# Addendum

# **Woodlake Sewer Improvements Project**

# Prepared for:



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December 2022

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# SECTION ONE – INTRODUCTION

This environmental document is an Addendum to the *City of Woodlake Sewer Improvements Project* (Approved Project) Initial Study/Negative Declaration (IS/ND), adopted on April 9, 2018 (State Clearinghouse (2018021014), by the City of Woodlake. The original infrastructure design was finalized, and the pipeline alignment shifted from what was originally analyzed, resulting in approximately 1.3 miles of un-analyzed pipeline.

In order to proceed with new infrastructure improvements, the City has determined that an Addendum should be prepared to the previous Project IS/MND. As demonstrated in this Addendum, there are no additional impacts and the IS/MND continues to serve as the appropriate document addressing the environmental impacts of these changes, pursuant to California Environmental Quality Act (CEQA).

### 1.1 Addendum Purpose

When a proposed project is changed or there are changes in environmental setting, a determination must be made by the Lead Agency as to whether an Addendum or Subsequent EIR or MND is prepared. CEQA Guidelines Sections 15162 and 15164 sets forth criteria to assess which environmental document is appropriate. The criteria for determining whether an Addendum or Subsequent MND is prepared are outlined below. If the criteria below are true, then an Addendum is the appropriate document:

- No new significant impacts will result from the project or from new mitigation measures.
- No substantial increase in the severity of environment impact will occur.
- No new feasible alternatives or mitigation measures that would reduce impacts previously found not to be feasible have, in fact been found to be feasible.

Based upon the information provided in Section Three of this document, implementation of the Approved Project will not result in new significant impacts or substantially increase the severity of impacts previously identified in the IS/MND, and there are no previously infeasible alternatives that are now feasible. None of the other factors set forth in Section 15162(a)(3) are present.

As such, an Addendum is appropriate, and this Addendum has been prepared to address the environmental effects of the Project.

## 1.2 Environmental Analysis and Conclusions

The previously Approved Project was evaluated under CEQA with an IS/MND in 2018. As previously discussed, the original infrastructure design was finalized and the pipeline alignment shifted from what was originally analyzed, resulting in approximately 1.3 miles of un-analyzed pipeline. This Addendum addresses the environmental effects associated with the Project to determine if there are any new or increased environmental impacts due to implementation of the Project within the current regulatory and environmental setting. The conclusions of the analysis in this Addendum remain consistent with those made in the original IS/MND. No new significant impacts will result, and no substantial increase in severity of impacts will result from those previously identified in the IS/MND.

## 1.3 Incorporation by Reference

In compliance with CEQA Guidelines Section 15150, this Addendum has incorporated by reference the *Woodlake Sewer Extension Project IS/MND*, adopted on April 9, 2018 (State Clearinghouse #2018021014). Information from this document incorporated by reference into this Addendum have been briefly summarized in the appropriate section(s) which follow, and the relationship between the incorporated part of the referenced document and this Addendum has been described. The documents and other sources which have been used in the preparation of this Addendum can be found as footnotes in the sections where they are referenced.

#### 1.4 Addendum Process

As described in Section 1.1, an addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.<sup>1</sup> An addendum need not be circulated for public review but can be included in or attached to the Final EIR or Negative Declaration.<sup>2</sup> The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.<sup>3</sup> Once adopted, the Addendum, along with the original EIR or Negative Declaration, is placed in the Administrative Record, and the CEQA process is complete. A copy of the Addendum will be transmitted to the State Clearinghouse.

<sup>&</sup>lt;sup>1</sup> CEQA Guidelines, Section 15164(a)

<sup>&</sup>lt;sup>2</sup> CEQA Guidelines, Section 15164(c)

<sup>&</sup>lt;sup>3</sup> CEQA Guidelines Section 15164(d)

# SECTION TWO - PROJECT DESCRIPTION

#### 2.1 Location

The City of Woodlake is located in Tulare County in the southern part of the San Joaquin Valley. The proposed Project includes citywide sewer improvements, as provided in Figure 1.

## 2.2 Project Description

#### **Original Description**

As discussed in the original IS/MND, the Project includes sewer improvements throughout the City. The improvements outlined in Figure 1 will implement capacity improvements, as well as repair and replacement of aging sewer system assets. The capacity improvements will be accomplished through upsizing existing lines, either through excavation and replacement with larger diameter lines or utilizing pipe bursting methods. In one instance, installation of a new, parallel trunk line will route flow that would otherwise exceed the capacity of an existing trunk sewer located in Valencia Street. In addition to the capacity improvements, the City plans to repair or replace aging infrastructure that is close to the end of its useful life.

