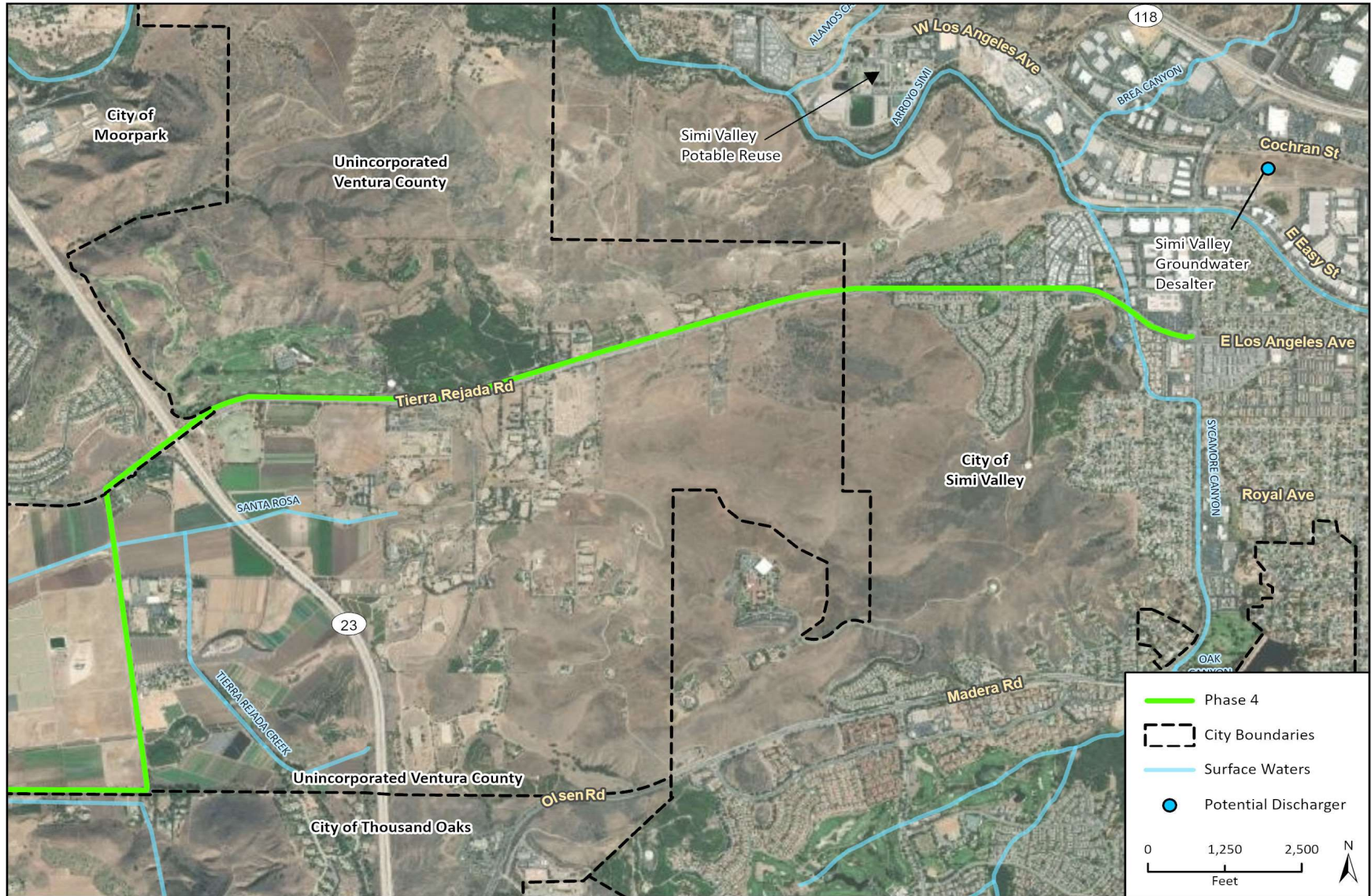
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Gabrielino Tongva Indians of California Tribal Council
Christina Conley, Tribal Consultant and Administrator
P.O. Box 941078
Simi Valley, CA 93094
Via Email: christina.marsden@alumni.usc.edu

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Tribal Consultant and Administrator Conley,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

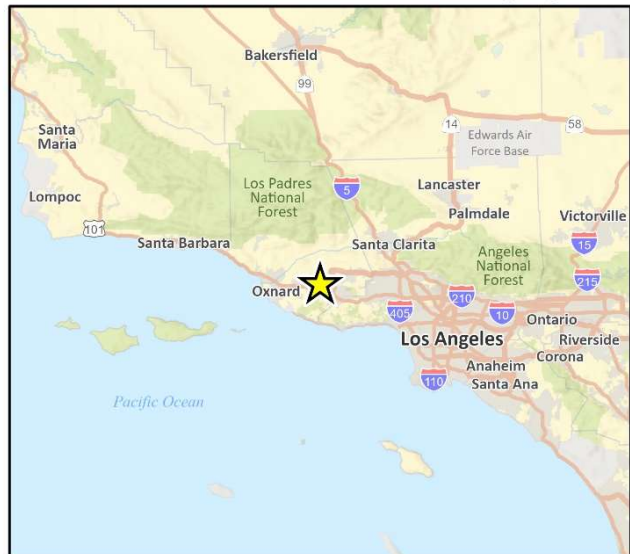
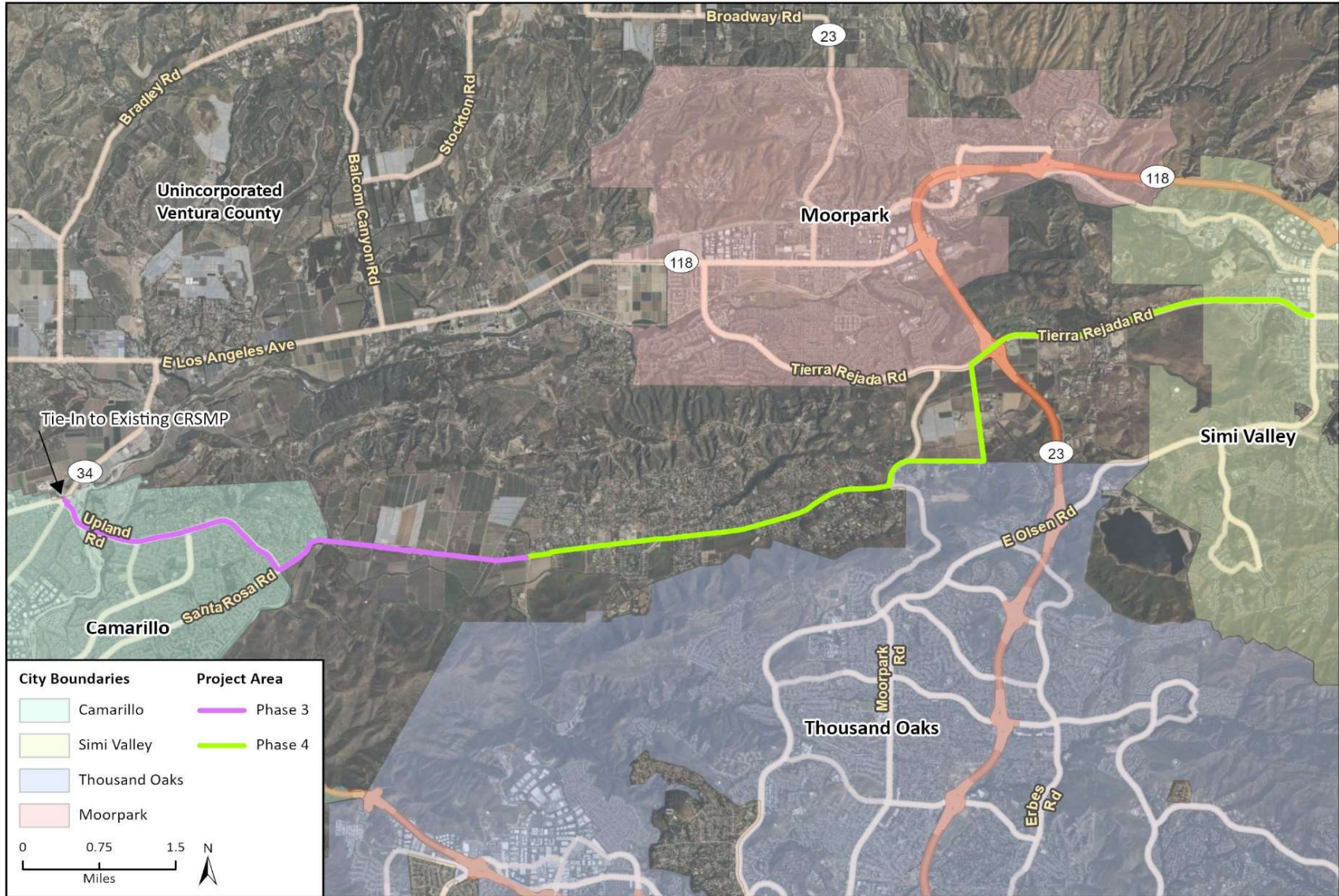


Figure 2 Project Site Location



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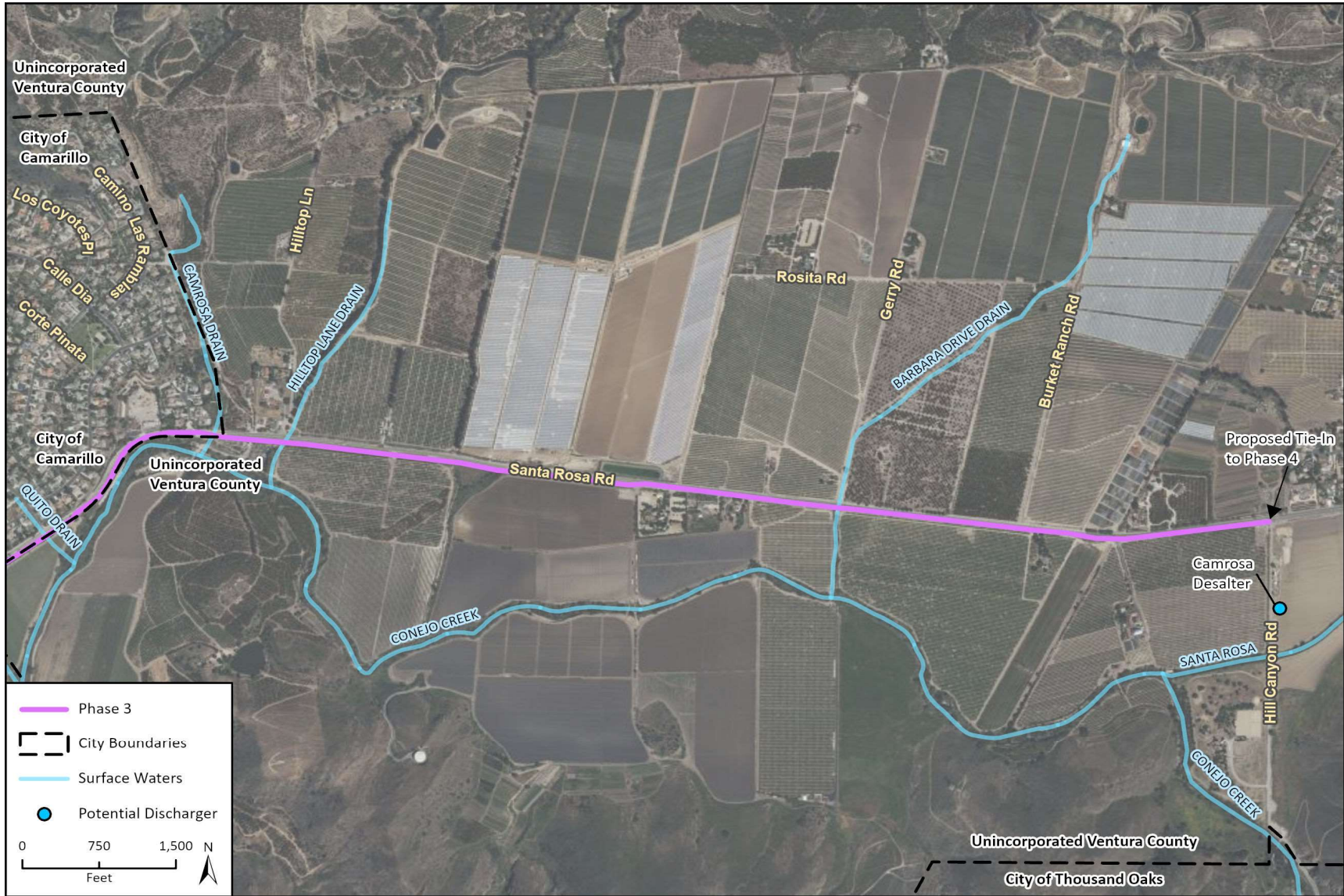
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

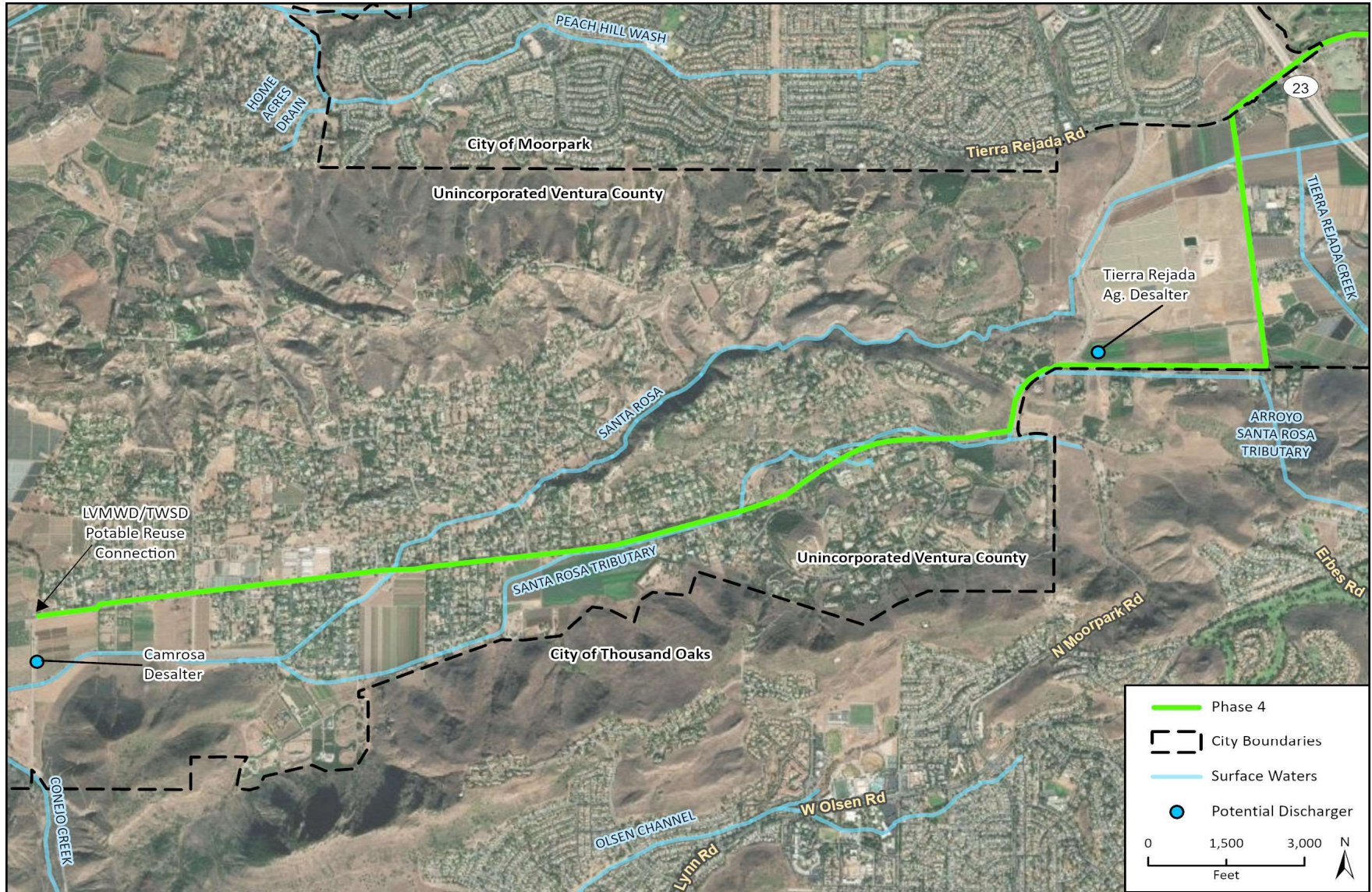
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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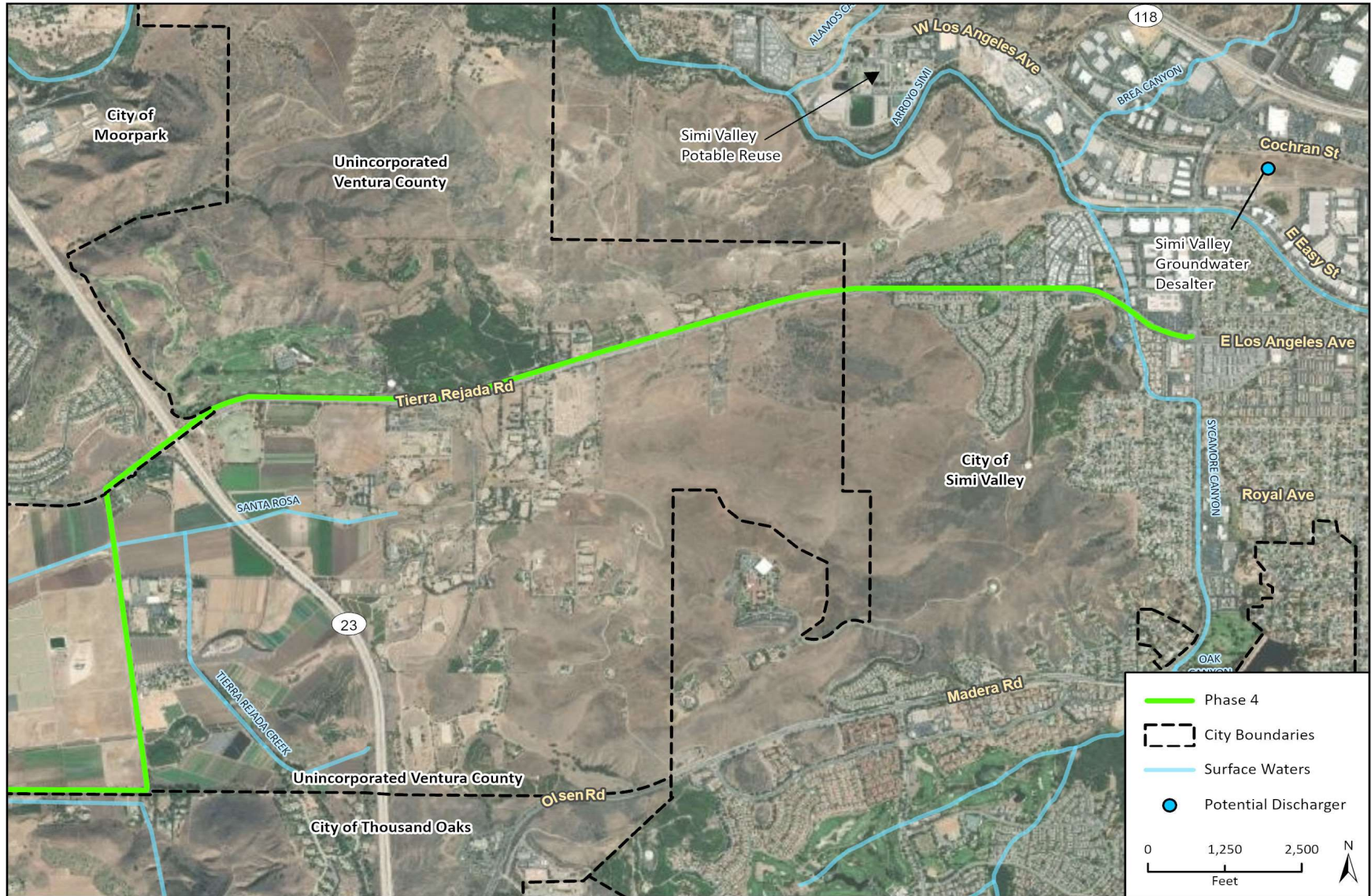
EPS Proj, Regional, Phase 3 Locn Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490
Bellflower, CA 90707
Via Email: gtongva@gmail.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Dorame,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
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- Existing Salinity Management Pipeline

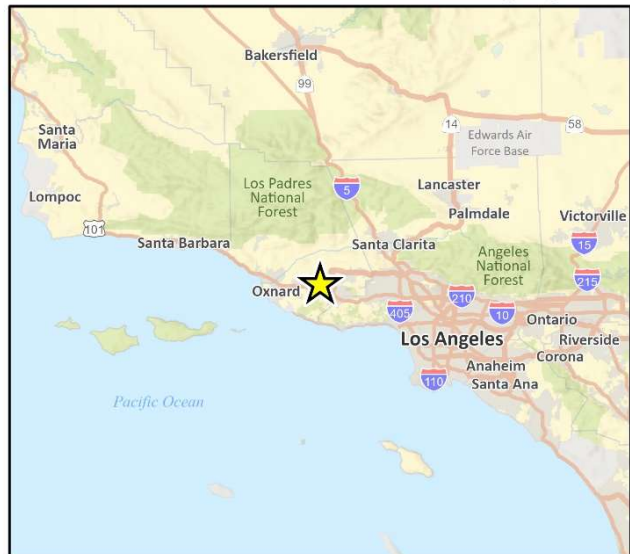
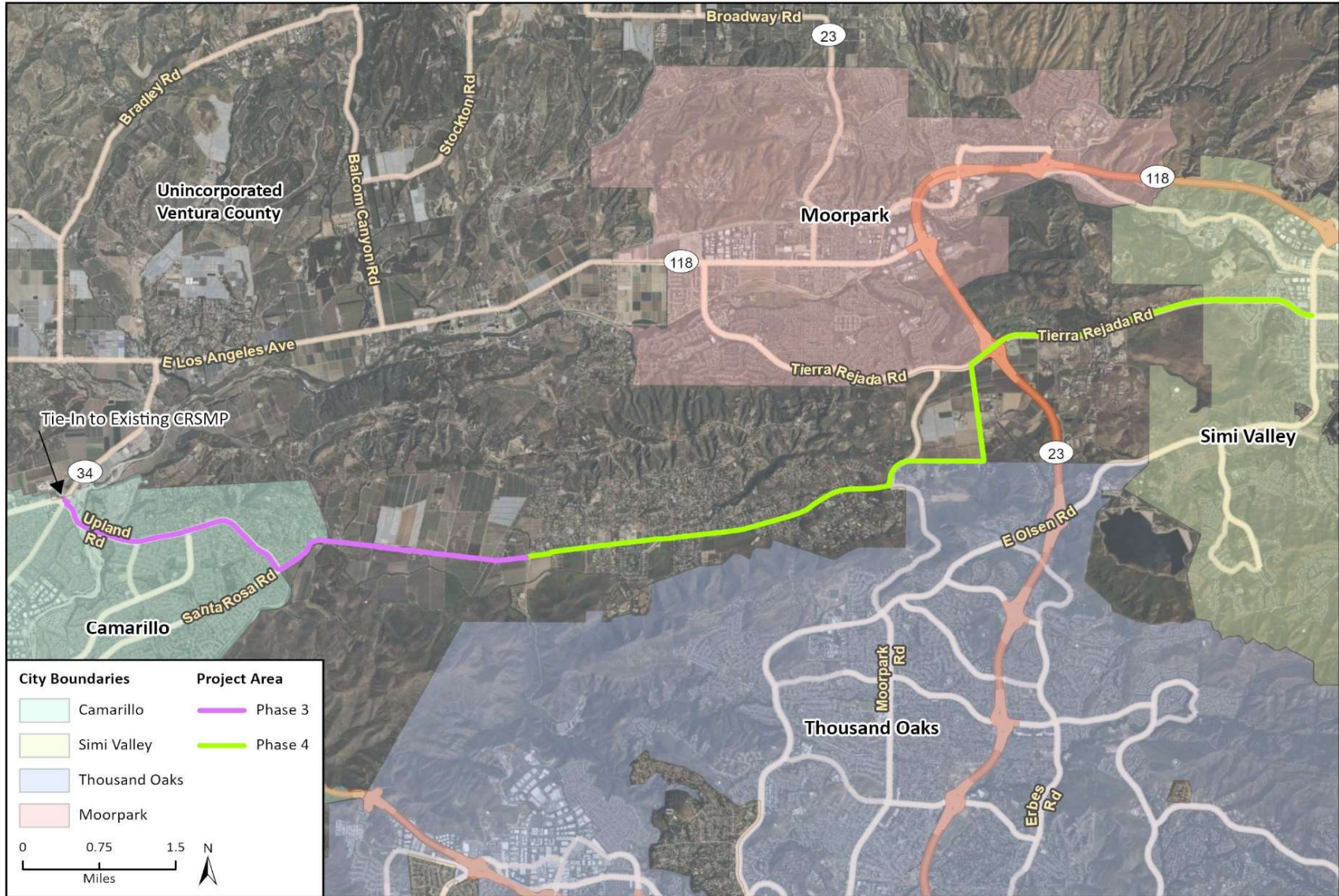