#### **Changes to Project Description**

The final design of the original sewer improvement project was finalized, and it was decided that a different alignment would serve the City more efficiently. There are approximately 1.3 miles of new sewer alignment that were not analyzed in the original MND, as provided in Figure 2. The 1.3 miles of new alignment is the subject of the environmental analysis contained in this Addendum.

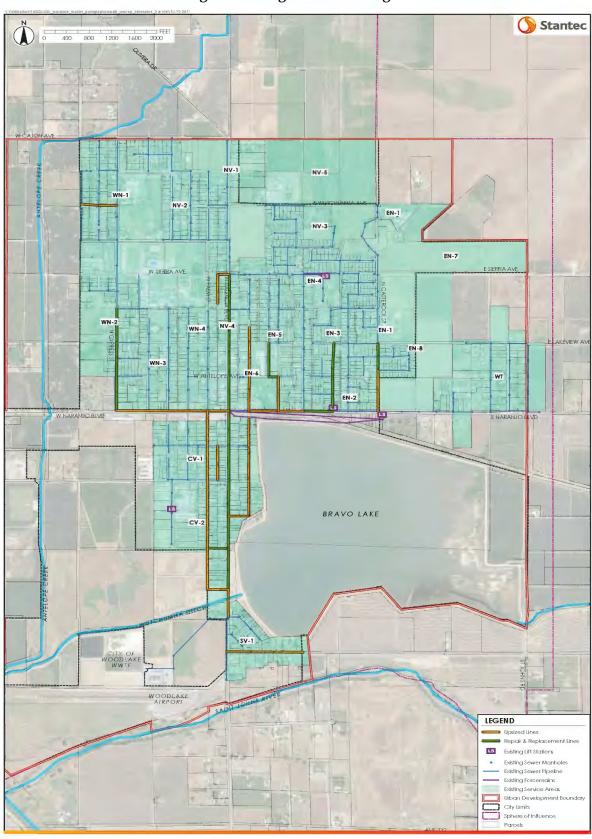


Figure 1 – Original Sewer Alignment

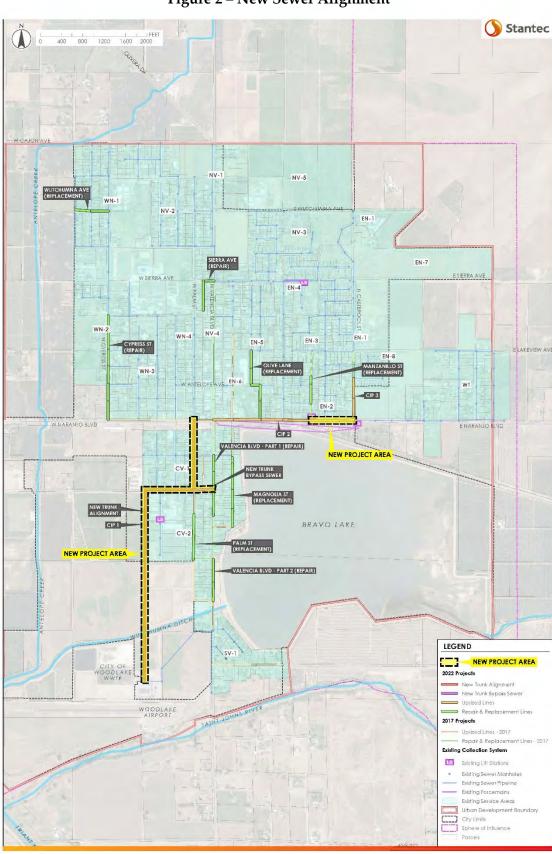


Figure 2 – New Sewer Alignment

# SECTION THREE - CEQA CHECKLIST

The purpose of the checklist is to evaluate the categories in terms of any changed condition (e.g., changed circumstances, project changes, or new information of substantial importance) that may result in a changed environment result (e.g., a new significant impact or substantial increase in the severity of a previously identified significant effect).<sup>4</sup>

The questions posed in the checklist come from Appendix G of the CEQA Guidelines. A "no" answer does not necessarily mean that there are no potential impacts relative to the environmental category, but that there is no change in the condition or status of the impact since it was analyzed and addressed with mitigation measures in the IS/MND prepared for the project. These environmental categories might be answered with a "no" in the checklist, since the proposed project does not introduce changes that would result in modification to the conclusion of the adopted IS/MND.

## 3.1 Checklist Evaluation Categories

**Conclusion in Prior IS/MND** – This column provides a cross reference to the section of the IS/MND where the conclusion may be found relative to the environmental issue listed under each topic.

**Do Proposed Changes Involve New Impacts?** – Pursuant to CEQA Guidelines Section 15162(a)(1), this column indicates whether the changes represented by the revised project will result in new significant environmental impacts not previously identified or mitigated by the IS/MND, or whether the changes will result in a substantial increase in the severity of a previously identified significant impact.

New Circumstances Involving New Impacts? – Pursuant to CEQA Guidelines Section 15162(a)(2), this column indicates where there have been substantial changes with respect to the circumstances under which the project is undertaken that will require major revisions to the IS/MND, due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

**New Information Requiring Analysis or Verification?** – Pursuant to CEAQA Guidelines Section 15162(a)(3)(a-d), this column indicates whether new information of substantial importance, which was

<sup>&</sup>lt;sup>4</sup> CEQA Guidelines Section 15162

not known and could not have been known with the exercise of reasonable diligence at the time of the previous FEIR or MND was certified as complete.

**Adopted IS/MND Mitigation Measures** – Pursuant to CEQA Guidelines Section 15162(a)(3), this column indicates whether the IS/ND provides mitigation measures to address effects in the related impact category.

## 3.2 Environmental Analysis

As explained in Section One, this comparative analysis has been undertaken pursuant to the provisions of CEQA Sections 15162 and 15164 to provide the City with the factual basis for determining whether any changes in the project, any changes in circumstances, or any new information since the IS/MND was adopted require additional environmental review or preparation of a Subsequent MND or EIR the IS/MND previously prepared.

As described in Section Two, an additional 1.3 miles of sewer line will be installed as described in Figure 2. Because of this, new analysis for impacts within the Project area is provided in this Section of the Addendum on the following pages.

# I. AESTHETICS

	Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
a.	<i>Nould the project:</i> Have a substantial	Less Than	<b>No.</b> There are	<b>No.</b> There are	<b>No.</b> There are	None.
<u>α.</u>	adverse effect on a scenic vista?	Significant.	no identified scenic vistas in the area.	no identified scenic vistas in the area.	no identified scenic vistas in the area.	none.
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact.	No. There is no state scenic highway in the project area.	No. There is no state scenic highway in the project area.	No. There is no state scenic highway in the project area.	None.
с.	In non-urbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings?	Less Than Significant.	No. The project would not substantially degrade site existing visual character.	No. The project would not substantially degrade site existing visual character.	No. The project would not substantially degrade site existing visual character.	None.
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant.	No. The project would not create a source of substantial light or glare.	No. The project would not create a source of substantial light or glare.	No. The project would not create a source of substantial light or glare.	None.

# DISCUSSION

The previously adopted MND determined that the proposed Project would have no significant impacts to aesthetic resources. Additional construction activities will occur along the new pipeline alignments; however, as stated in the adopted MND, construction activities will be temporary in nature. There are no changes to the Project description that would cause an increase in impacts beyond what was previously analyzed. Therefore, the Project impact remains less than significant.

# FINAL IS/MND MITIGATION MEASURES

None.

# CONCLUSION

The conclusions from the IS/MND remain unchanged.

# II. AGRICULTURAL AND FORESTRY RESOURCES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non- agricultural use?	No Impact.	No. The project will not remove any land from agricultural production.	No. The project will continue to not remove any land from agricultural production.	No. The proposed project remains the same concerning agricultural resources.	None.
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact.	No. The project will not remove any land from agricultural production.	No. The project will not remove any land from agricultural production.	No. The proposed project remains the same concerning agricultural resources.	None.
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))?	No Impact.	No. The project will not remove any land from agricultural production.	No. The project will not remove any land from agricultural production.	No. The proposed project remains the same concerning agricultural resources.	None.
d. Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact.	No. There is no forest land on site.	No. There is no forest land on site.	No. There is no forest land on site.	None.
e. Involve other changes in the existing	No Impact.	<b>No.</b> The project will	<b>No.</b> The project will	<b>No.</b> The project will	None.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
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?		not remove any land from agricultural production.	not remove any land from agricultural production.	not remove any land from agricultural production.	