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

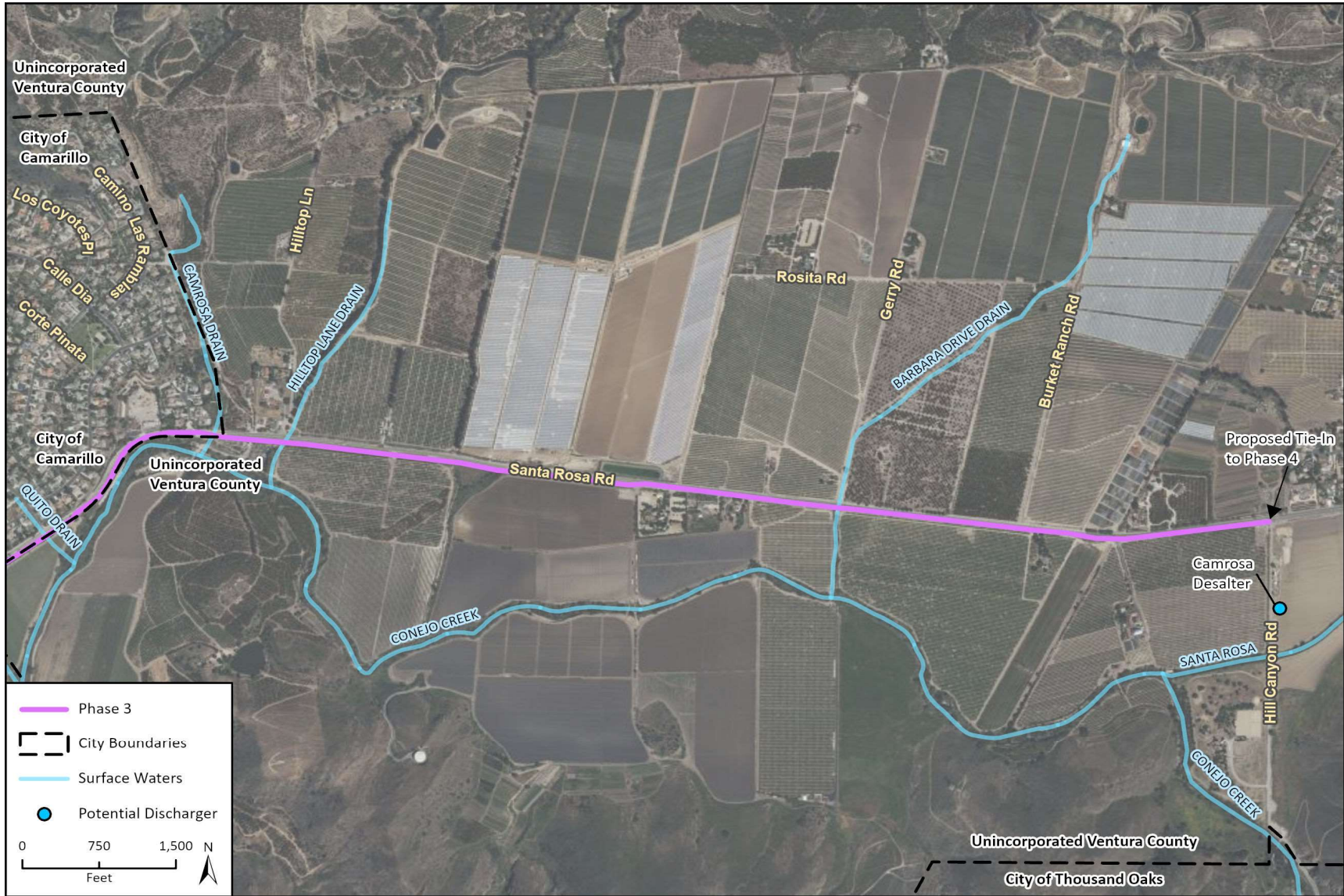
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

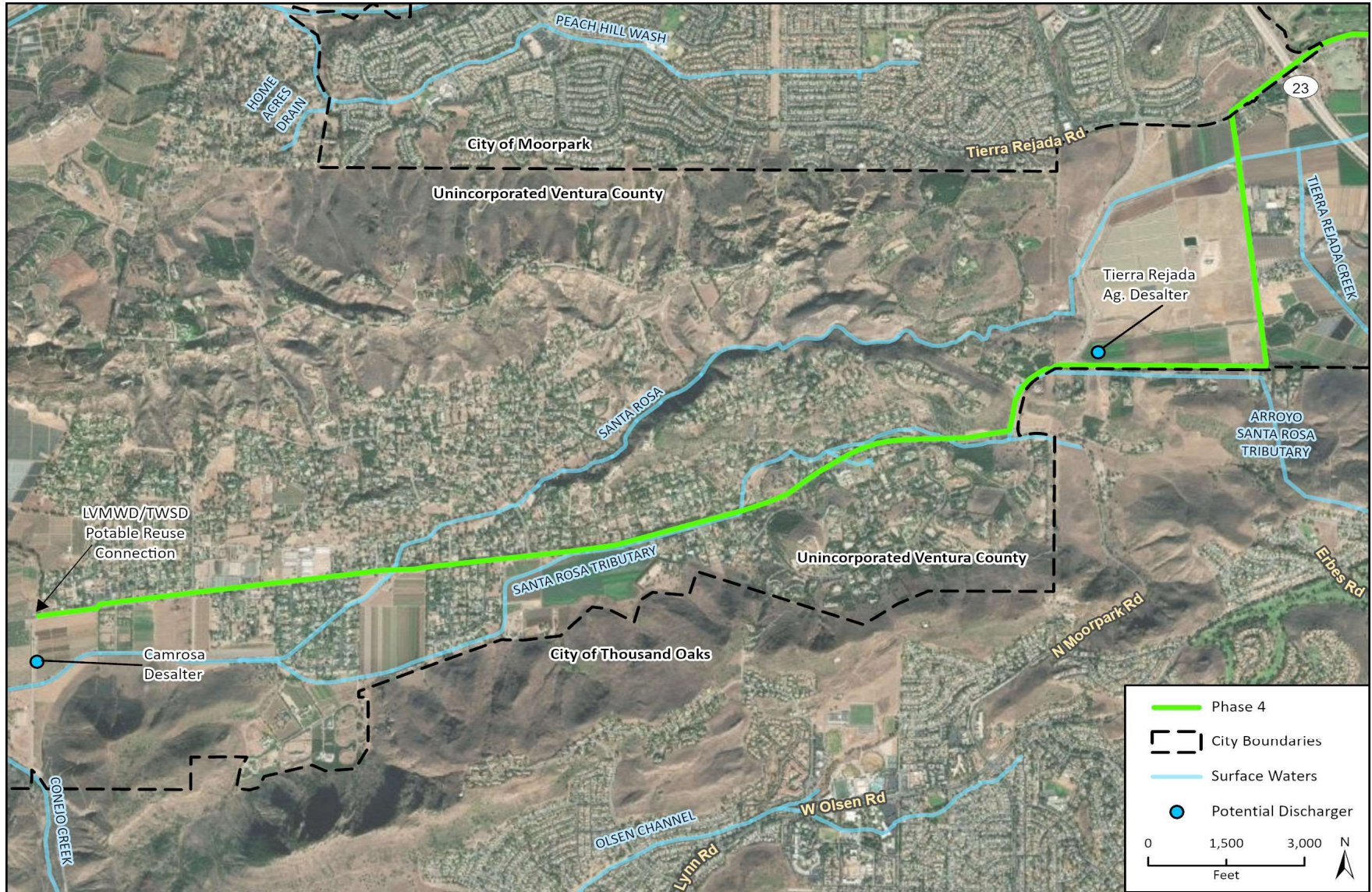
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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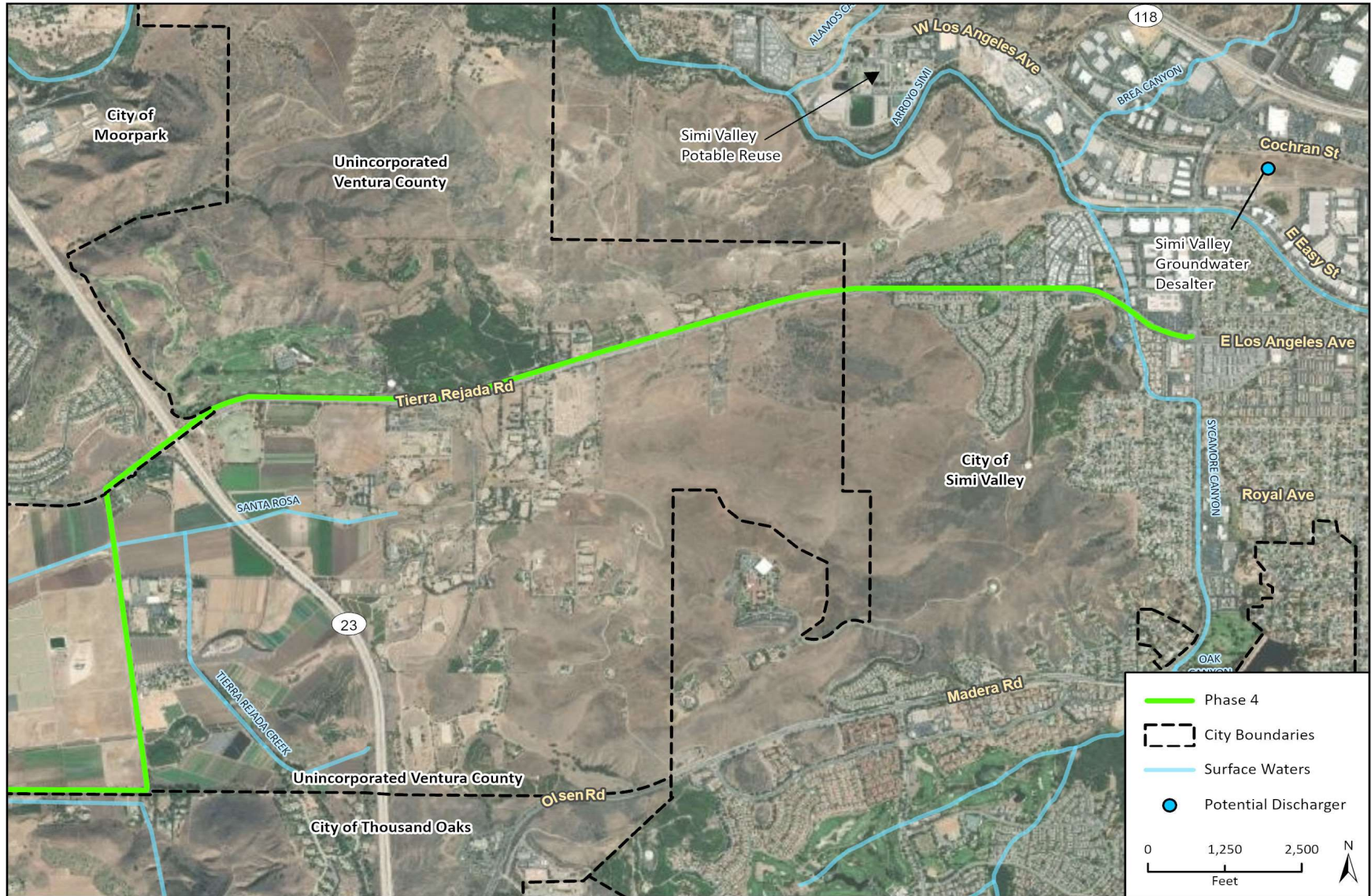
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Gabrielino/Tongva Nation
Sandonne Goad, Chairperson
106 ½ Judge John Aiso, St., #231
Los Angeles, CA, 90012
Via Email: sgoad@gabrielino-tongva.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Goad,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District




Enclosure: Project Location Maps

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Imagery provided by Esri and its licensors © 2022.

EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

-  Phase 3 Pipeline
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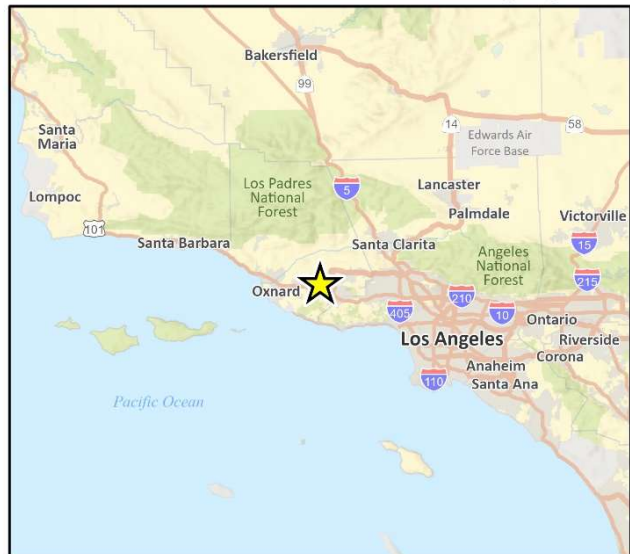
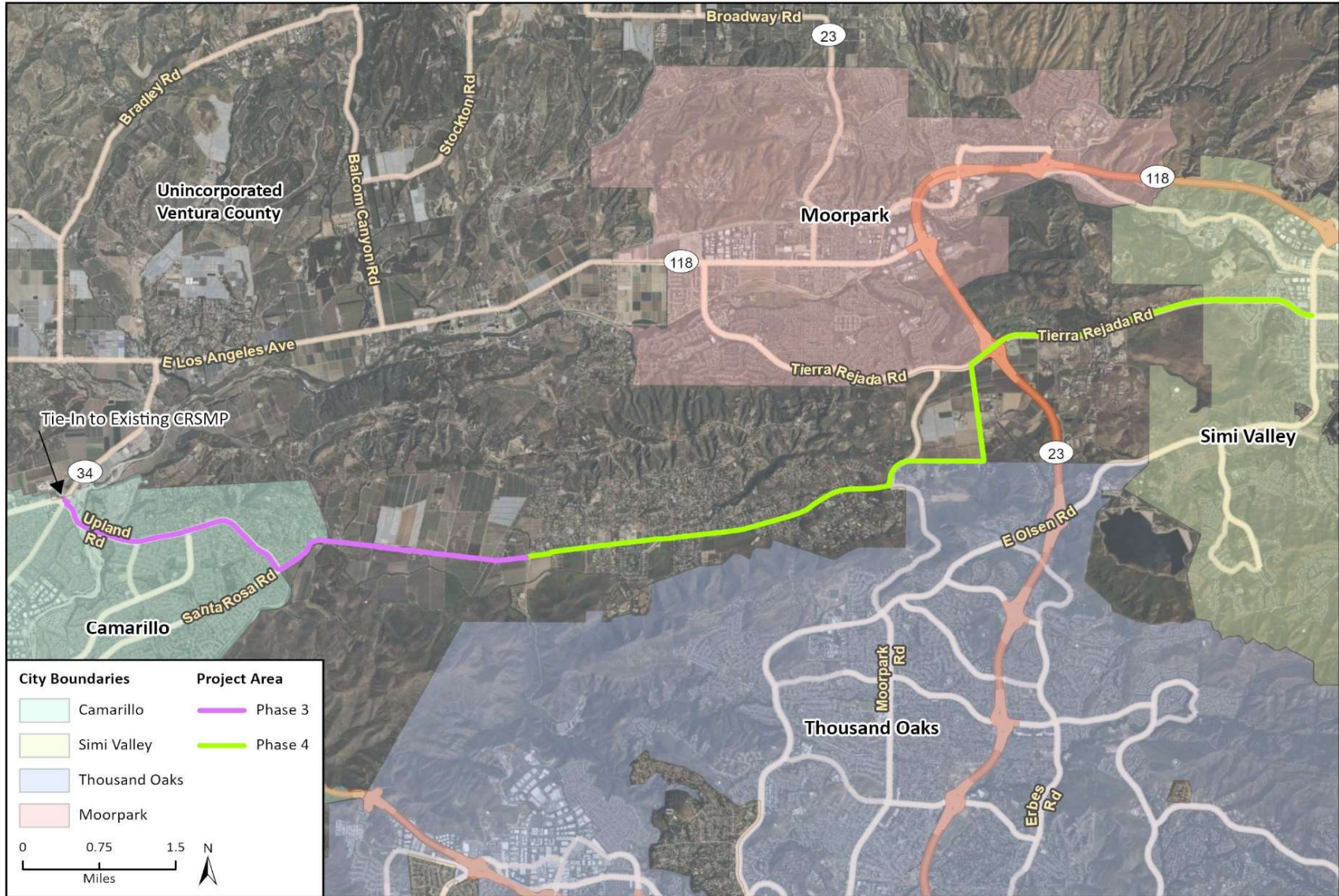


Figure 2 Project Site Location



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Additional data provided by the County of Ventura.

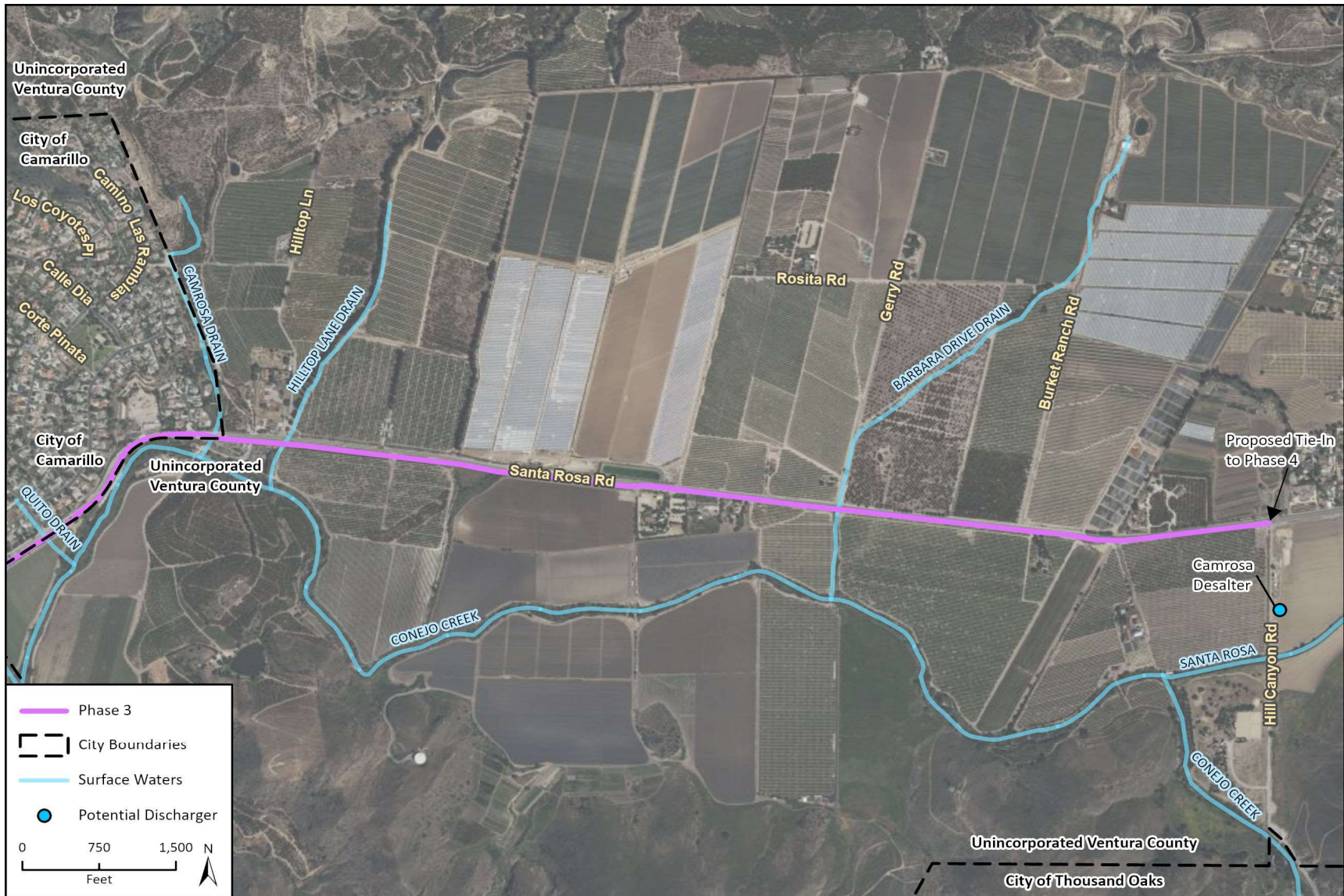
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