# DISCUSSION

As discussed in the adopted MND, the pipelines will be installed within the existing right of way and will be installed underground. The Project purpose is to improve the existing sewer system and does not have the potential to result in the conversion of farmland to non-agricultural uses or forest land to non-forestland. There is no impact.

# FINAL IS/MND MITIGATION MEASURES

None.

## CONCLUSION

The Project will continue to have no impact on agricultural or forestry resources.

# III. AIR QUALITY

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact with Mitigation.	No. The project would not create new significant increases in air emissions that would conflict or obstruct implementation of an available air quality plan.	No. The project would not create new significant increases in air emissions that would conflict or obstruct implementation of an available air quality plan.	No. The project would not create new significant increases in air emissions that would conflict or obstruct implementation of an available air quality plan	Yes. AIR- 1.
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Less Than Significant Impact with Mitigation.	No. The project would not introduce any new impacts related to air quality standards or violations not previously disclosed.	No. The project would not introduce any new impacts related to air quality standards or violations not previously disclosed.	No. The project would not introduce any new impacts related to air quality standards or violations not previously disclosed.	<b>Yes</b> . AIR-1.
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Less Than Significant Impact with Mitigation.	No. The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.	No. The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.	No. The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.	Yes. AIR- 1.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
d. Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact with Mitigation.	No. The project would not expose sensitive receptors to substantial pollutant concentrations.	No. The project would not expose sensitive receptors to substantial pollutant concentrations.	No. The project would not expose sensitive receptors to substantial pollutant concentrations.	Yes. AIR- 1.
e. Create objectionable odors affecting a substantial number of people?	Less Than Significant Impact	No. The project does not involve any land uses that would create additional objectionable odors.	No. The project does not involve any land uses that would create additional objectionable odors.	No. The project does not involve any land uses that would create additional objectionable odors.	None.

## DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact on air quality. The proposed additional Project components will not increase the severity of air quality impacts or result in a significant increase in emissions and will not result in air emissions that exceed any Air District thresholds. Following construction activities, operation of the sewer mains would be a passive process and no increase in long-term operations air emissions is anticipated to occur. Construction emissions are provided in the table below. The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 8.1.0 was utilized to estimate emissions generated from project construction (the Sacramento model is a State-wide industry standard model for linear projects such as pipelines). Also provided in the Table below are the construction emissions estimates from the original IS/MND. As identified in the table, combined construction emissions are well below the established air emission thresholds.

	VOC (ROG)	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Original IS/MND Emissions	0.28	2.60	0.26	0.18
Additional Pipeline Installation Emissions	0.14	1.42	0.44	0.13
Total Project Emissions	0.42	4.02	0.70	0.31
Annual Threshold of Significance	10	10	15	15
Significant?	No	No	No	No

The Air District rules and regulations identified in the IS/MND pertaining the original project description also apply to the additional improvements being proposed. As such, the proposed additional improvements will not result in impacts beyond what was analyzed in the previous IS/MND. Therefore, the Project will continue to have less than significant impacts on air quality with the incorporation of Mitigation Measure AIR-1.

# FINAL IS/MND MITIGATION MEASURES

#### AIR-1

The City shall require that the selected contractor prepare and implement a Project Dust and Emissions Control Plan that is approved by the SJVAPCD prior to construction. The following shall be conducted throughout the construction period to limit and control dust and air emissions:

- Apply water to unpaved surfaces and areas
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling
- Store and handle materials in a three-sided structure
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp

- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site
- Prevent trackout by installing a trackout control device
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately
- Monitor dust-generating activities and implements appropriate measures for maximum dust control

## CONCLUSION

The conclusions from the IS/MND remain unchanged.