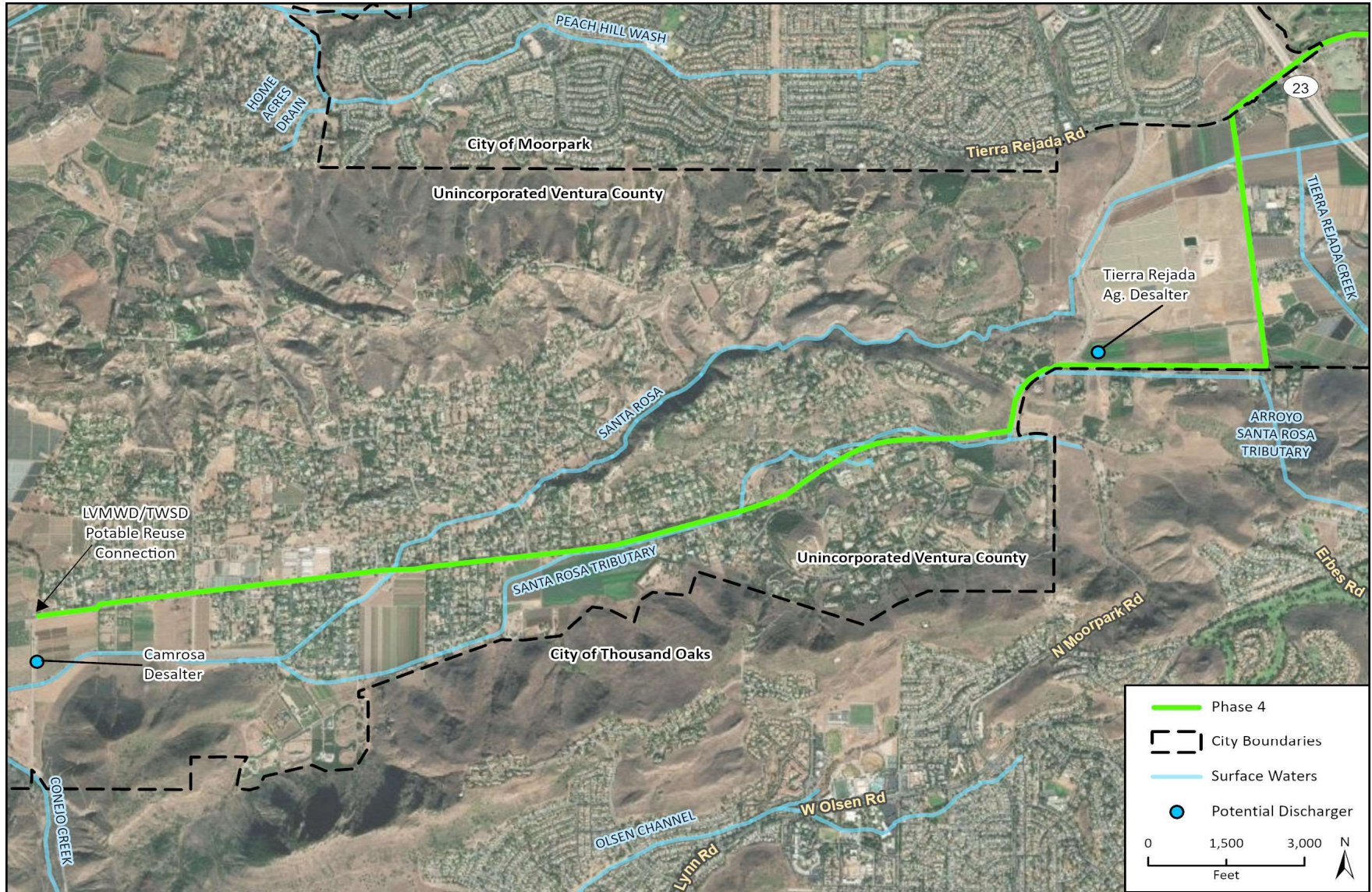
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Gabrieleño/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778
Via Email: GTTribalCouncil@aol.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Morales,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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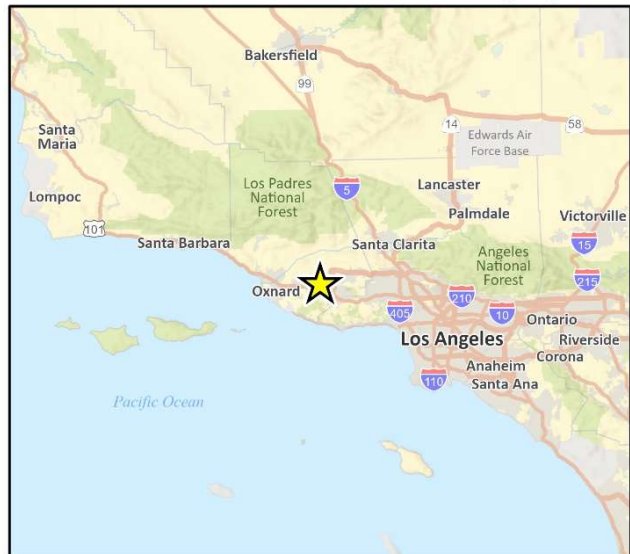
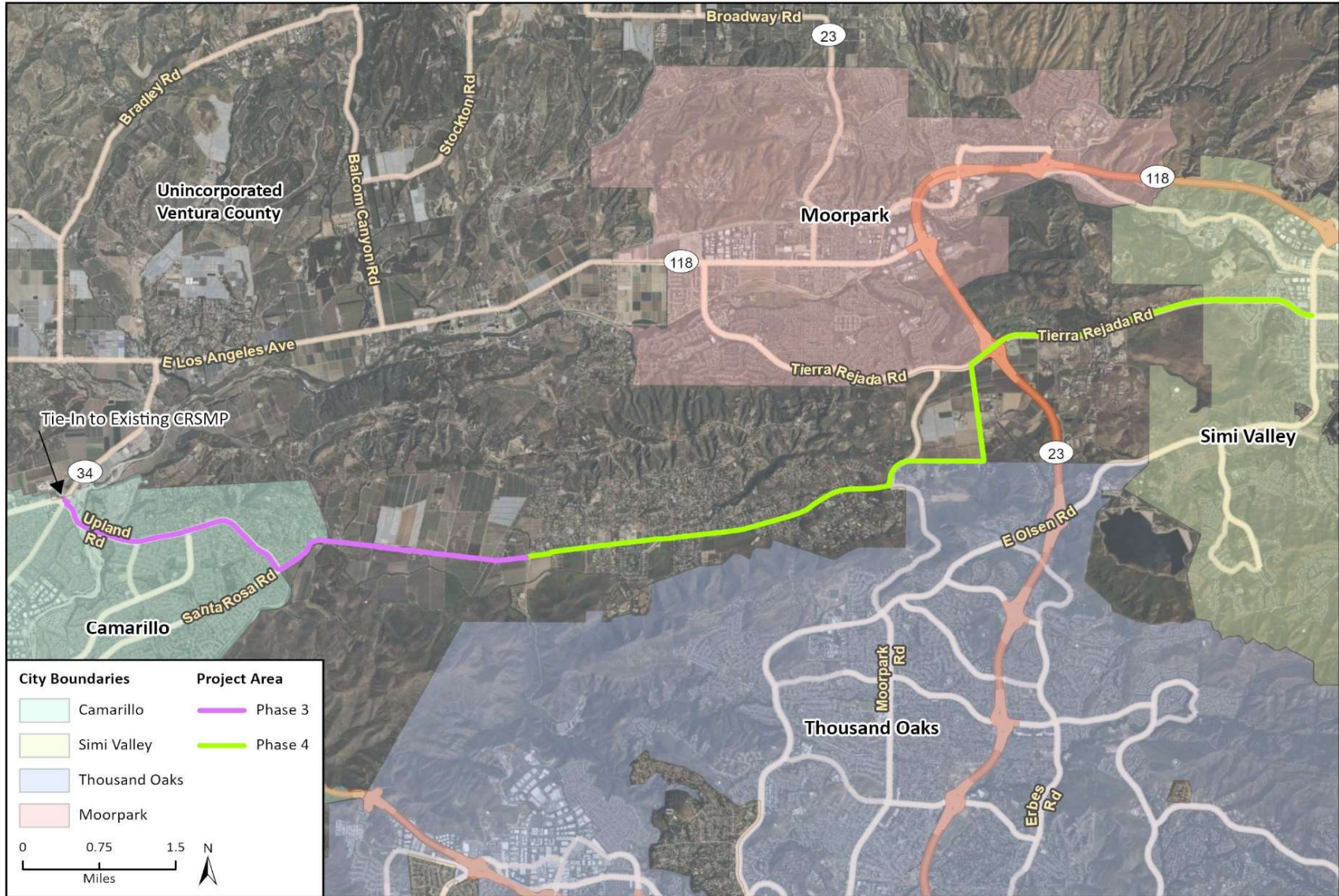


Figure 2 Project Site Location



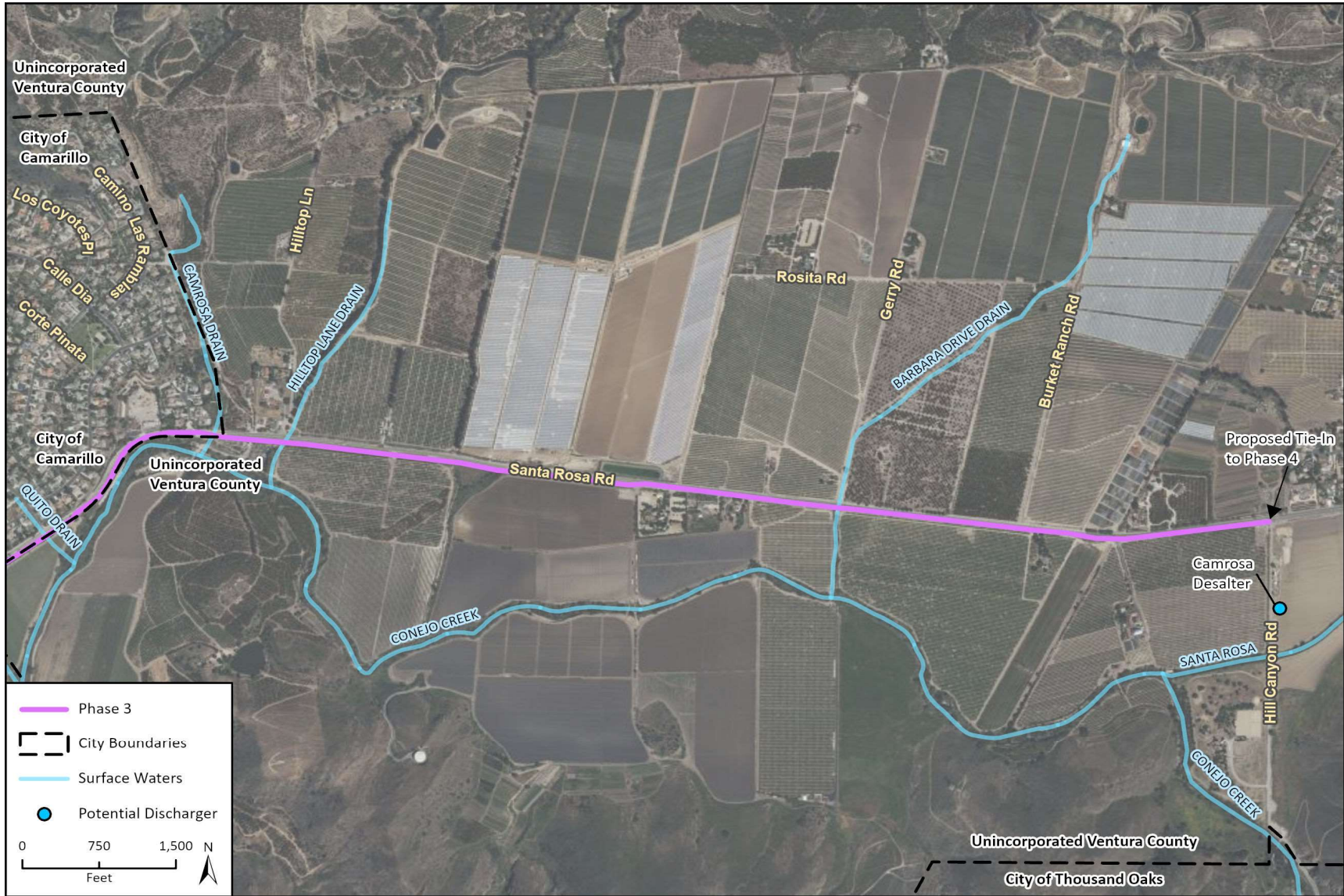
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 Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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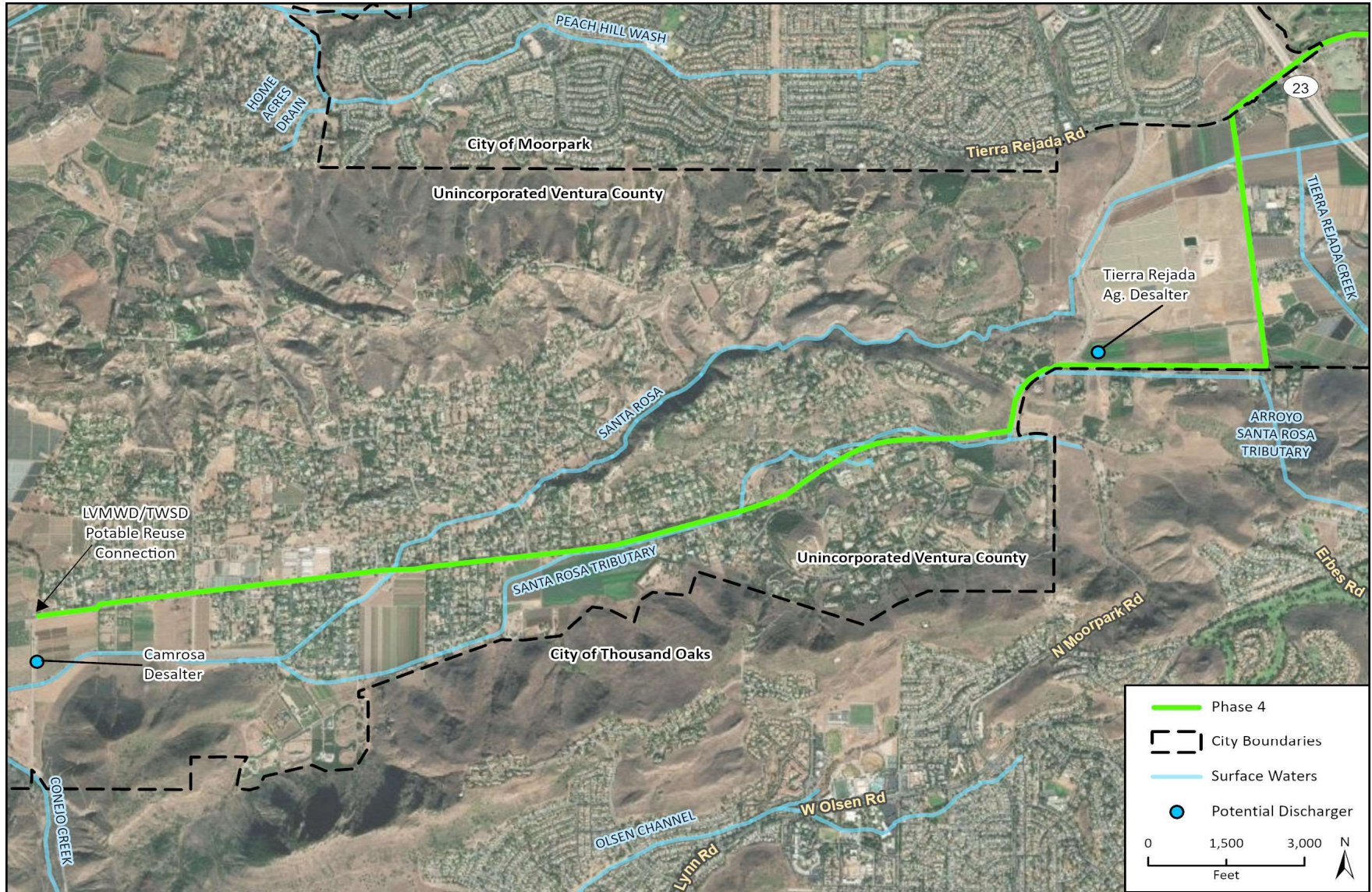
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj, Regional, Phase 3 Locn Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533
Los Osos, CA, 93412
Via Email: violetsagewalker@gmail.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Walker,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2022.

EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

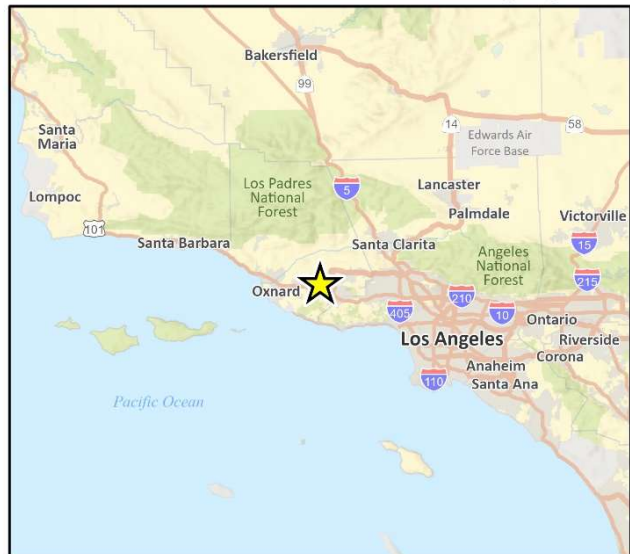
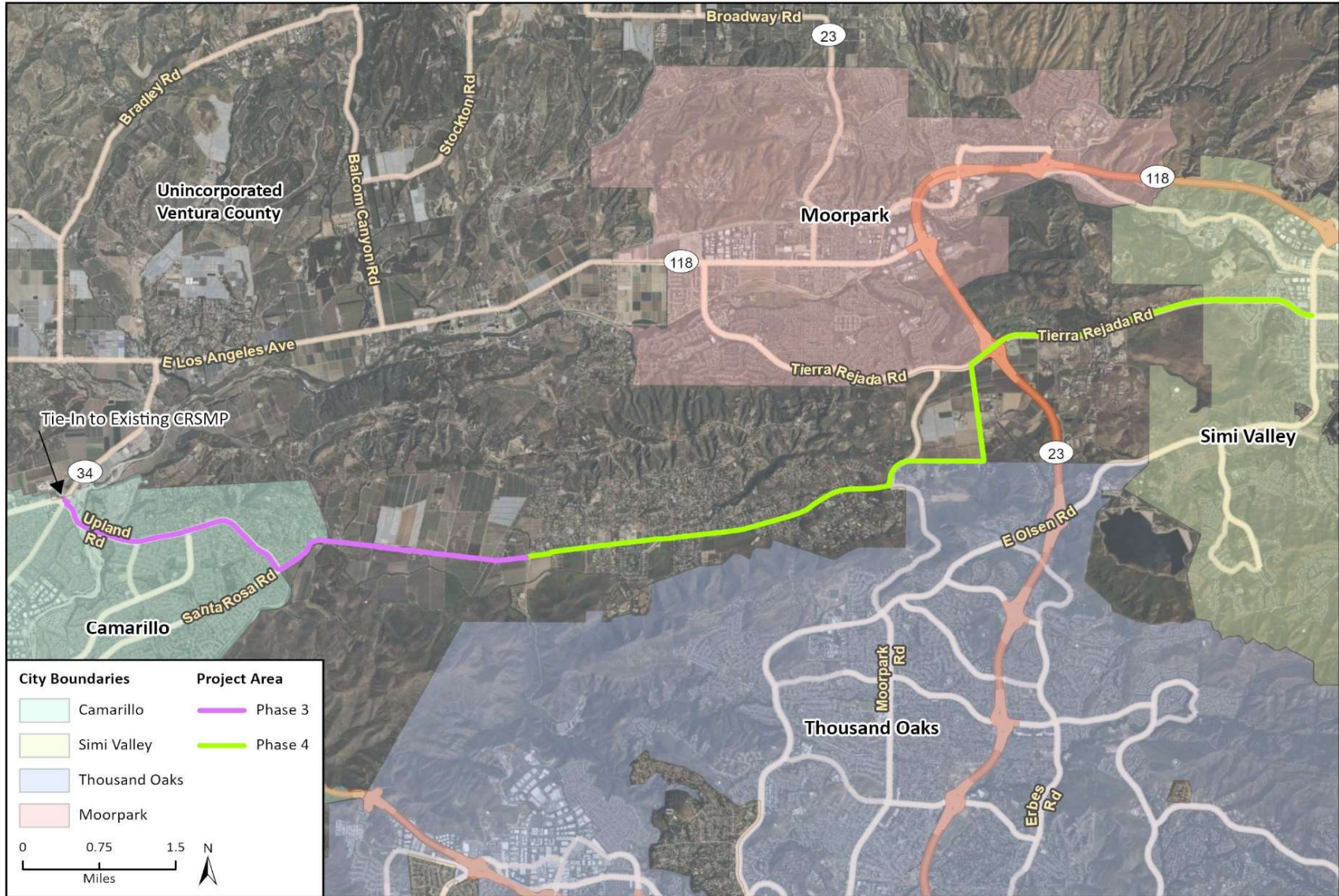


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

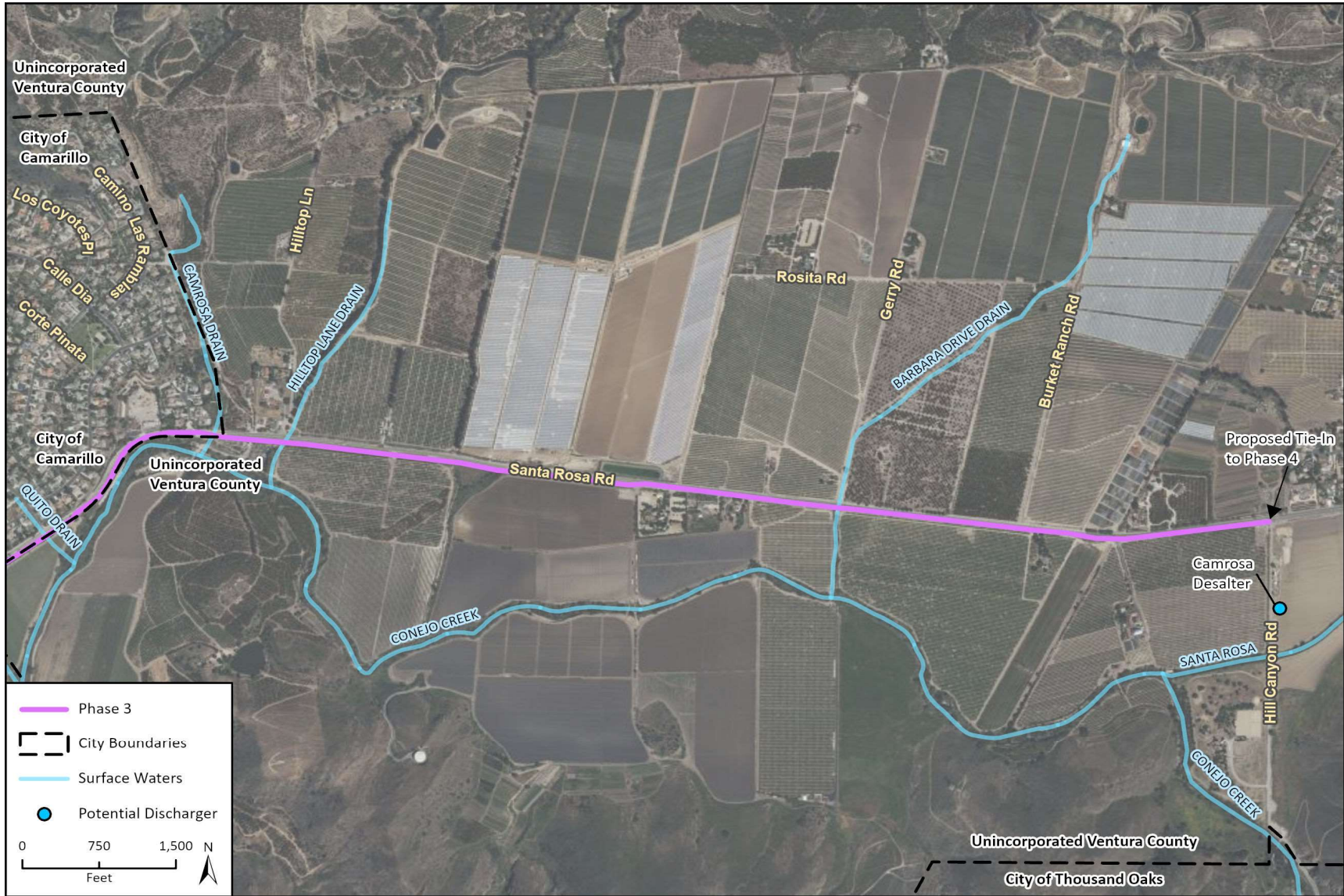
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