# IV. BIOLOGICAL RESOURCES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
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 Game or U.S. Fish and Wildlife Service?	Less Than Significant Impact with Mitigation.	Less Than Significant Impact With Mitigation.	No. The additional Project components will have similar impacts to the original project and after mitigation, will not have a substantial effect on any candidate plant or animal species.	No. The additional Project components will have similar impacts to the original project and after mitigation, will not have a substantial effect on any candidate plant or animal species.	Yes. BIO-1 and BIO-2.
b. Have a substantial adverse effect 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 Game or U.S. Fish and Wildlife Service?	Less Than Significant Impact.	No. The site does not contain any biologically unique or riparian habitat. The additional Project components will have similar impacts to the original project and after mitigation, will not have a substantial effect on a riparian habitat or sensitive natural community.	No. The site does not contain any biologically unique or riparian habitat. The additional Project components will have similar impacts to the original project and after mitigation, will not have a substantial effect on a riparian habitat or sensitive natural community.	No. The site does not contain any biologically unique or riparian habitat. The additional Project components will have similar impacts to the original project and after mitigation, will not have a substantial effect on a riparian habitat or sensitive natural community.	None.
c. Have a substantial adverse effect on	Less Than Significant	No. There are no new	No. There are no new impacts	No. There are no new impacts	Yes. BIO- 3.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Impact with Mitigation.	impacts to protected wetlands with the additional project components.	to protected wetlands with the additional project components.	to protected wetlands with the additional project components.	
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?	Less Than Significant Impact.	No. The project will not interfere with any fish or wildlife movement or corridors. The additional Project components will have similar impacts to the original project and after mitigation, will not interfere substantially with wildlife movement.	No. The project will not interfere with any fish or wildlife movement or corridors. The additional Project components will have similar impacts to the original project and after mitigation, will not interfere substantially with wildlife movement.	No. The project will not interfere with any fish or wildlife movement or corridors. The additional Project components will have similar impacts to the original project and after mitigation, will not interfere substantially with wildlife movement.	None.
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less Than Significant Impact with Mitigation.	No. No local ordinances are applicable to the Project. This includes the original project area and the new project areas.	No. No local ordinances are applicable to the Project. This includes the original project area and the new project areas. No additional impacts.	No. No local ordinances are applicable to the Project. This includes the original project area and the new project areas. No additional impacts.	Yes. HAZ-1

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
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?	Less Than Significant Impact with Mitigation.	No. The Project is not subject to any adopted biological conservation plans.	No. The Project is not subject to any adopted biological conservation plans.	No. The Project is not subject to any adopted biological conservation plans.	Yes. HAZ-1

### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have less than significant impacts associated with impact areas IV (b) and (d), and a less than significant impact with mitigation associated with impact areas IV (a), (c), (e) and (f). The proposed additional improvements described in Section 2.2 – Project Description will occur within the vicinity of the Approved Project as described in the original IS/MND. The additional components are similar to the Approved Project components. Because of the additional Project components, a supplemental Biological Memorandum was prepared (Attachment A to this Addendum).

Previously, a Biological Study was conducted by Stantec Biologists for the original Approved Project. The Biological Study included database searches through the California Natural Diversity Database (CNDDB), followed by a reconnaissance survey of the original Project areas. The Approved Project Biological Study is summarized as follows:

#### Plant Species

All special status plant species have a low potential to occur within the proposed Project area. On September 28, 2017, no special-status plants were observed within the proposed Project area. Impacts such as ground disturbance or dust to special-status species would be considered a potential significant impact. Implementation of Mitigation Measures BIO-1: Pre-Construction Contractor Environmental Awareness Training, would reduce this impact to a less than significant level by training the contractor to identify special-status species during construction activities and stop work accordingly, if necessary to consult. Therefore, the impact would be less than significant with mitigation incorporated.

#### Wildlife Species

No suitable habitat for San Joaquin kit fox were observed in the proposed Project area or footprint during field surveys conducted on September 28, 2017. However, a known occurrence of a kit fox was observed in the city in 1990 and the kit foxes are known to use man-made structures, such as culverts and pipes as dens. Specifically, the upsized and repair and replacement lines are located in developed and paved areas that lack San Joaquin kit fox specific upland habitat. The only area where excavation may occur in relatively undisturbed areas is adjacent to Wutchumna Canal, which was surveyed and lacks proximity to viable habitat.

Therefore, it is highly unlikely that San Joaquin kit fox or their habitat would occur within or be affected by the proposed Project. With the implementation of Mitigation Measure BIO-1, impacts would be reduced to a less than significant level.

No suitable habitat for western mastiff bats were observed in the proposed Project area or footprint during field surveys conducted on September 28, 2017. However, a known occurrence of a western mastiff bat was observed within two miles of the proposed Project. The upsized and Riparian Habitat repair and replacement lines are located in developed and paved areas that lack western mastiff bat specific habitat. The only area where excavation may occur in relatively undisturbed areas is across Wutchumna Canal, which was surveyed and lacks proximity to viable habitat. Therefore, it is highly unlikely that western mastiff bat or their habitat would occur within or be affected by the proposed Project. With the implementation of Mitigation Measure BIO-1, impacts would be reduced to a less than significant level.