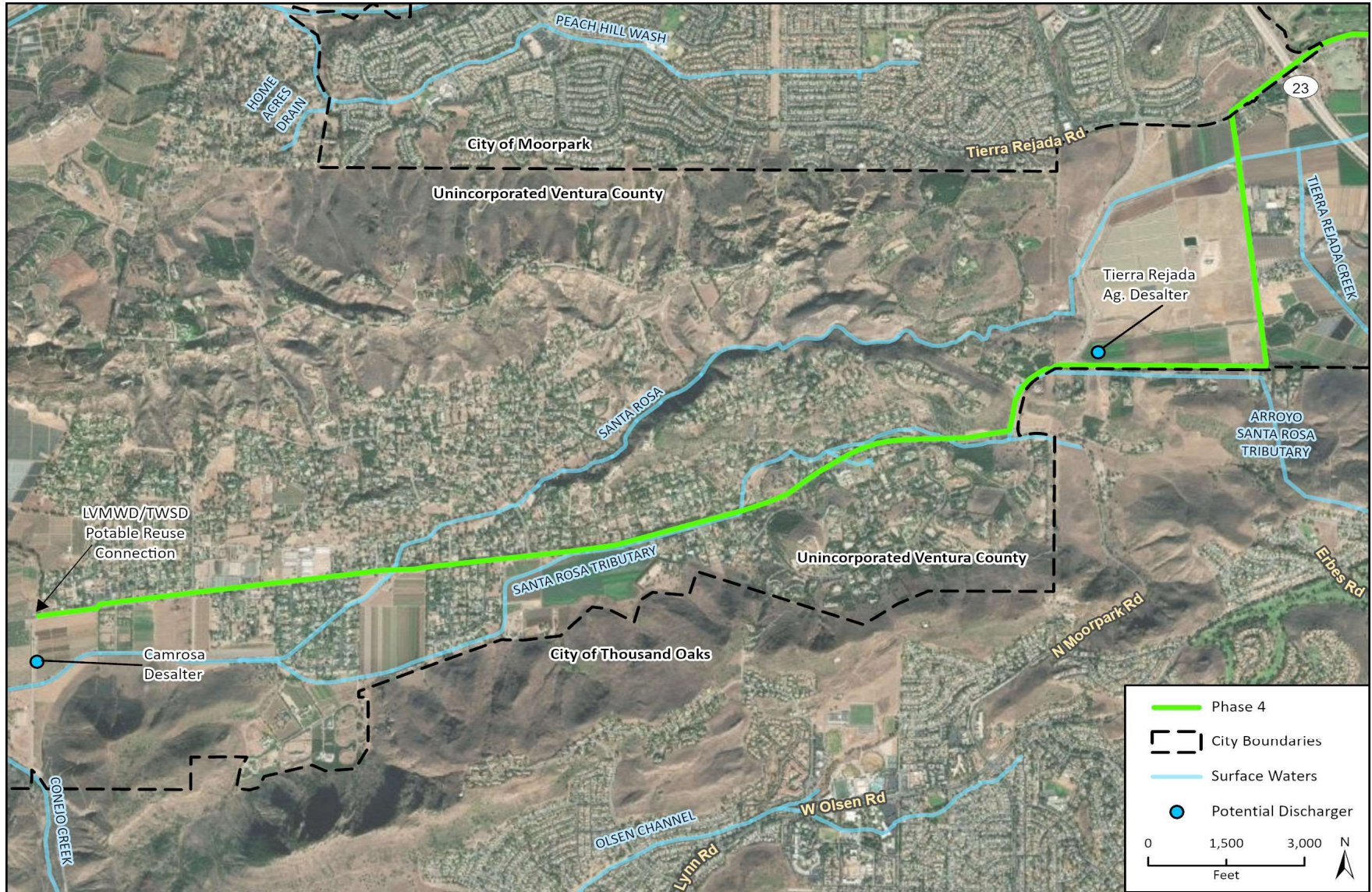
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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THIBAUT ROBERT, DIRECTOR
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JACQUELYN MCMILLAN, DIRECTOR
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ANTHONY GOFF
GENERAL MANAGER

web site: www.calleguas.com

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730

December 8, 2022

Pechanga Band of Indians
Mark Macarro, Chairperson
P.O. Box 1477
Temecula, CA 92593
Via Email: epreston@pechanga.nsn.gov

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Macarro,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

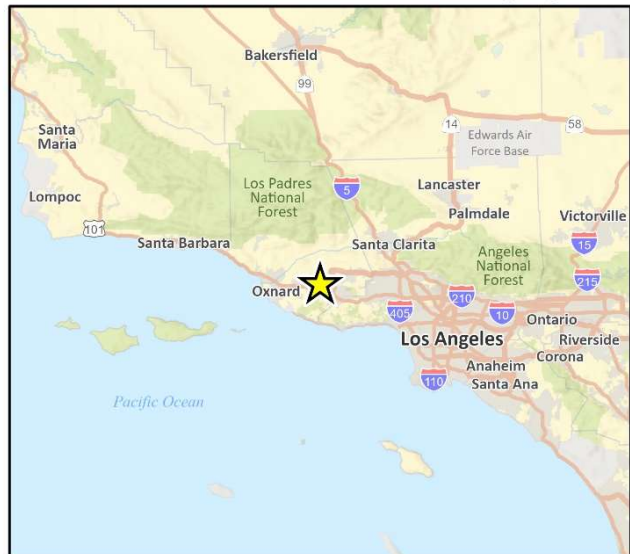
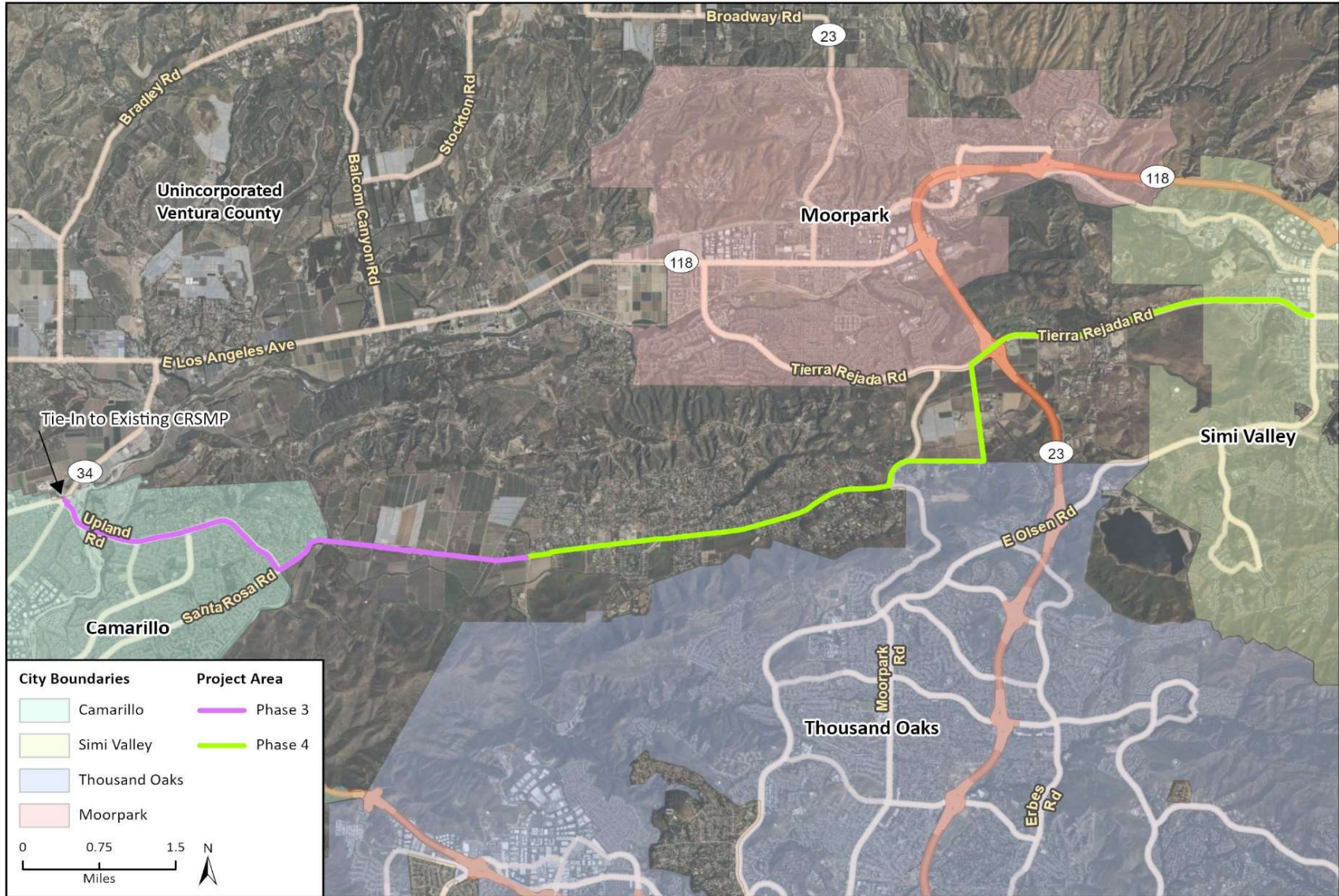


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

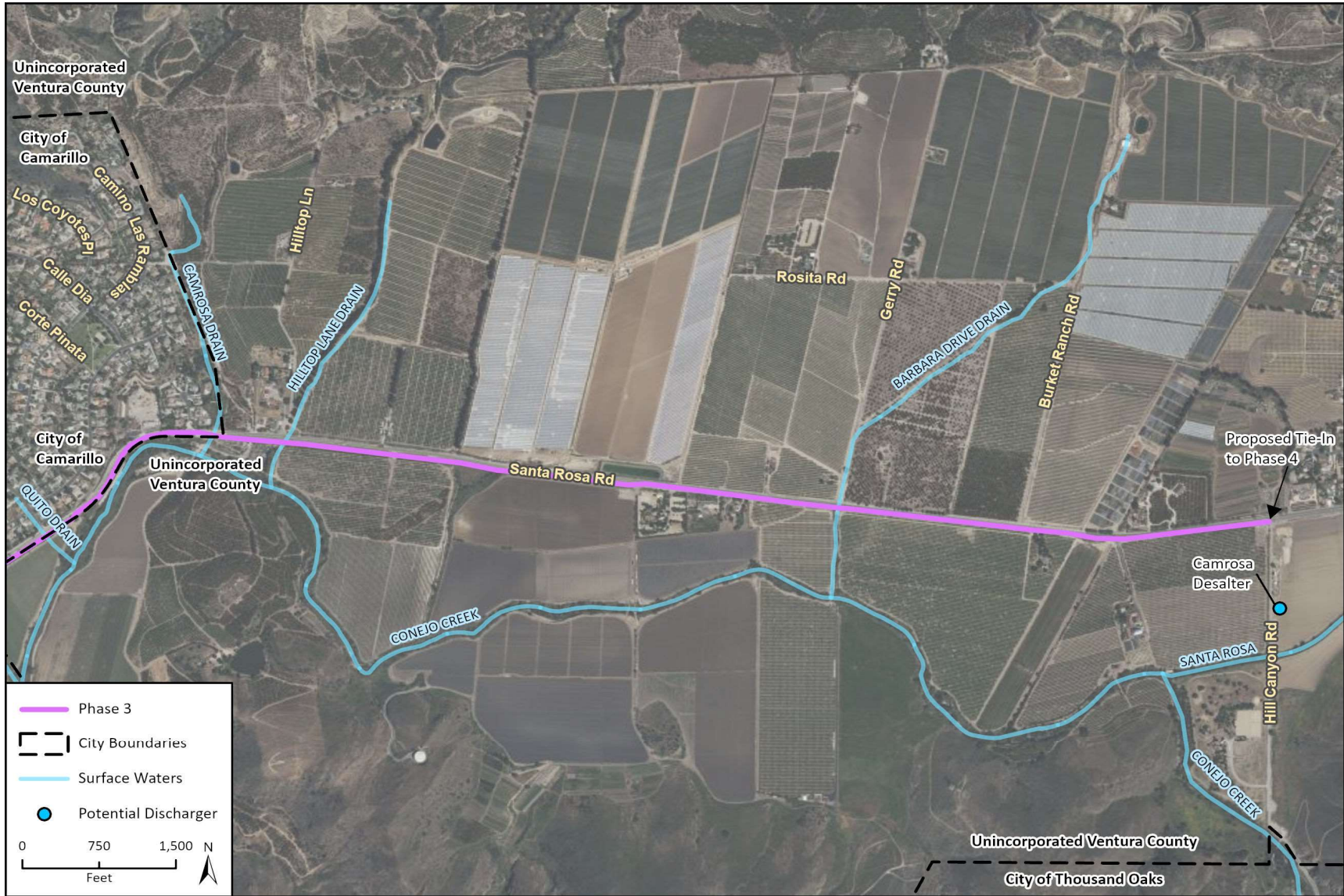
Proj. Regional, Phase 3 Locn
 Fig. 2.2 Project Location

Figure 3 Phase 3 Pipeline Location, Western Portion



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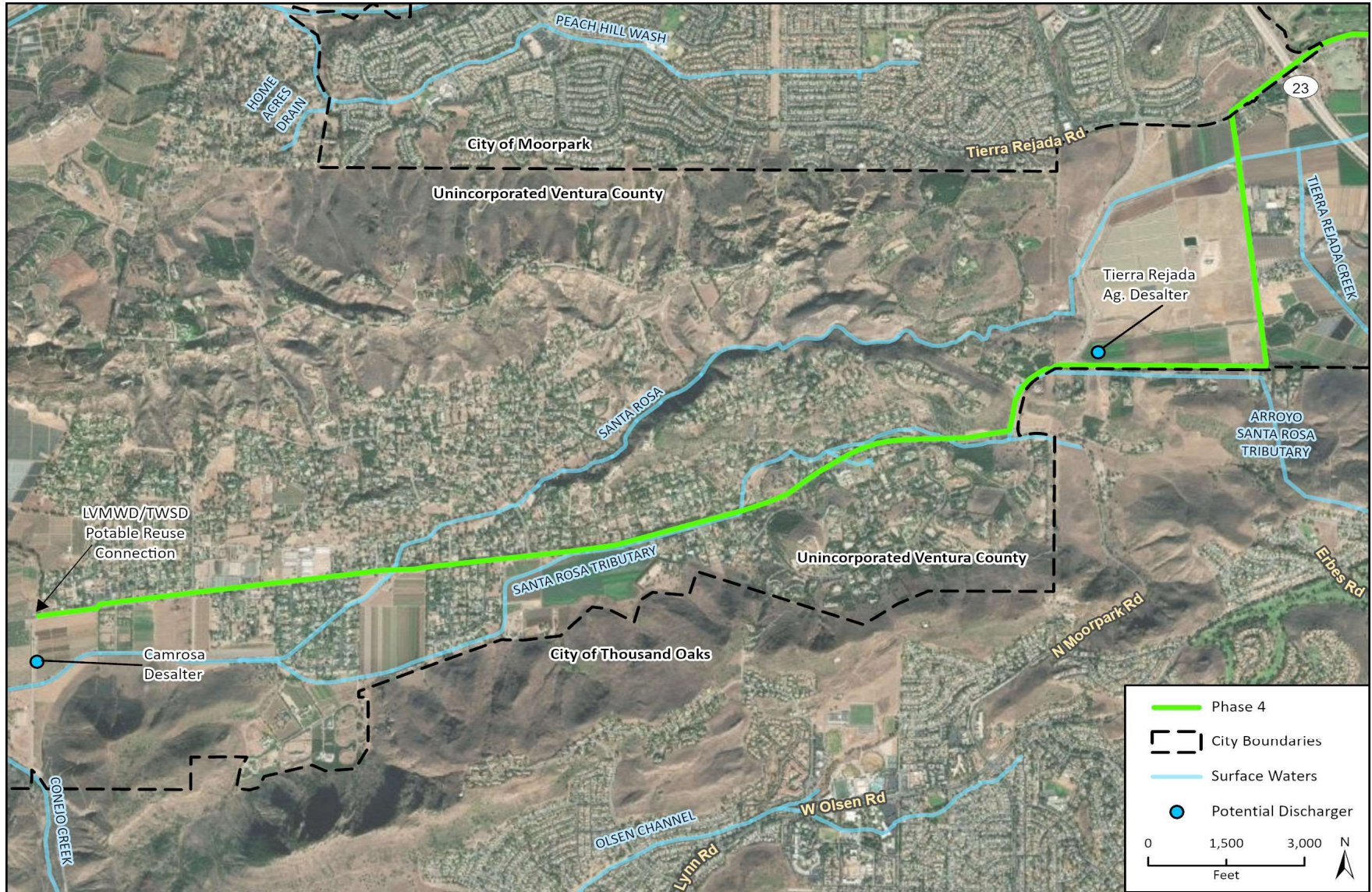
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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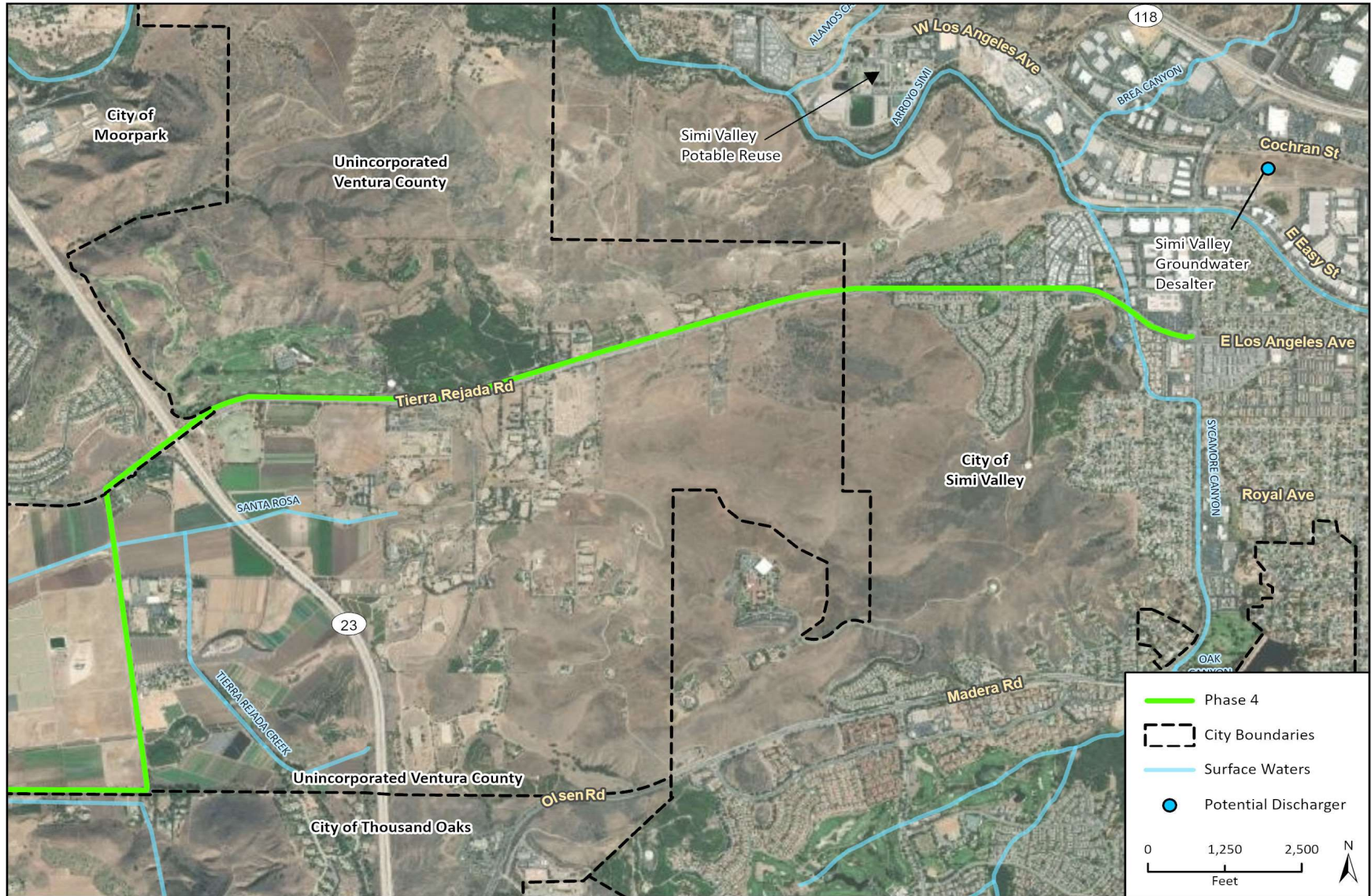
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

Pechanga Band of Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477
Temecula, CA 92593
Via Email: pmacarro@pechanga-nsn.gov

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Cultural Resources Coordinator Macarro,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
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- Existing Salinity Management Pipeline

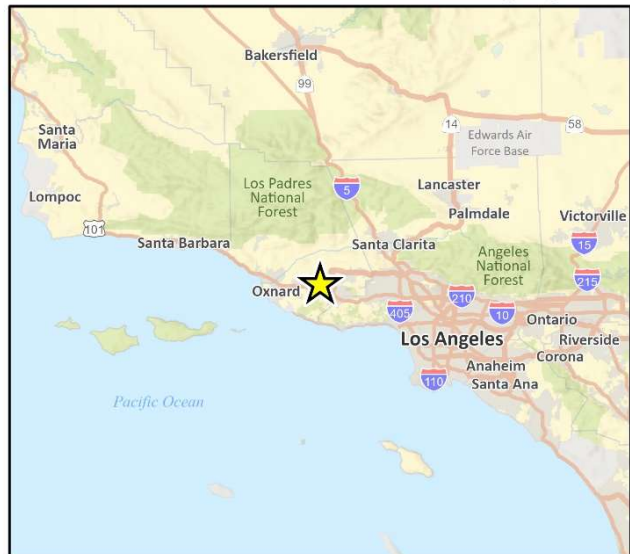
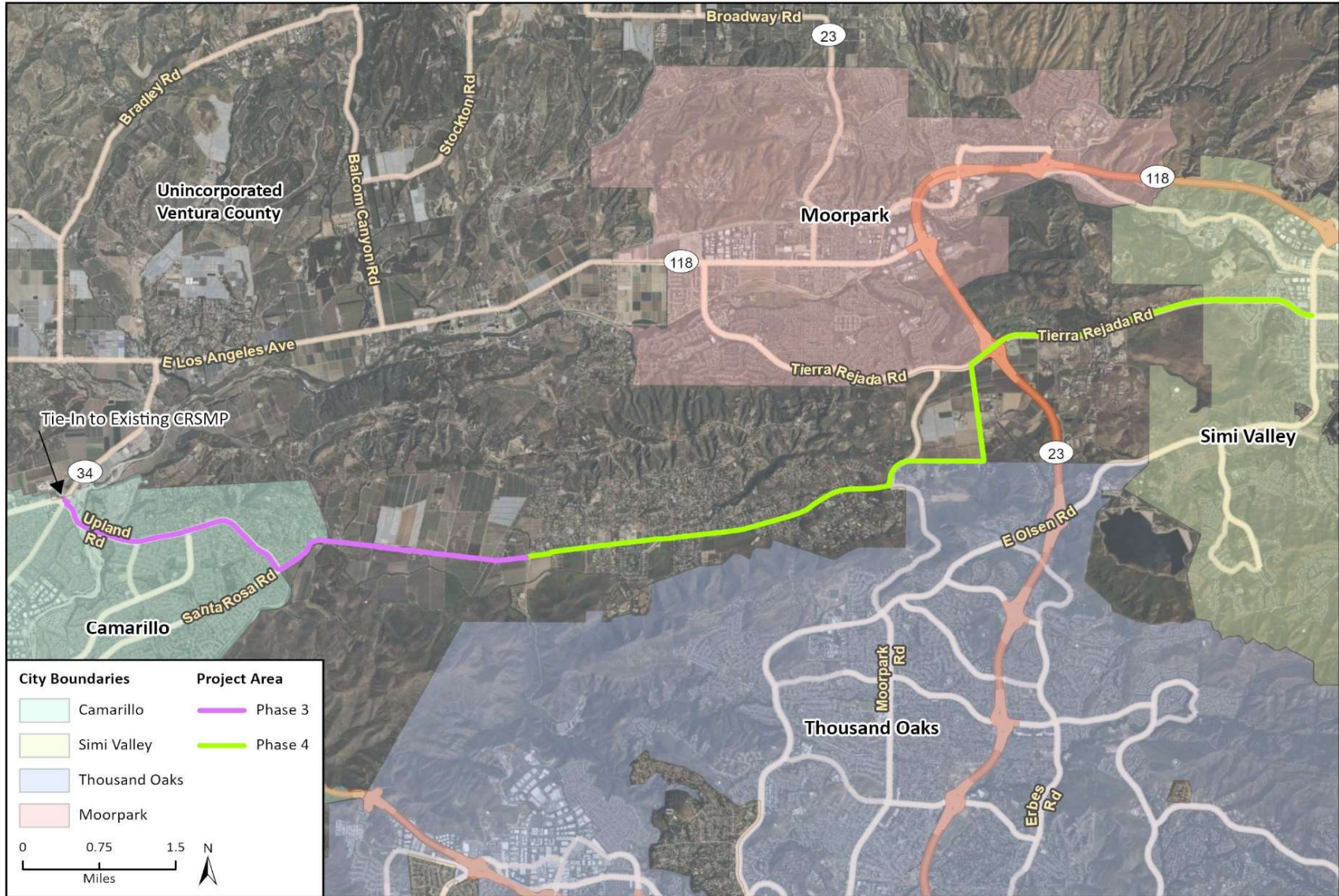


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

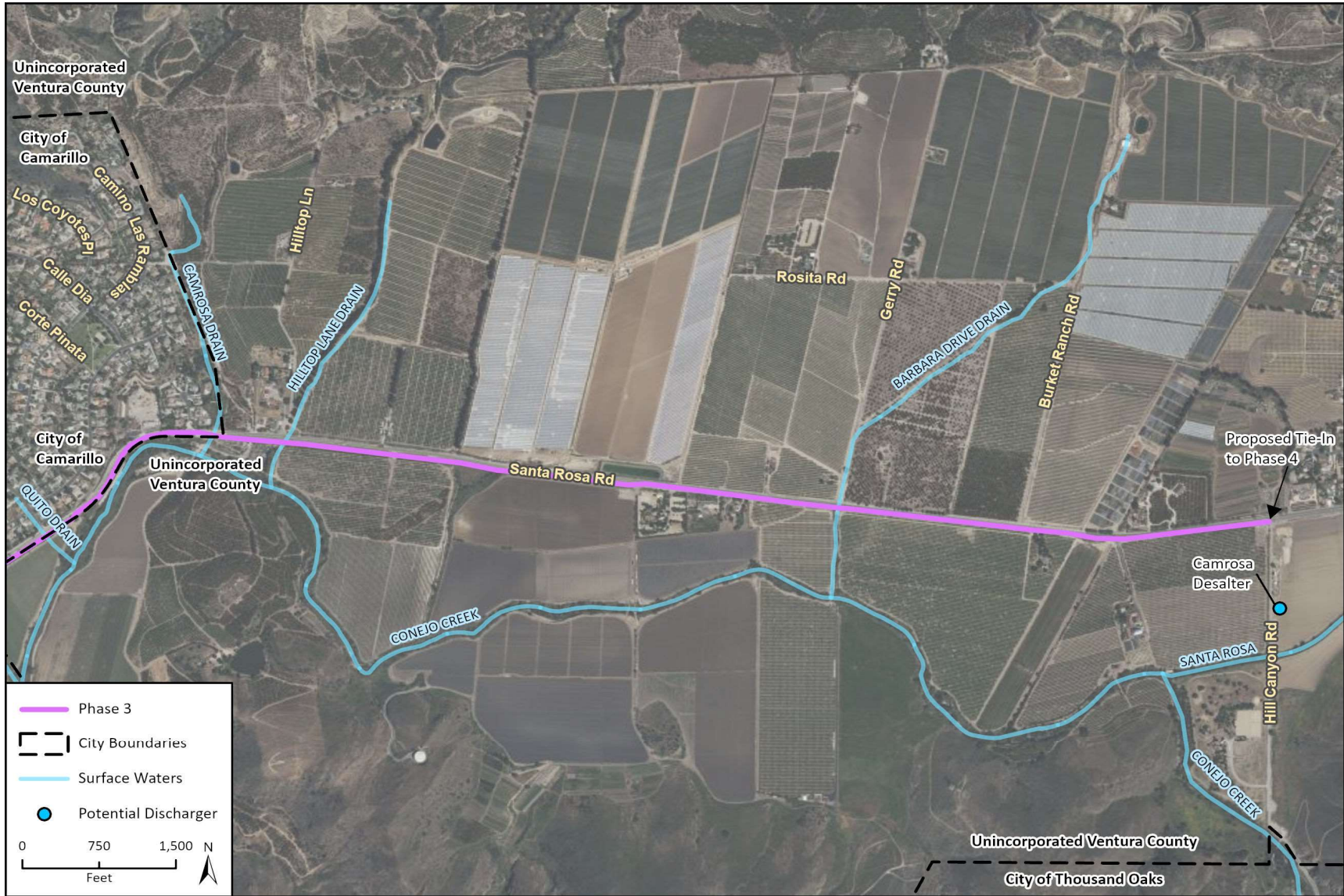
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

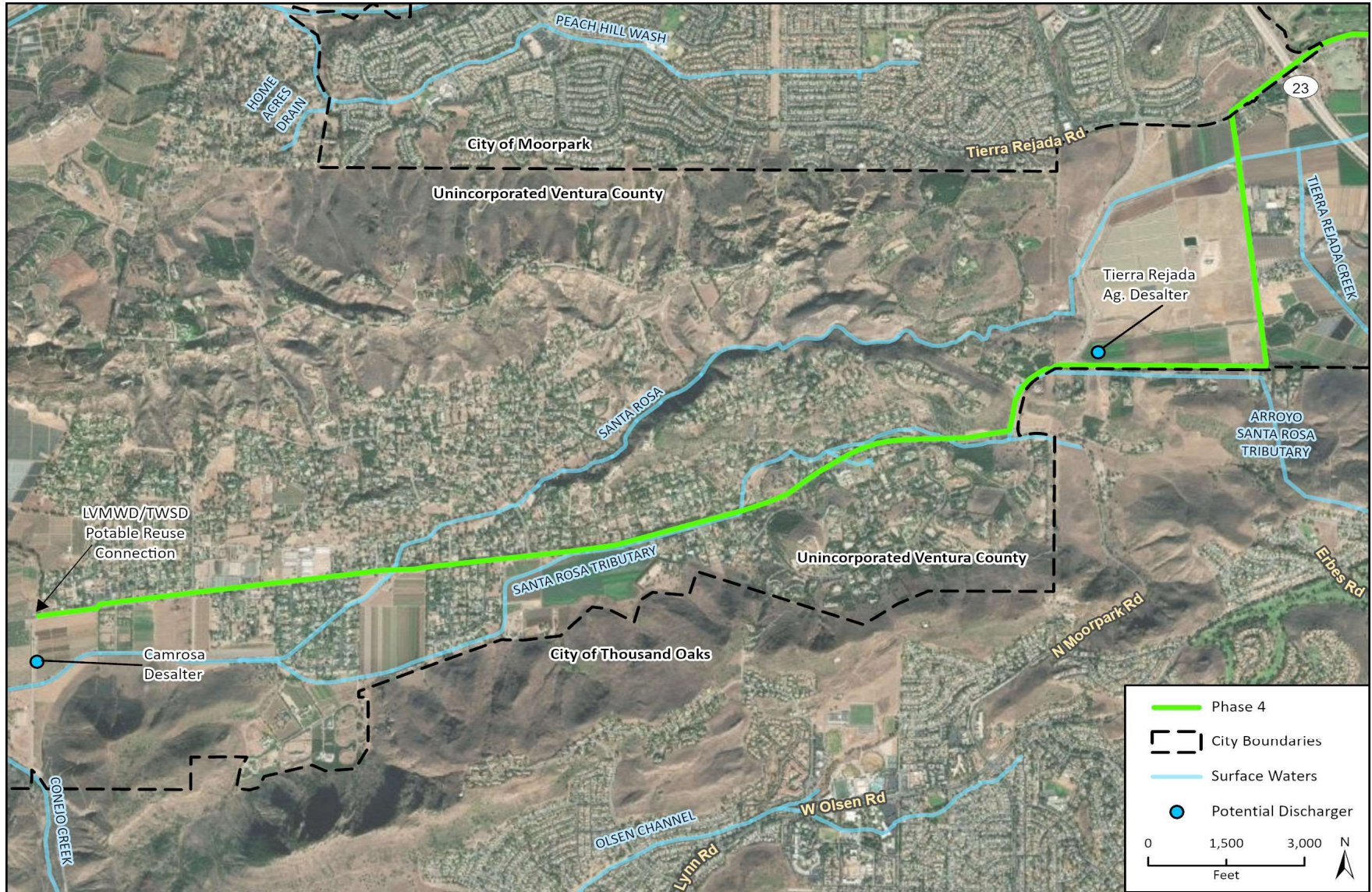
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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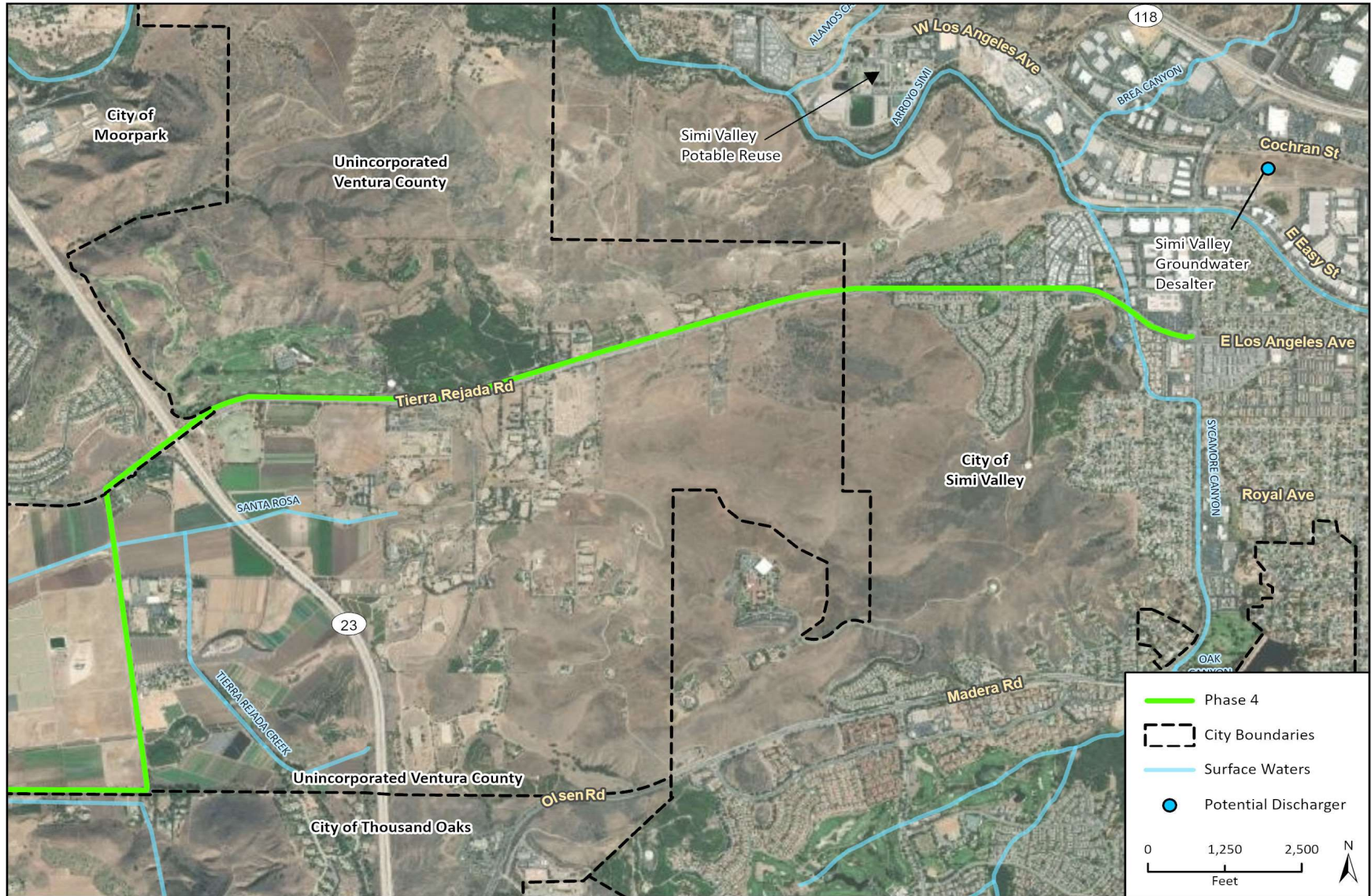
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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ANTHONY GOFF
GENERAL MANAGER

web site: www.calleguas.com

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December 8, 2022

Rincon Band of Luiseño Indians
Cheryl Madrigal, Tribal Historic Preservation Officer
One Government Center Lane
Valley Center, CA, 92082
Via Email: crd@rincon-nsn.gov

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Tribal Historic Preservation Officer Madrigal,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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Fig 2.1 Regional Location

- Phase 3 Pipeline
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- Existing Salinity Management Pipeline

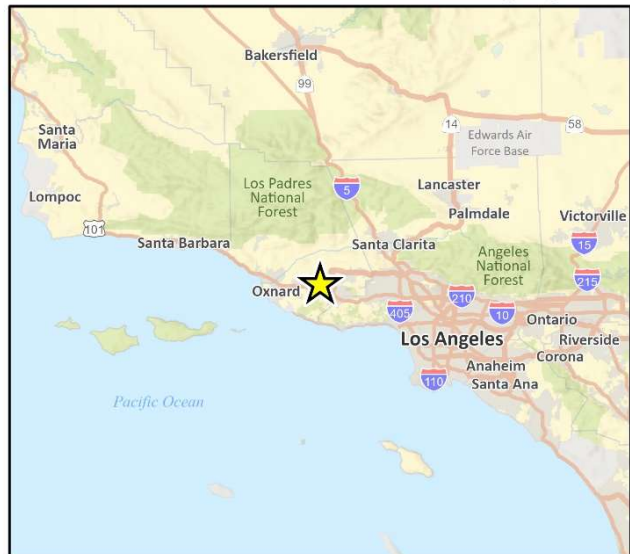
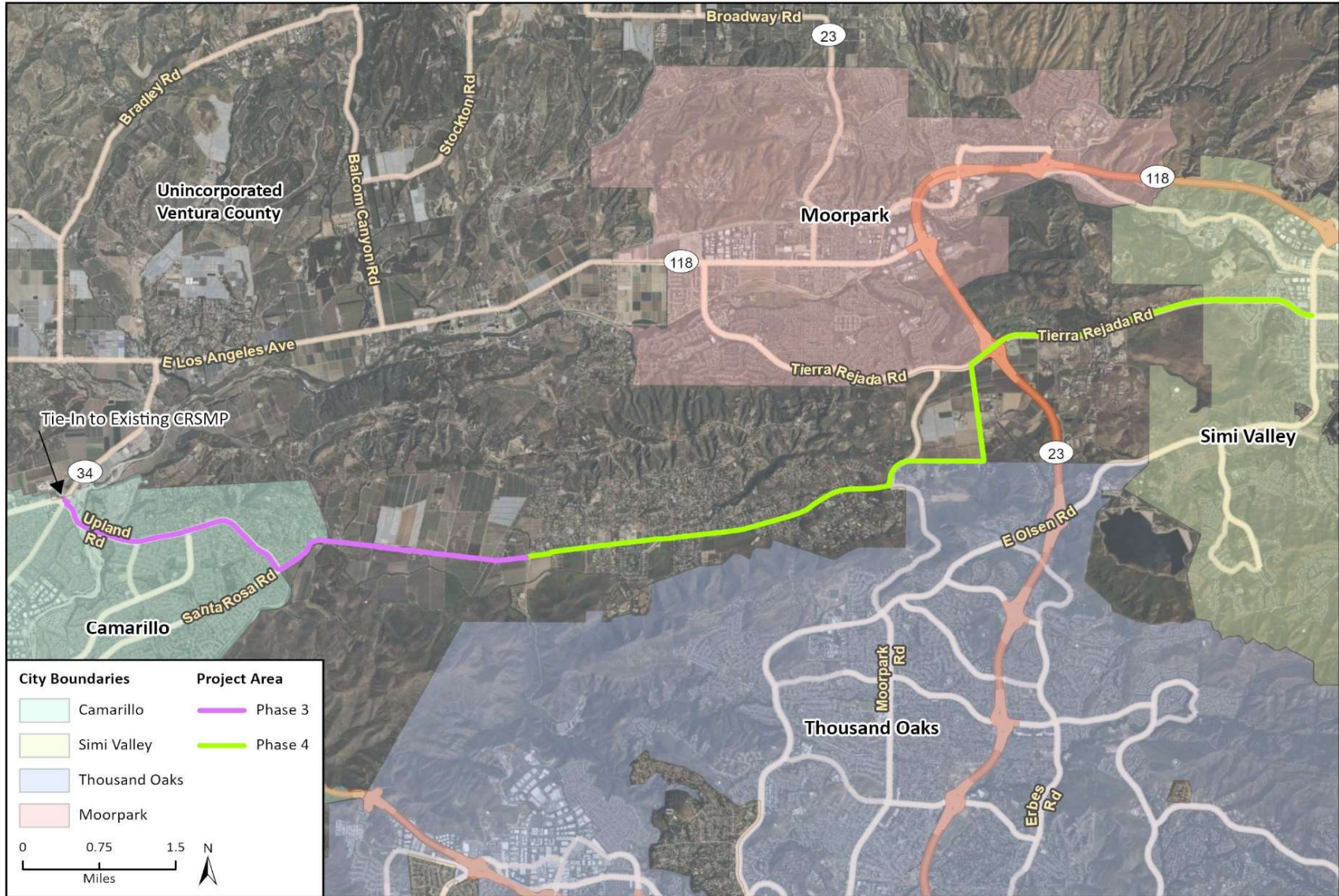


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

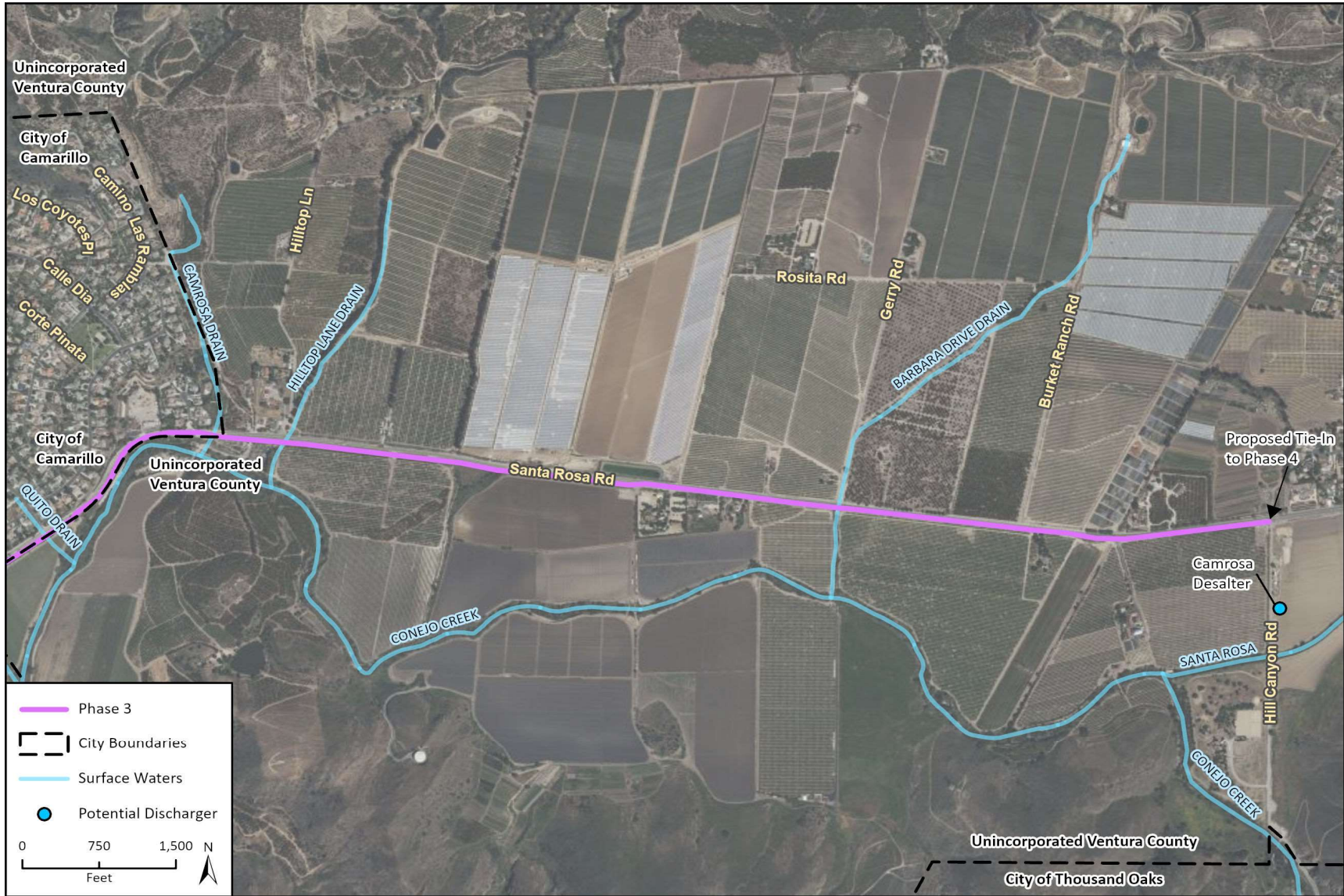
Figure 3 Phase 3 Pipeline Location, Western Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.3 Phase 3 Pt 1