There is a moderate potential for nesting raptors and other migratory birds protected under the MBTA to occur within the proposed Project area. Construction activities during the nesting season (approximately February 15 through August 31) could disturb or cause nest abandonment and subsequent loss of eggs or developing young at active nests. Disturbance resulting in nest abandonment or loss of eggs would be considered a substantial adverse effect and violates the MBTA. Implementation of Mitigation Measures BIO-1: Pre-Construction Contractor Environmental Awareness Training and BIO-2: Avoid Disturbance of Nesting Raptors and Migratory Bird, would reduce this impact to a less than significant level.

#### Sensitive Natural Communities

The proposed Project area is approximately one and a half miles south of the San Joaquin Orcutt grass and Hoover's spurge Critical Habitat Units, Unit 6D and 7D, respectively. Based on field surveys

completed on September 28, 2017, the proposed Project area does not contain suitable San Joaquin Orcutt grass or Hoover's spurge habitat, nor were any San Joaquin Orcutt grass or Hoover's spurge observed during the field surveys.

Therefore, as described above, the majority of the proposed Project are located in either paved or developed lands and are significantly buffered from any potential sensitive habitats. Additionally, site surveys did not detect any other riparian habitat or other critical communities, identified by regional plans, policies or regulations, in the proposed Project area.

The operation of the proposed Project will have a less-than-significant impact on any riparian habitat, sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW and USFWS. Impacts from proposed Project activities would be at a less than significant level.

#### Protected Wetlands

One of the upsized lines does cross the Wutchumna Canal, as noted above. This line will be crossed by using horizontal directional drilling (HDD), or similar, which entails installing the pipe underneath Wutchumna Canal, a potential Waters of the U.S. It is not anticipated that Water of the U.S. would be impacted by the project; however, the City will apply Mitigation Measure BIO- 3 to reduce any potential unforeseen impacts to Waters of the U.S. This mitigation measure requires no net loss of wetlands or waters of the U.S. and proper permissions from the U.S. Army Corps of Engineers.

Therefore, the proposed Project activities would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or by other means. During operation, under no circumstances, is the discharge of untreated sewage to a water of the U.S. planned or permissible. Rather, the sewage would be properly conveyed to the City of Woodlake WWTF, treated and discharged in accordance with the Facility WDR Permit.

With the implementation of Mitigation Measures BIO-3, impacts from proposed construction activities would be reduced to a less than significant level.

#### Migratory Movement

Construction activities could cause temporary disturbance to common wildlife movements; however, the extent of the disturbance is limited as wildlife could move around the area. As a result, the proposed Project construction and operation is expected to have a less than significant impact on species

movements. Thus, the potential impacts to native resident or migratory wildlife species are considered less than significant with no mitigation necessary.

#### Local Policies and Ordinances

Based on field surveys completed on September 28, 2017, the proposed Project site would not have a substantial adverse effect on natural communities. The proposed Project was designed to primarily be installed in paved roadways and their associated compacted shoulder area. Therefore, it avoids and minimizes potential impacts to present natural habitats such as wetlands. In-road portions of the proposed Project will avoid and minimize impacts, such as treetrimming, to the extent feasible. The proposed Project construction and operation does not conflict with the City of Woodlake General Plan (City of Woodlake 2008), other habitat or community conservation plan(s), or any other approved local, regional, or state habitat conservation plan(s), and potential impacts are minimal with mitigation incorporated.

The application of Mitigation Measure HAZ-1: Avoid/Minimize Potential Impact from Construction Material release, discussed in Section 3.8 would mitigate any potential significant impacts of release of pollutants in flood waters, flowing river, stream, creek, or reservoir waters (Goal 5, Policy 3). The proposed Project was designed to primarily follow paved roadways and therefore does not impact agricultural land (Goal 4). The project design, also complies with the General Plan Goal 7 to minimize the impact of new development on biotic resources in the planning area. Additionally, the proposed Project does not entail the removal of trees.

The proposed Project site is not within a proposed or adopted habitat conservation plan or natural community conservation plan area and thus does not have a potential for conflict.

Therefore, with the application of Mitigation Measures HAZ-1, the proposed project would have a less than significant potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation, policies or ordinances.