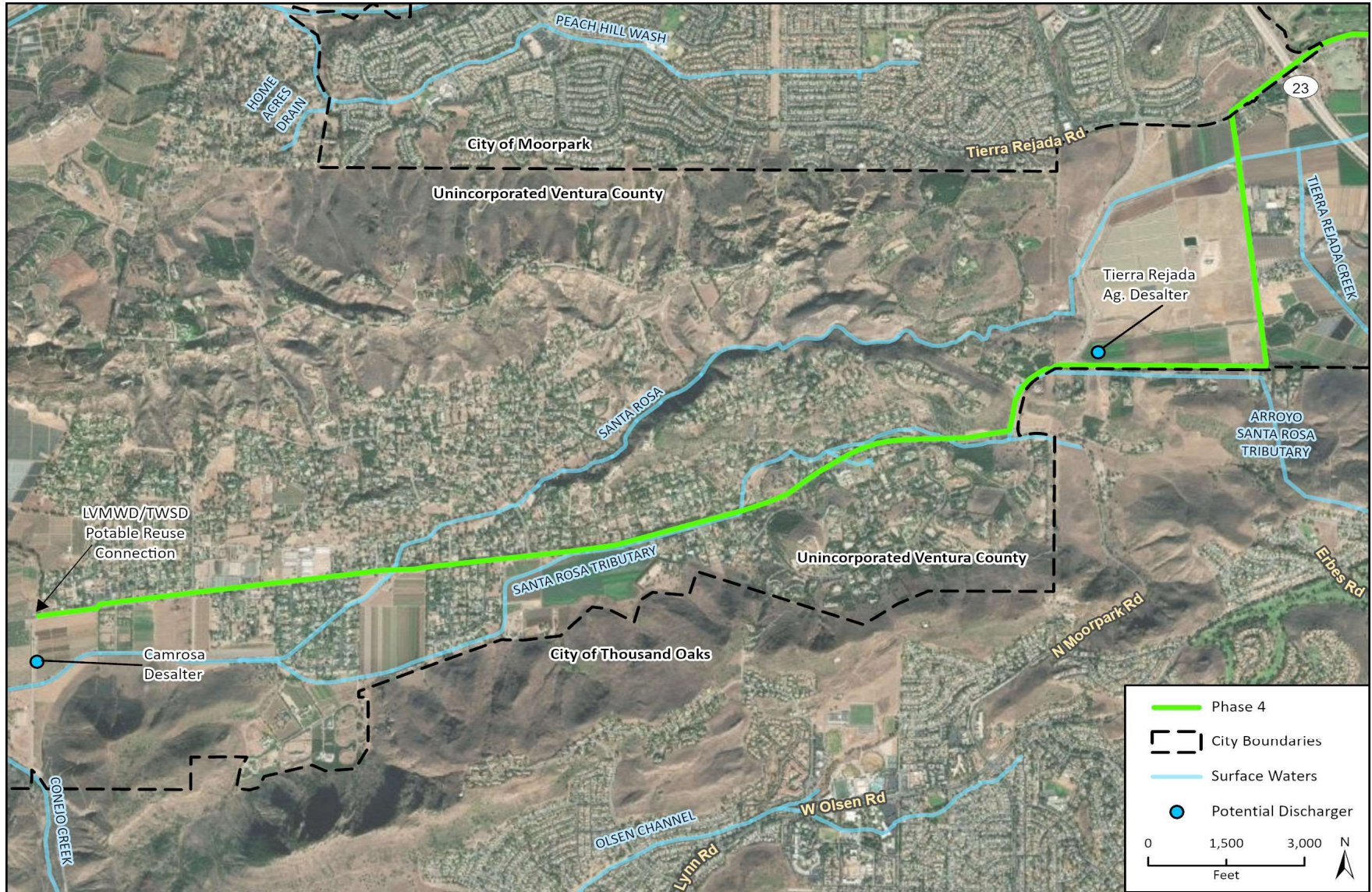
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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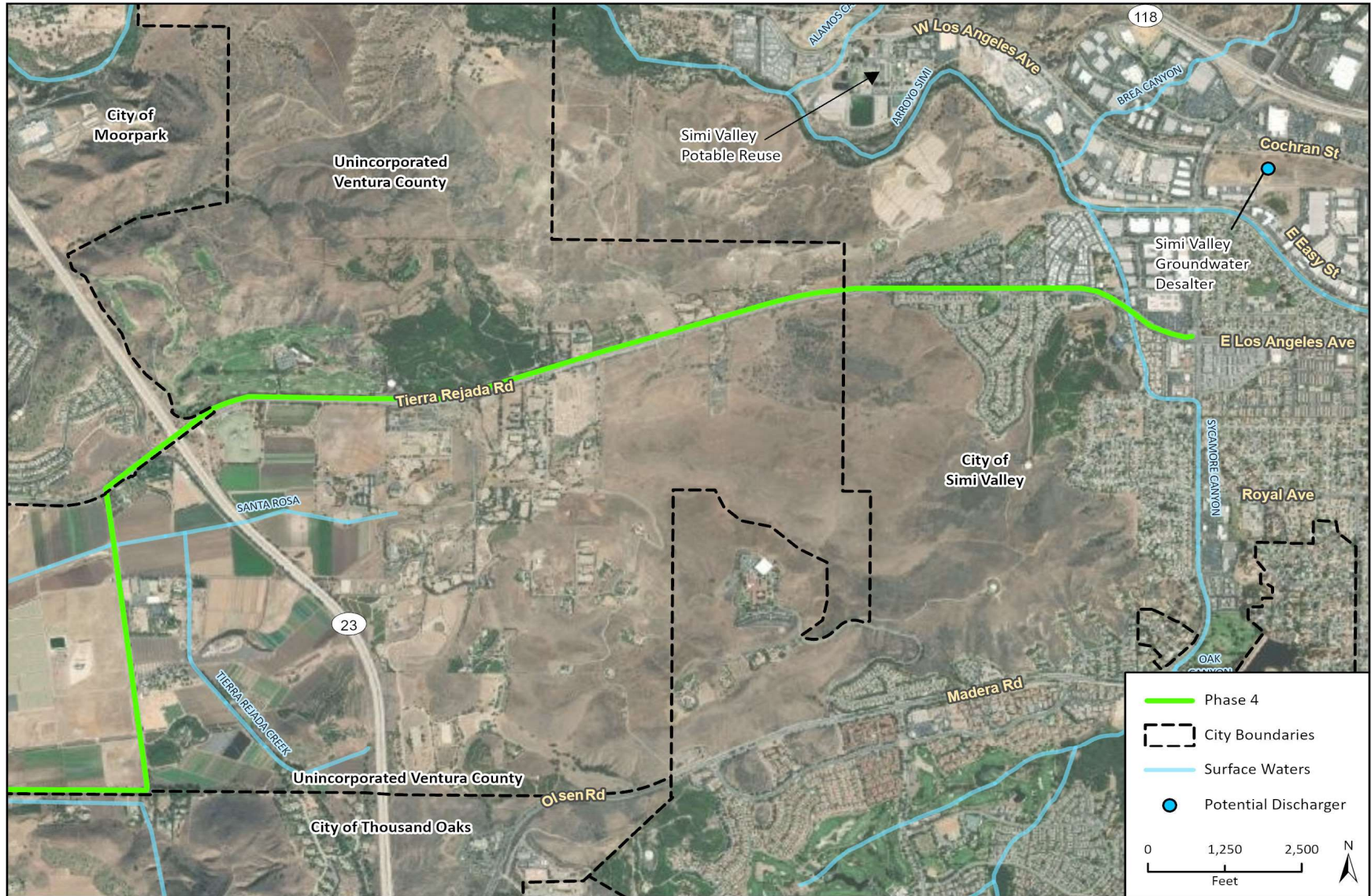
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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RAUL AVILA, DIRECTOR
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December 8, 2022

Rincon Band of Luiseño Indians
Bo Mazzetti, Chairperson
One Government Center Lane
Valley Center, CA 92082
Via Email: bomazzetti@aol.com

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Mazzetti,

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Principal Resource Specialist
Calleguas Municipal Water District

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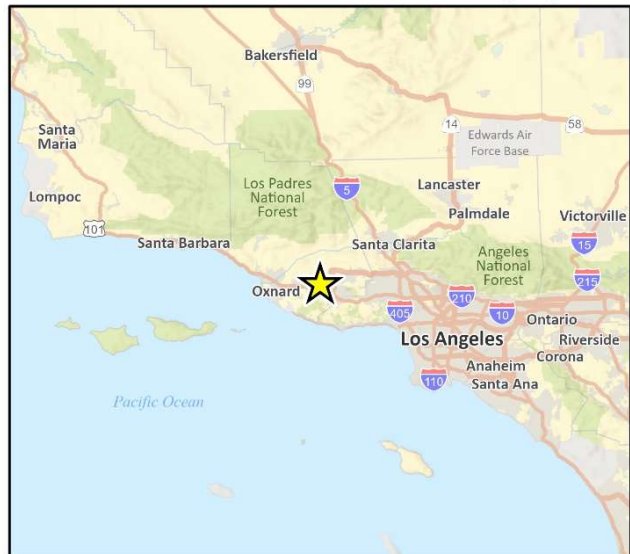
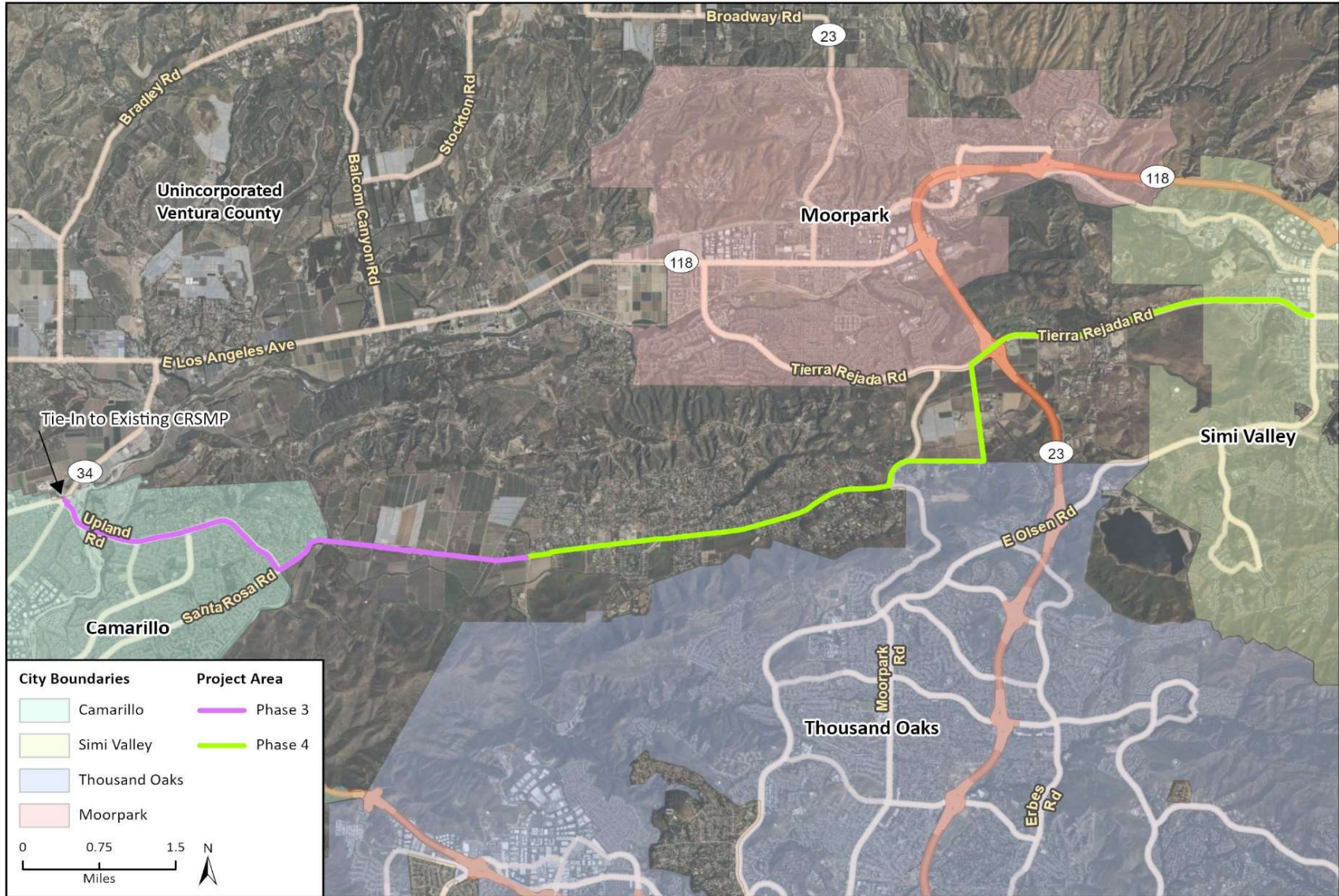


Figure 2 Project Site Location



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Proj. Regional, Phase 3 Locn
 Fig. 2.2 Project Location

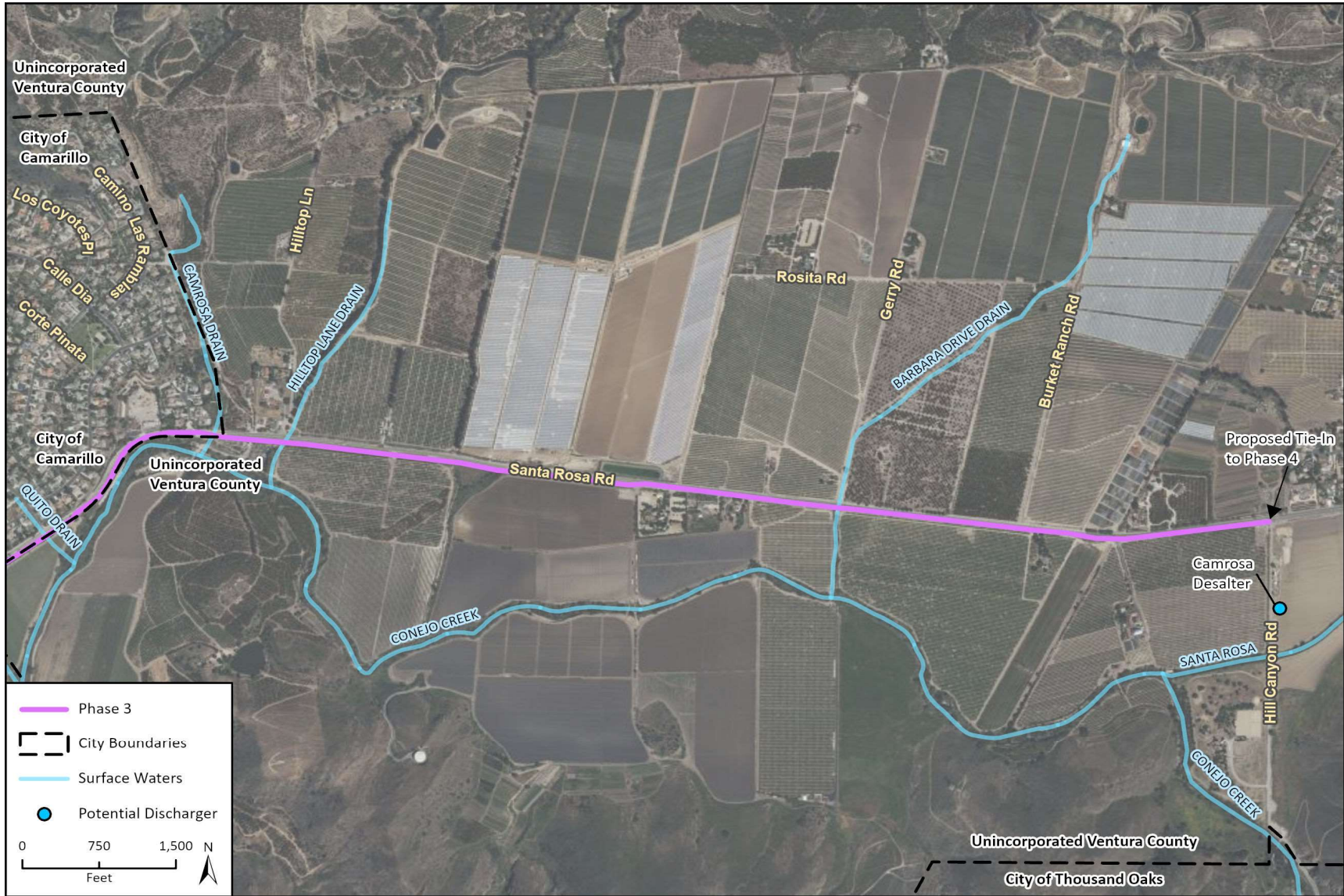
Figure 3 Phase 3 Pipeline Location, Western Portion



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Fig 2.3 Phase 3 Pt 1

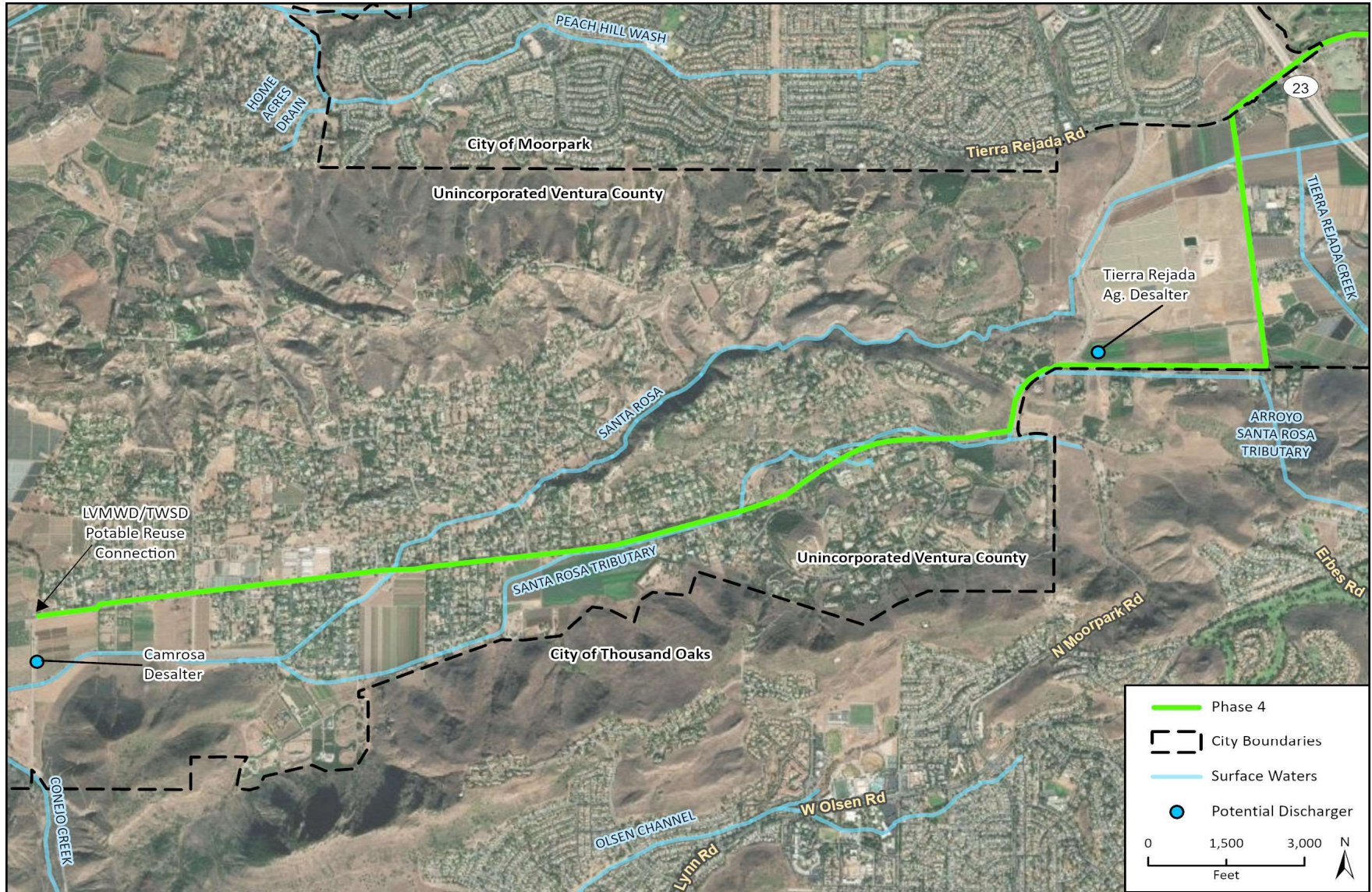
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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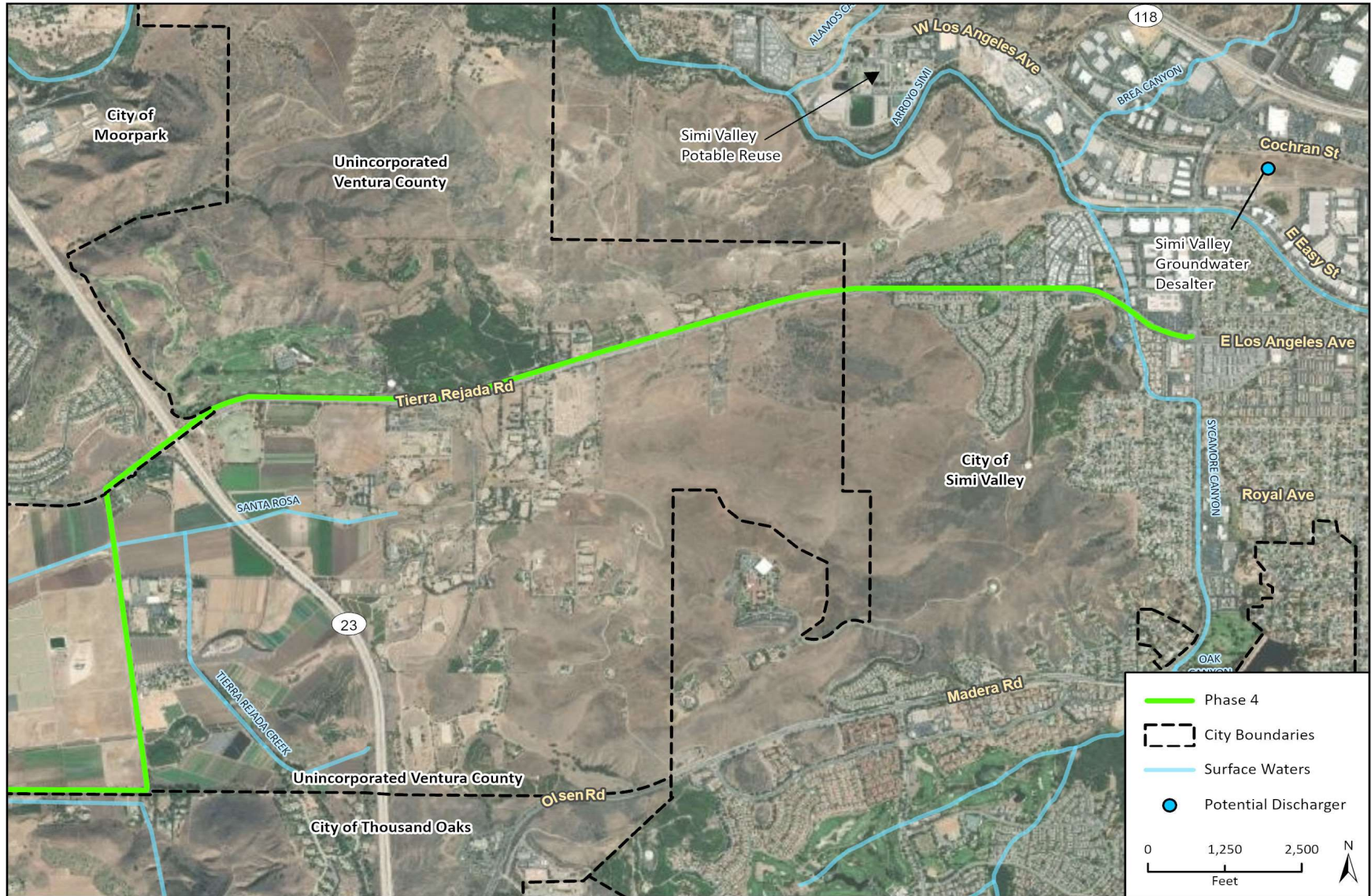
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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RAUL AVILA, DIRECTOR
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December 8, 2022

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838
Newhall, CA 91322
Via Email: ddyocum@comcast.net

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Yocum,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Lancaster". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District




Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

-  Phase 3 Pipeline
-  Phase 4 Pipeline
-  Existing Salinity Management Pipeline

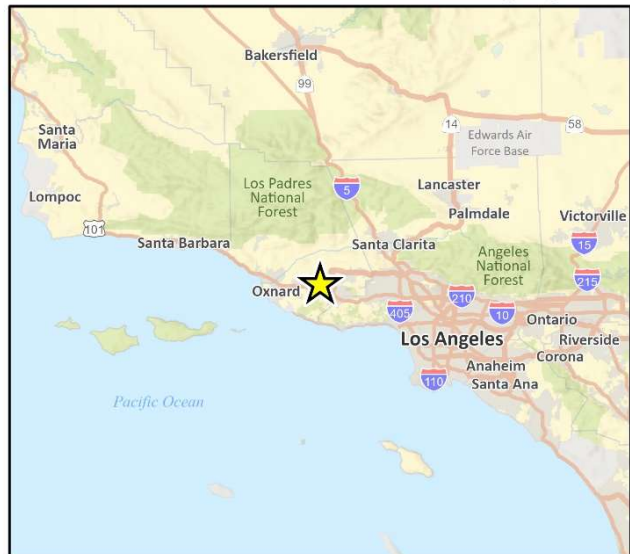
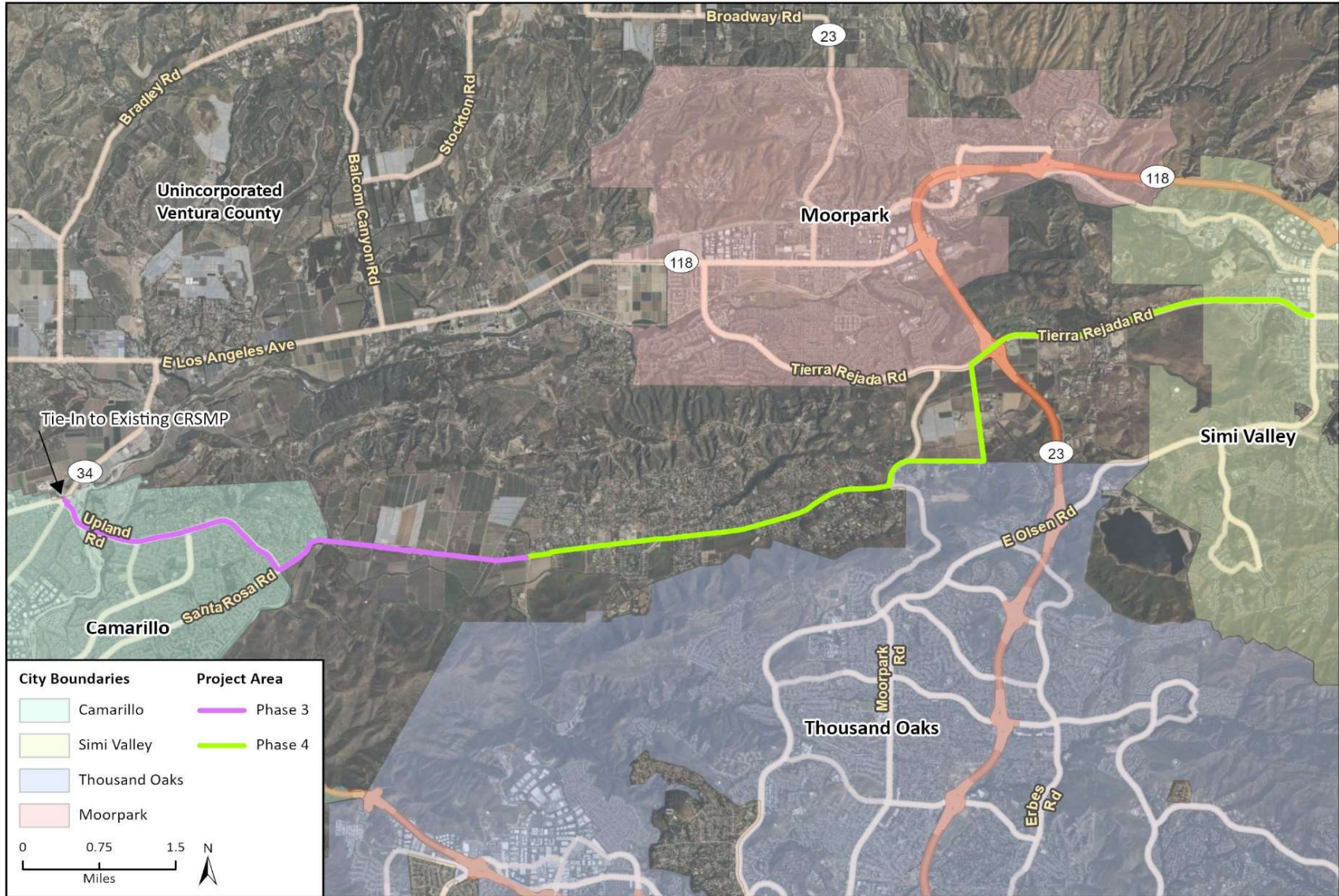


Figure 2 Project Site Location



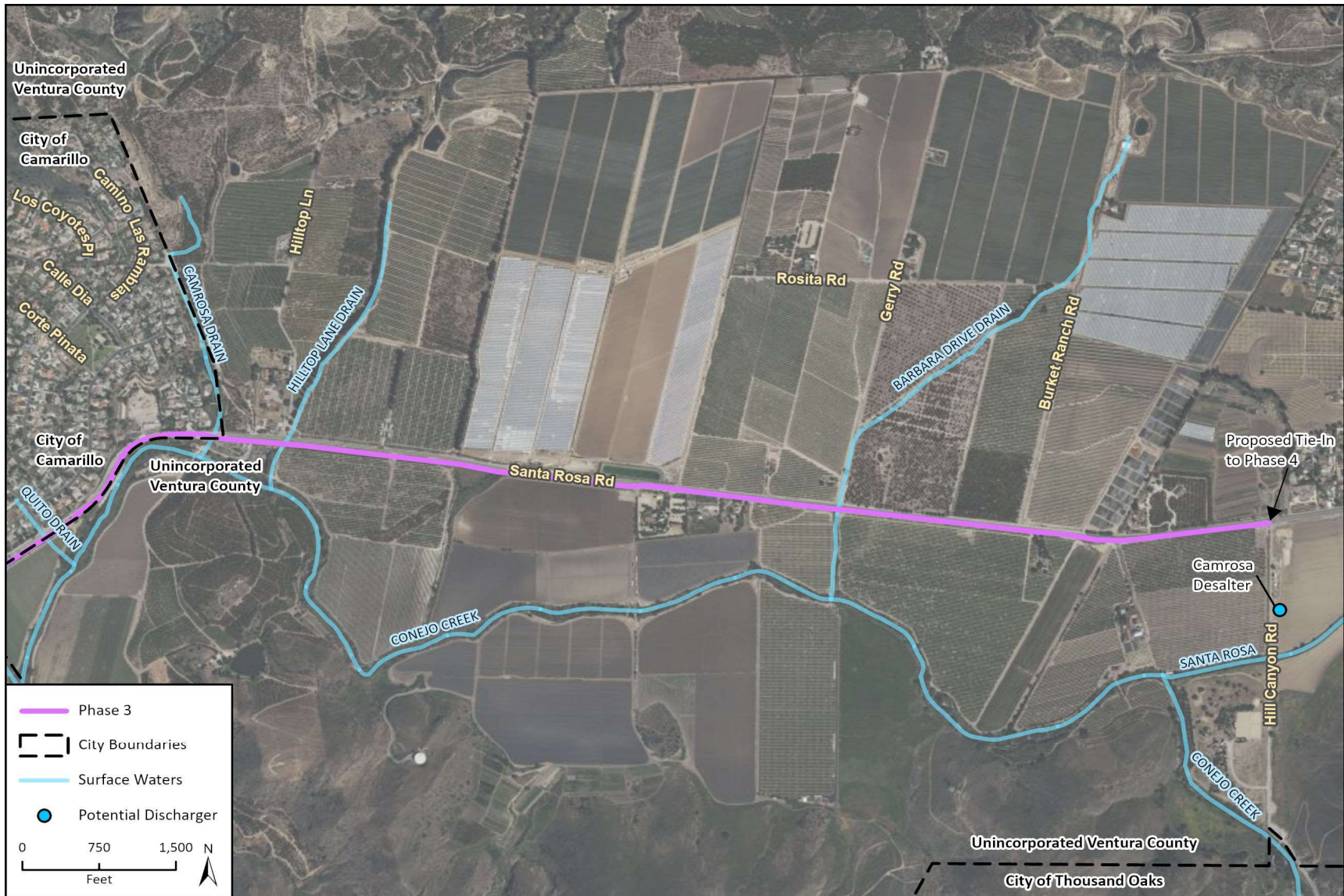
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 Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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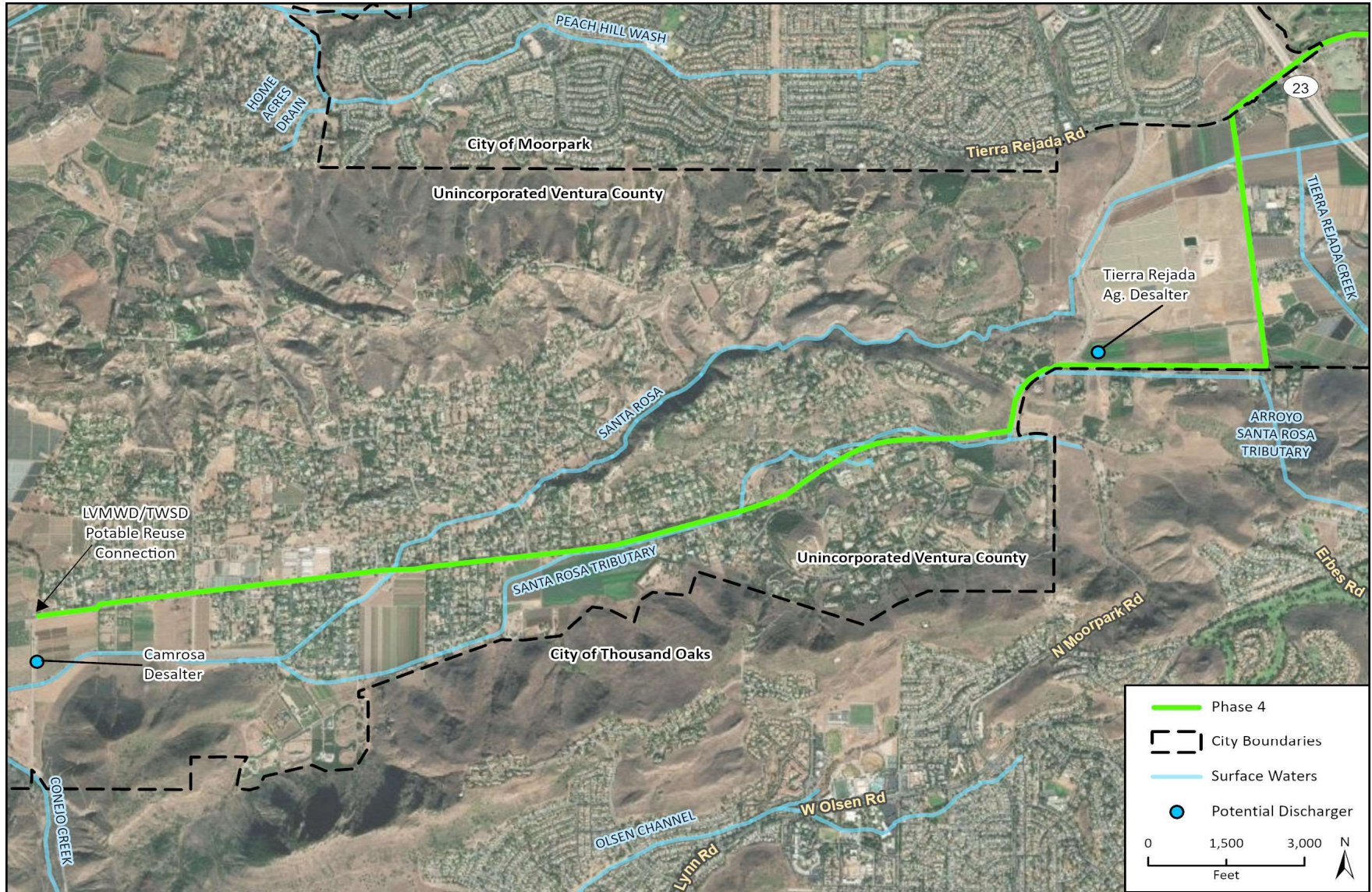
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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RAUL AVILA, DIRECTOR
DIVISION 1

SCOTT H. QUADY, DIRECTOR
DIVISION 2

ANDY WATERS, DIRECTOR
DIVISION 3



THIBAUT ROBERT, DIRECTOR
DIVISION 4

JACQUELYN MCMILLAN, DIRECTOR
DIVISION 5

ANTHONY GOFF
GENERAL MANAGER

web site: www.calleguas.com

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730

December 8, 2022

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Via Email: kkahn@santaynezchumash-nsn.gov

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear Chairperson Kahn,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

The proposed project would install an underground pipeline. The Phases 3 and 4 pipeline alignments would traverse portions of Camarillo, Moorpark, Thousand Oaks, and Simi Valley, as well as unincorporated Ventura County. Pipeline alignments would mostly be located within the public right-of-way within paved roads and dirt shoulders. A portion of the alignment would extend under private property at the northeast corner of the intersection of Las Posas Road and Upland Road, which is currently developed for agricultural production. Roadways along the project alignments include Upland Road, Santa Rosa Road, Moorpark Road, Read Road, Sunset Valley Road, and Tierra Rejada Road. See attached project location maps. The majority of the pipeline would be installed via conventional open-cut trench construction methods. Trenchless construction methods would be used to cross below existing drainage channels. Trenchless construction methods would also be used to cross Somis Road, Santa Rosa Road, and busy intersections to minimize traffic impacts.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the Calleguas Municipal Water District planning process. Under AB 52, you have 30 days from receipt of this notification to respond in writing if you wish to consult on the proposed project. If you require any additional information or have any questions, please contact me at (805) 579-7194, or via e-mail at jlancaster@calleguas.com. Thank you for your assistance.

Sincerely,

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District

Enclosure: Project Location Maps

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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

- Phase 3 Pipeline
- Phase 4 Pipeline
- Existing Salinity Management Pipeline

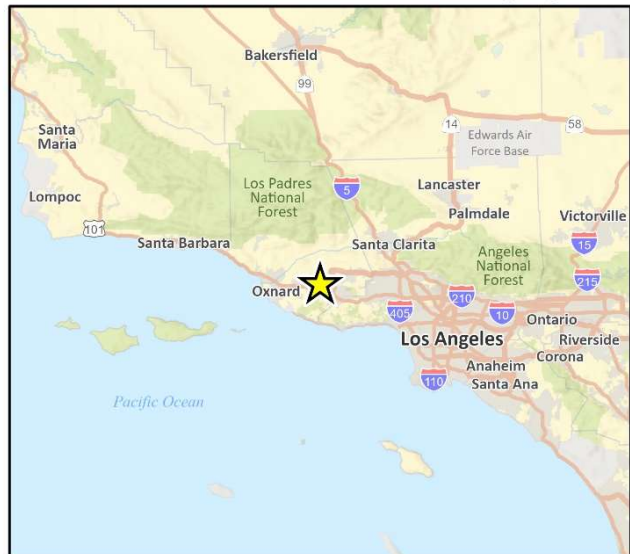
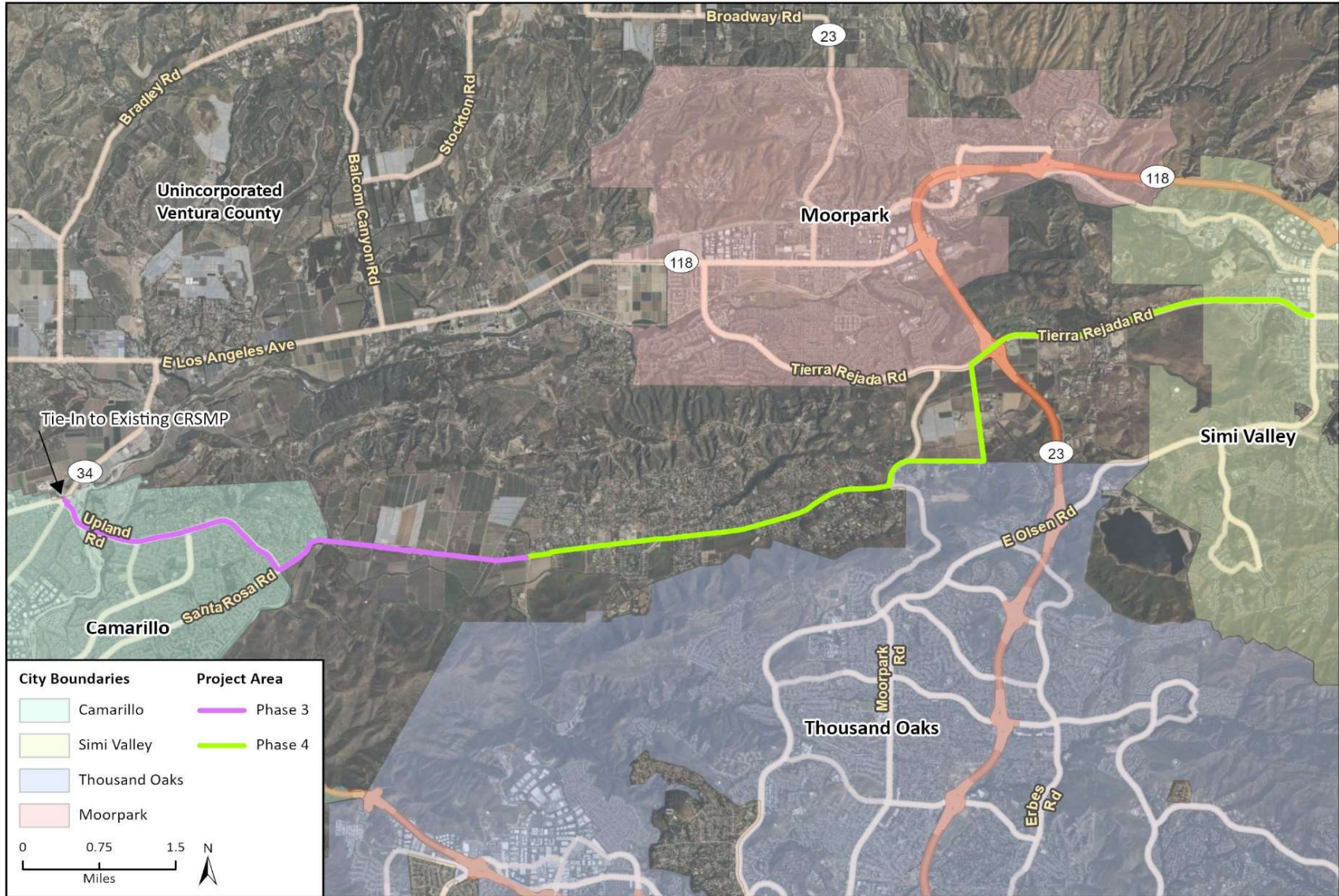


Figure 2 Project Site Location



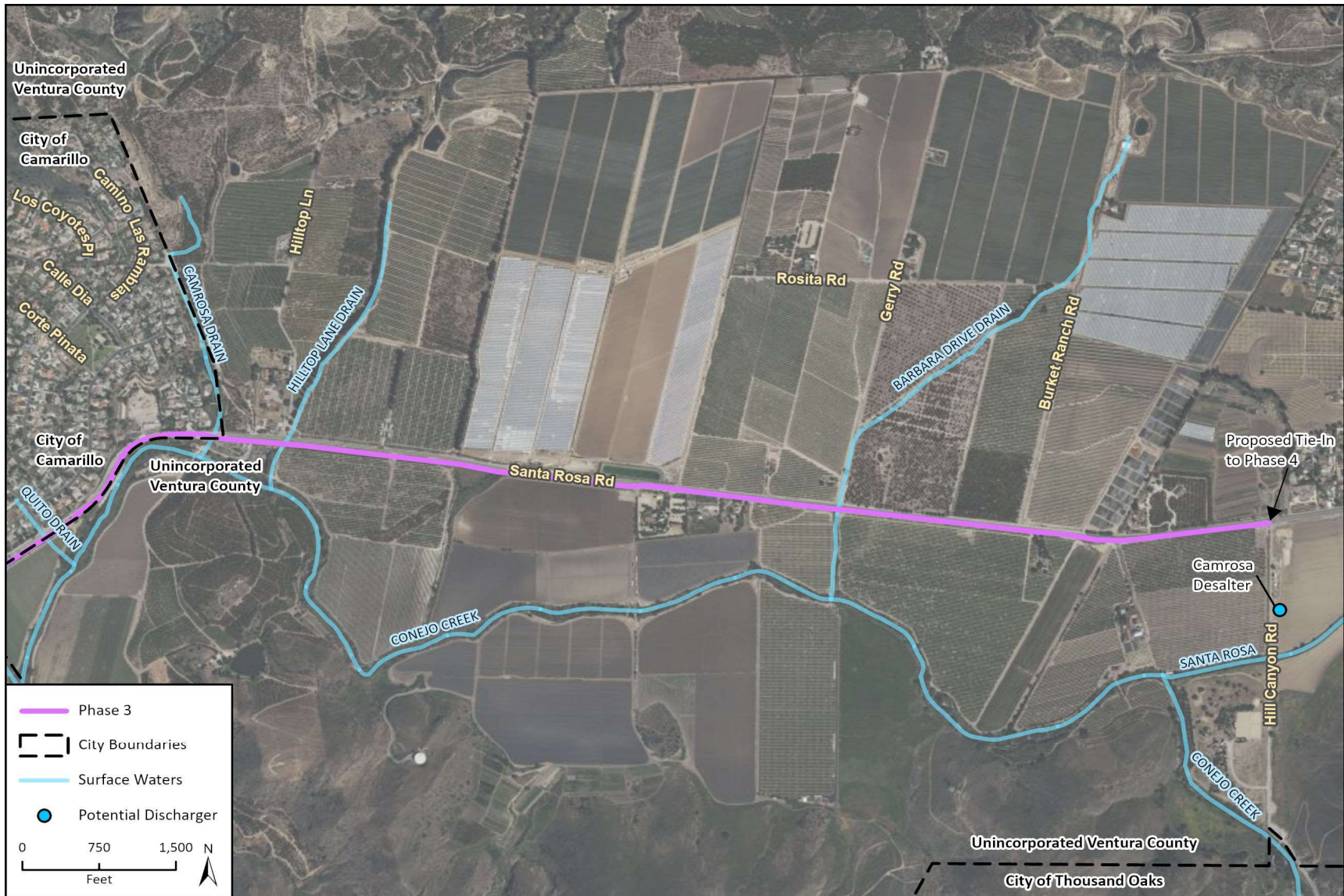
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 Additional data provided by the County of Ventura.

Figure 3 Phase 3 Pipeline Location, Western Portion



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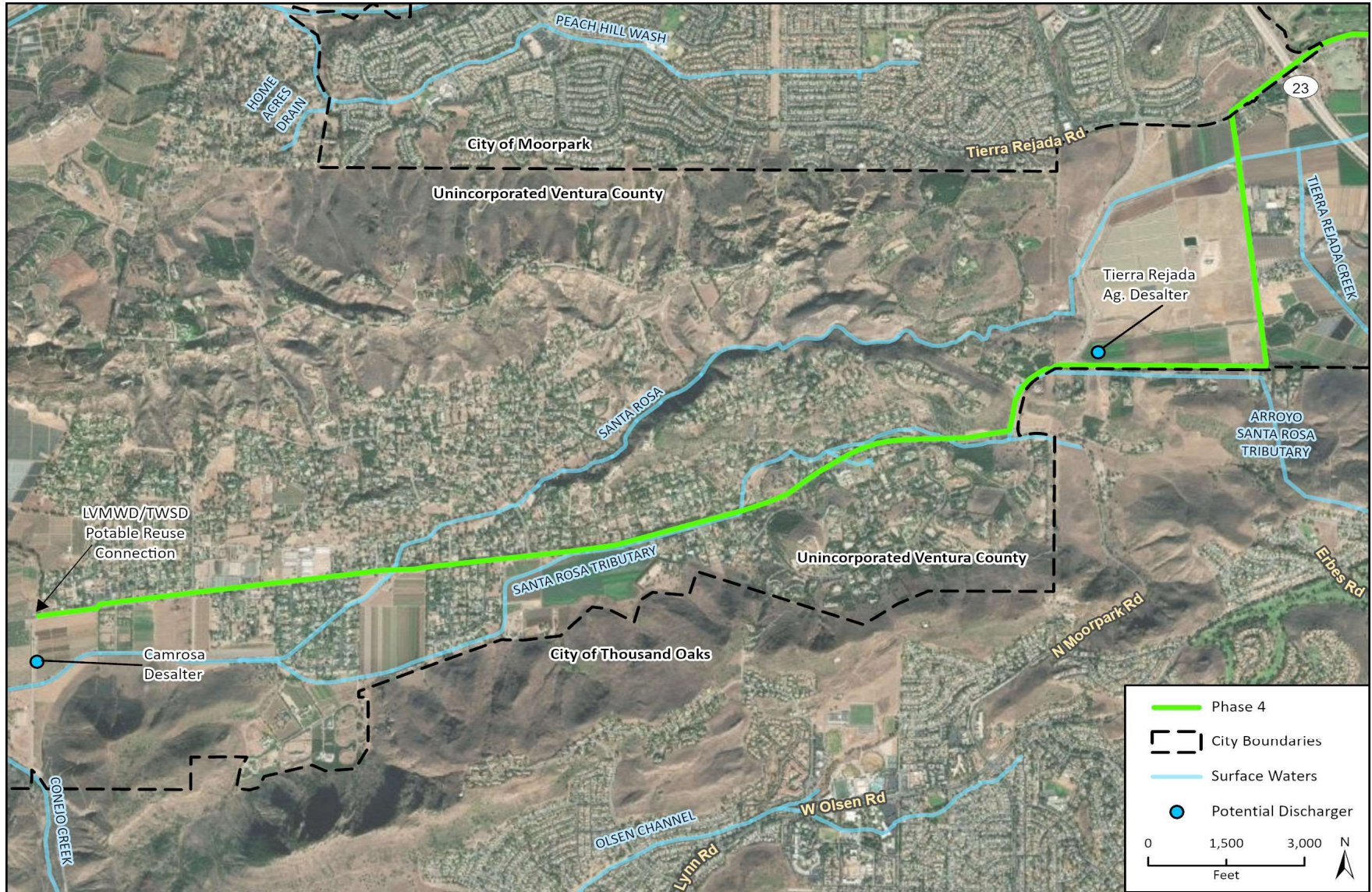
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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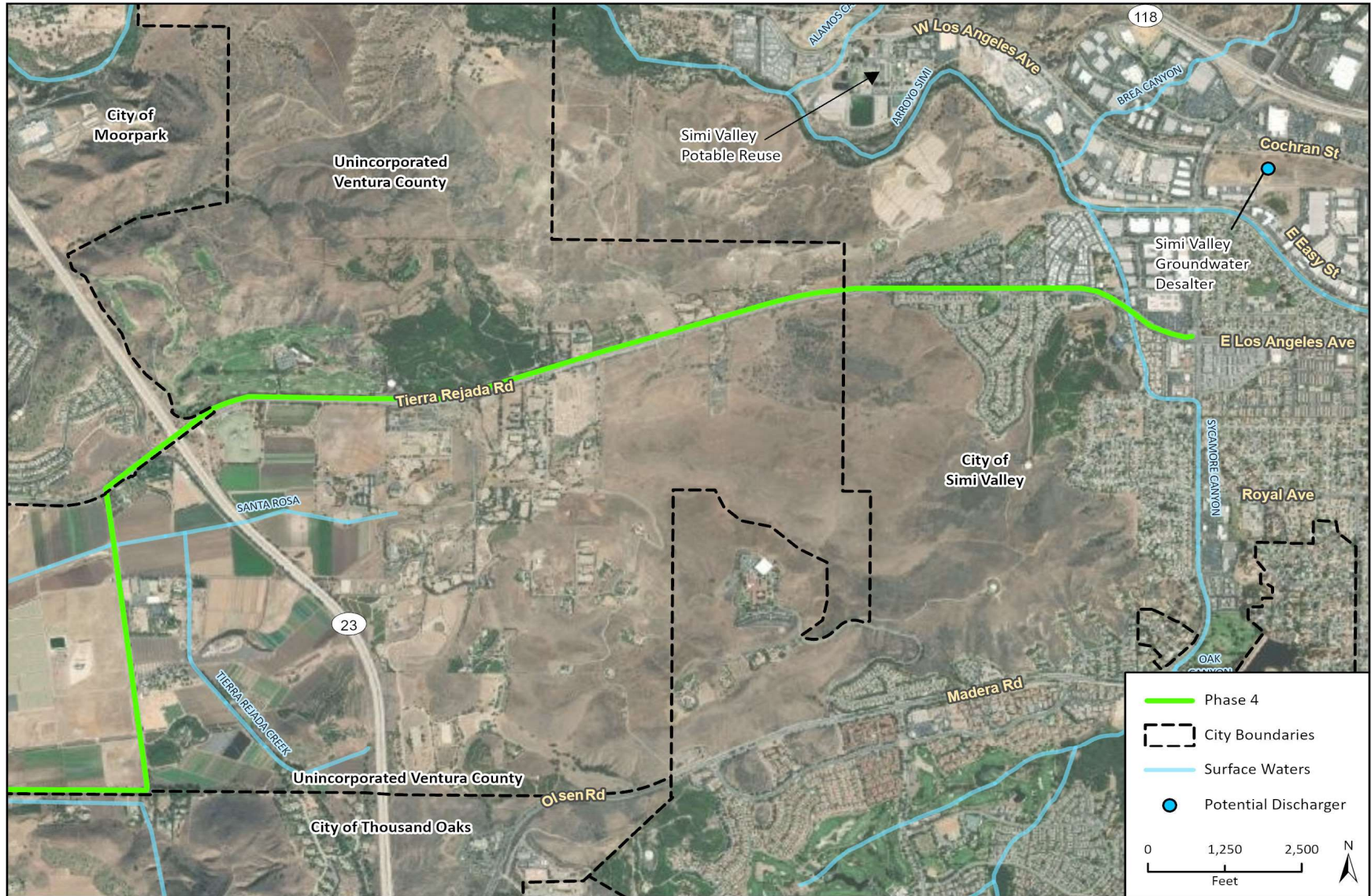
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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December 8, 2022

San Luis Obispo County Chumash Council
1030 Ritchie Road
Grover Beach, CA, 93433

RE: Assembly Bill 52 Consultation Notification for the Calleguas Regional Salinity Management Pipeline Phases 3 and 4, Ventura County, California

Dear San Luis Obispo County Chumash Council,

The Calleguas Municipal Water District proposes the Calleguas Regional Salinity Management Pipeline (CRSMP) Phases 3 and 4 (proposed project), located in Ventura County, California. The CRSMP consists of a pipeline system to transport excess recycled water and brine concentrate generated within the watershed to an ocean outfall. The CRSMP currently extends approximately 22 miles from its upstream end in the Somis area near Camarillo to its downstream terminus at the ocean outfall in Port Hueneme. The proposed project would extend the CRSMP approximately 14 miles inland from the existing terminus, enabling connections to additional dischargers. The proposed project is subject to the California Environmental Quality Act.

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Jennifer Lancaster
Principal Resource Specialist
Calleguas Municipal Water District




Enclosure: Project Location Maps

Figure 1 Regional Location



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EPS Proj, Regional, Phase 3 Locn
Fig 2.1 Regional Location

-  Phase 3 Pipeline
-  Phase 4 Pipeline
-  Existing Salinity Management Pipeline

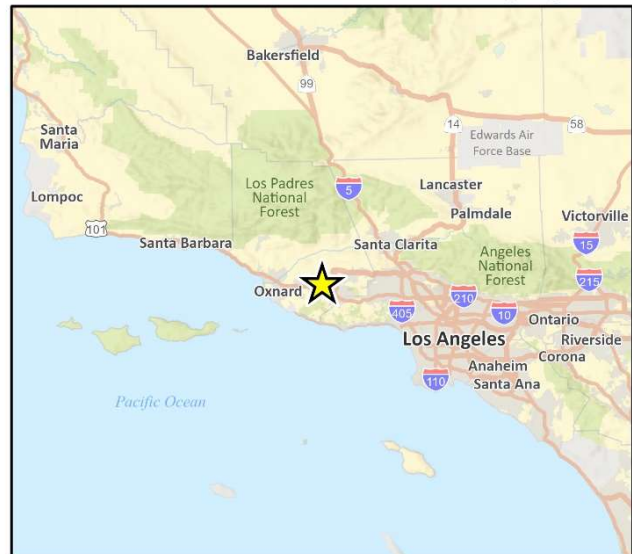
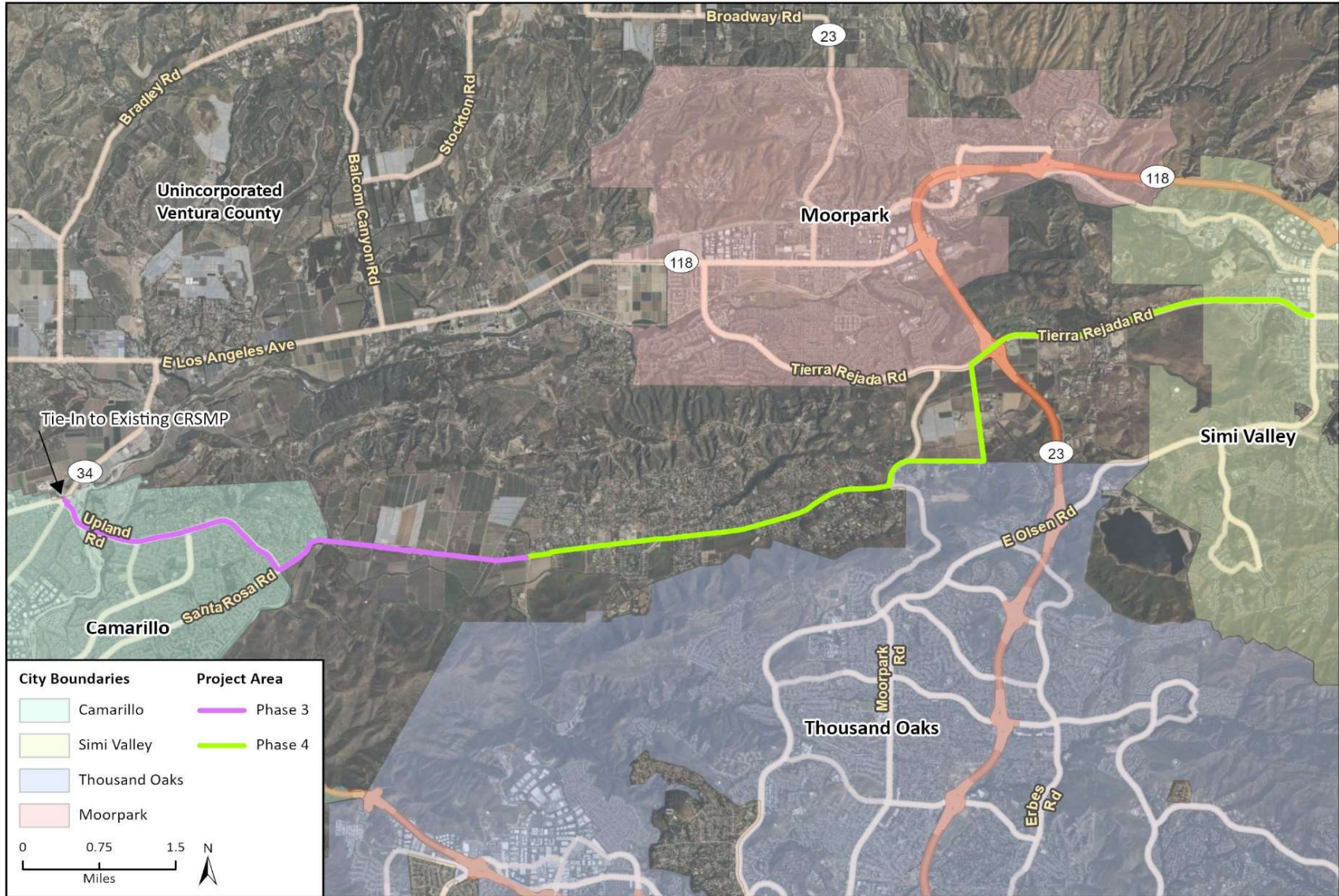


Figure 2 Project Site Location



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 Additional data provided by the County of Ventura.

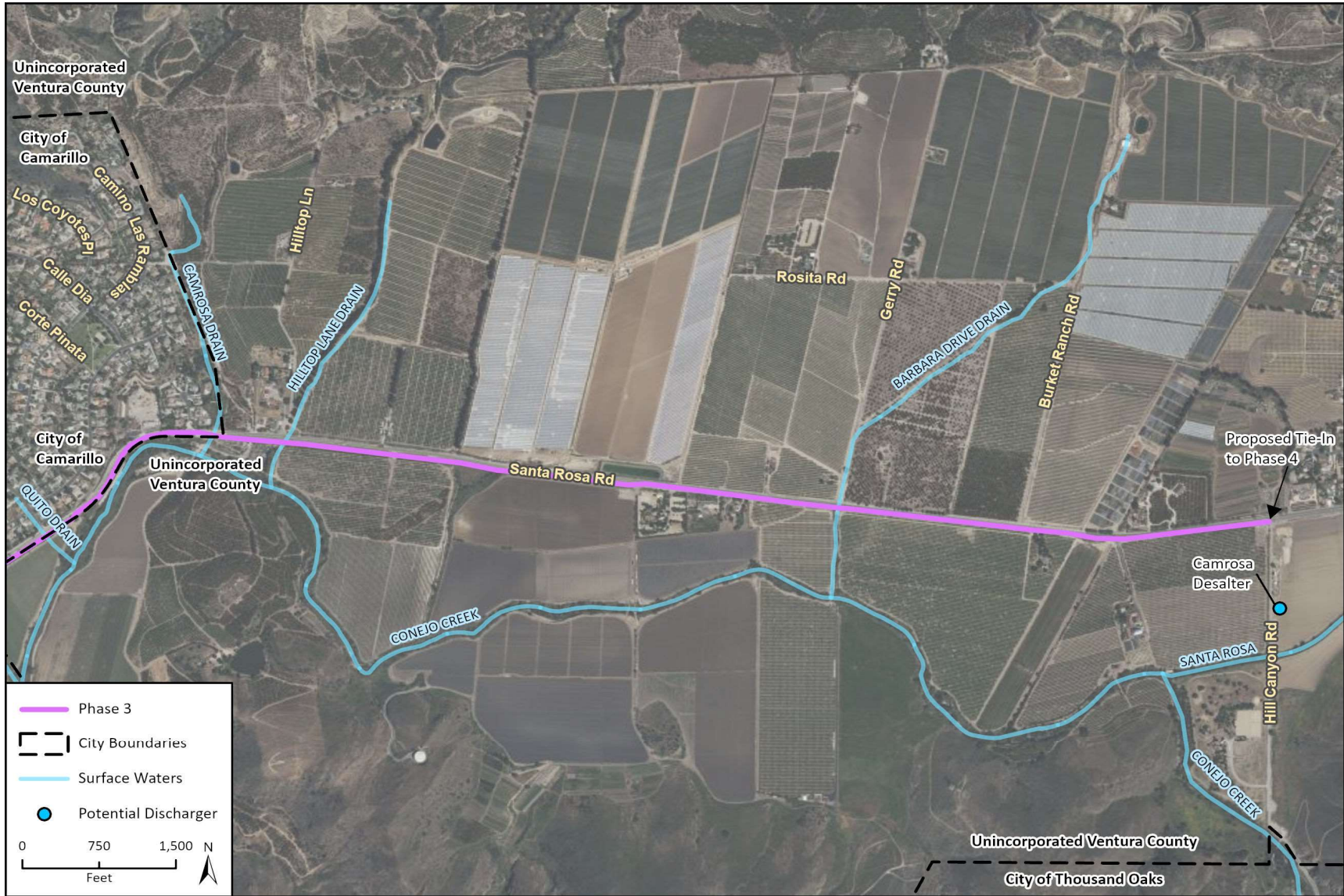
Proj. Regional, Phase 3 Locn
 Fig. 2.2 Project Location

Figure 3 Phase 3 Pipeline Location, Western Portion



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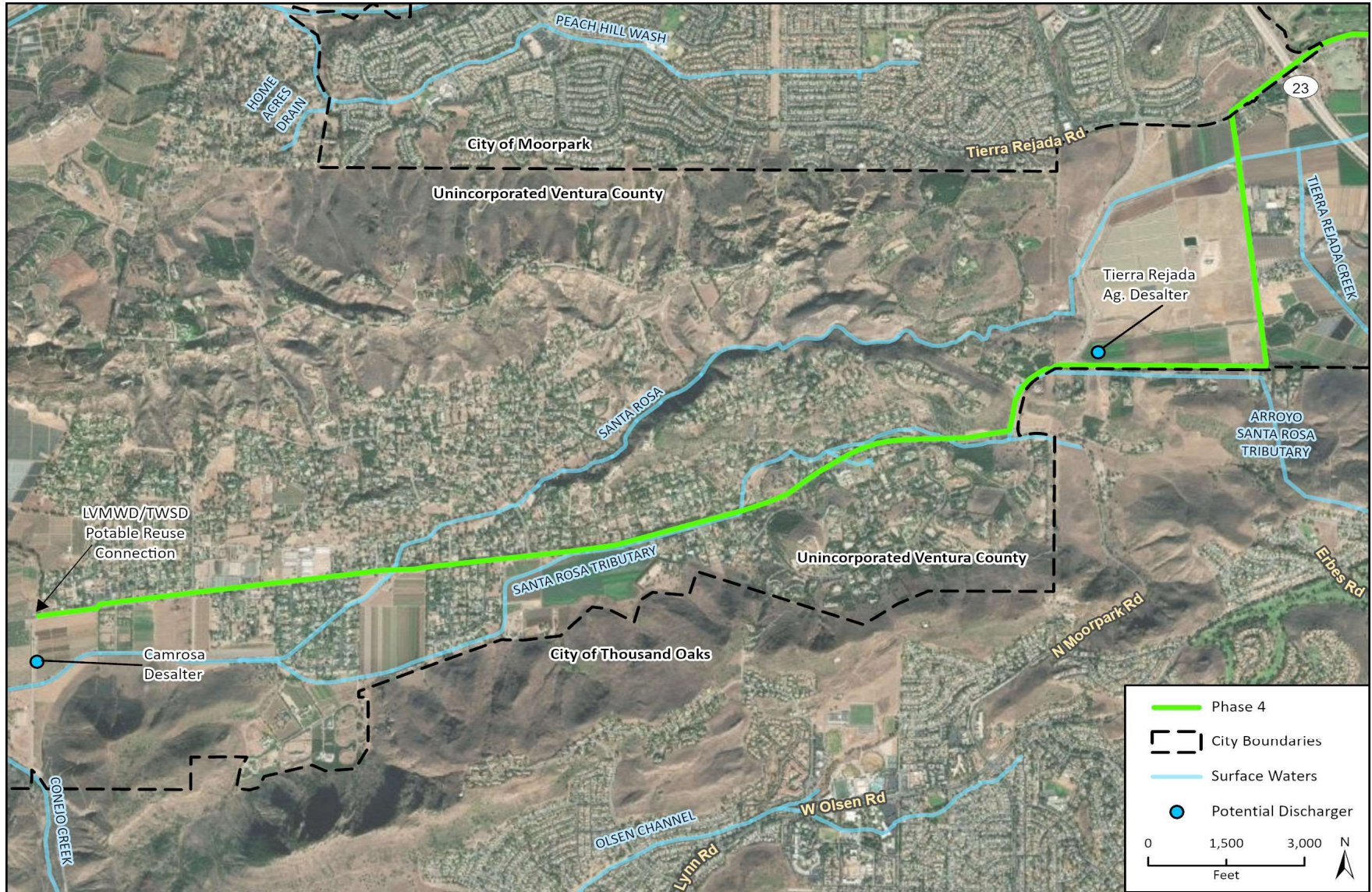
Figure 4 Phase 3 Pipeline Location, Eastern Portion



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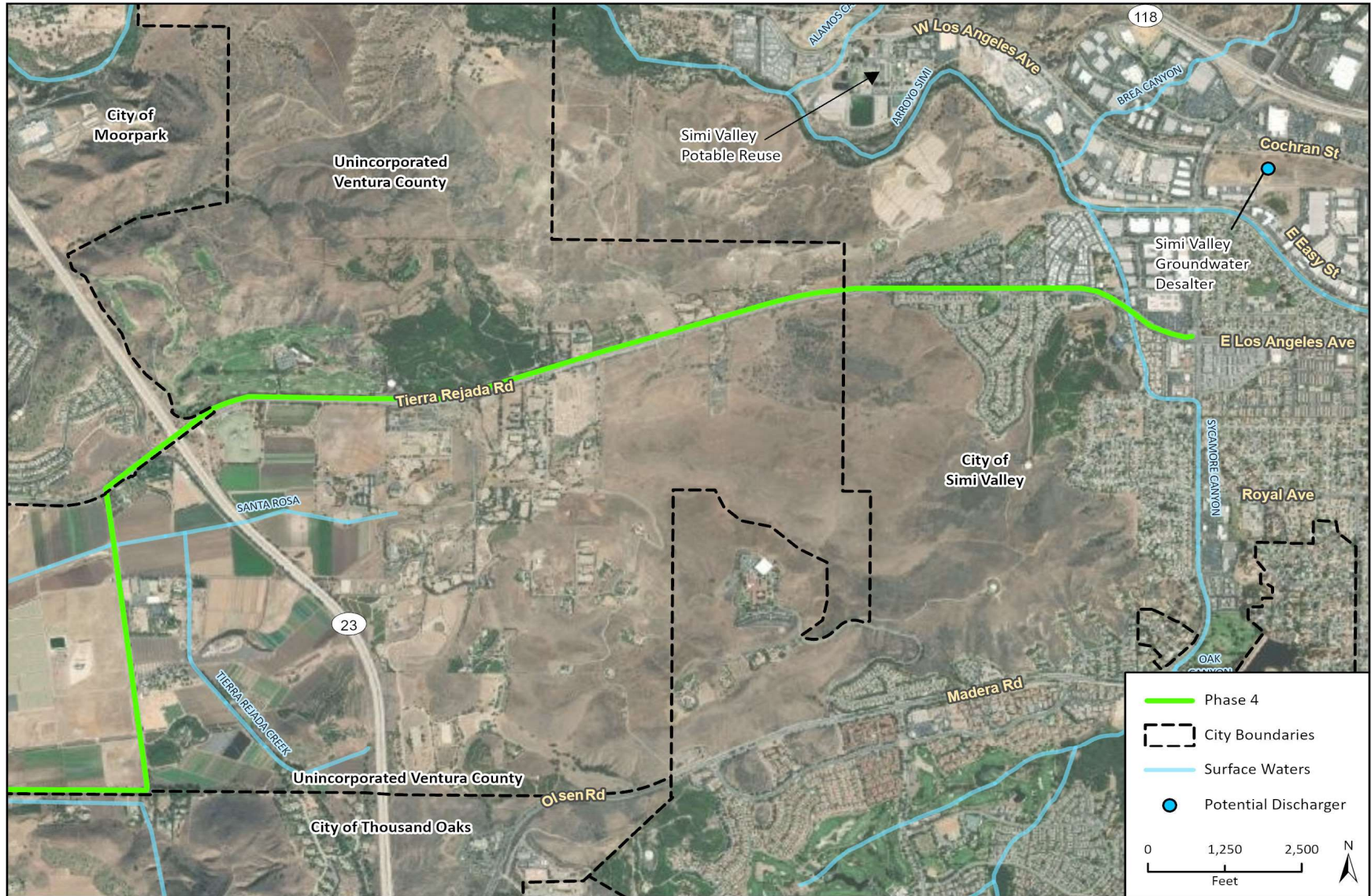
EPS Proj, Regional, Phase 3 Locn
Fig 2.4 Phase 3 Pt 2

Figure 5 Phase 4 Pipeline Location, Western Portion



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Figure 6 Phase 4 Pipeline Location, Eastern Portion



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