#### **Additional Project Components**

Minor changes were made to the Project which included re-routing 1.3 miles of pipeline, as provided in Figure 2. The new Project components will have ground disturbing activities similar to the Approved Project and will occur in the general vicinity of the areas covered under the Approved Project. Mitigation measures applicable to the Approved Project are also applicable to the new project areas.

A Biological Resource Evaluation (BRE) was prepared for the new Project area and is summarized below. The BRE is also provided as Attachment A to this Addendum.

#### Plant Species

Sanford's arrowhead is an aquatic, rhizomatous perennial herb in the family Alismataceae with a California Rare Plant Rank of 1B.2. It is endemic to the Central Valley of California where it occupies ponds and ditches below 984 feet elevation; it flowers May–October.

One CNDDB record from 2018 is known from within 5 miles of the Project site. Although this species was not detected during the reconnaissance survey, which was conducted outside of the blooming period, the aquatic habitat in Wutchumna Ditch and Little Bravo Lake could support this species. Due low habitat quality, however, its probability of occurrence is low. Implementation of Mitigation Measure BIO-1 will reduce any potential impact to less than significant.

#### Wildlife Species

There are three CNDDB records of San Joaquin kit fox from within 5 miles of the Project site. In addition, the Project site is in a non-specific 1990 CNDDB occurrence polygon. The Project site contained fallowed agricultural fields and disturbed grassland that could provide habitat for this species. Ground squirrel burrows on the Project site could serve as dens or provide temporary refuge. However, the Project site is subject to human disturbance and is relatively isolated from natural lands. Therefore, the potential for San Joaquin kit fox to occur on or near the Project site is low.

Although there are no CNDDB records of northwestern pond turtle from within 5 miles of the Project site, Little Bravo Lake and Wutchumna Ditch provide potential aquatic habitat. The disturbed grassland adjacent to Little Bravo Lake and Wutchumna Ditch could represent potential nesting habitat. Due low habitat quality, however, the potential for northwestern pond turtle to occur on or near the Project site is low.

Although there are no CNDDB records of burrowing owl known from within 5 miles of the Project site, the disturbed grassland and inactive agricultural fields south of Mulberry Street contained burrows that could support burrowing owl. The nearby grassland and detention basins could also provide foraging habitat. However, the habitat was disturbed, and no sign of burrowing owl was detected during the 2 December 2022 reconnaissance survey. Therefore, the potential for this species to occur on or near the Project site is low.

Implementation of BIO-1 will reduce potential impacts to these sensitive species to less than significant.

#### Sensitive Natural Communities

The Project site consisted of developed and disturbed land cover (Figures 5–11). Land uses included residential and commercial development, transportation, water storage, and water transport.

The Project site along East Naranjo Boulevard, South Palm Street, and Avenue 342 consisted of paved roads surrounded by residential and commercial development (Figures 5 and 6 of Attachment A). The Project site along Mulberry Street consisted of a dirt road bordered by a recently cleared and grubbed orchard to the west and a row of olive trees and commercial development to the east (Figure 7 of Attachment A). Vegetation in the recently cleared and grubbed orchard was dominated by ruderal forbs. South of Mulberry Street, the Project site crossed an unnamed drainage ditch and followed an earthen berm between an artificial wetland (Little Bravo Lake) and several maintained detention basins (Figures 8 and 9 of Attachment A). Land cover along the berm consisted of disturbed grassland. The Project site then crosses Wutchumna Ditch, a canal that drains Bravo Lake (Figure 10 of Attachment A). Dirt levee roads flanking Wutchumna Ditch were armored with riprap. Wutchumna Ditch supported emergent vegetation. South of Wutchumna Ditch, the Project site consisted of a recently disked fallow field that supported ruderal vegetation (Figure 11 of Attachment A). Small mammal burrows were present at a moderate density in the survey area between Avenue 342 and Wutchumna Ditch. There is no critical or riparian habitat on the Project site. Any impacts to sensitive communities is less than significant.

#### Protected Wetlands

Project site was within 50 feet of three potentially regulated habitats: Wutchumna Ditch, Little Bravo Lake, and an unnamed ditch south of Mulberry Street. The unnamed ditch drains to Little Bravo Lake, which drains to Wutchmna Ditch, and eventually to the Saint Johns River. As streams and lakes in California, they are likely under the regulatory jurisdiction of the CDFW; as potential surface waters in California, they are likely under the regulatory jurisdiction of the SWRCB; and as potential tributaries of the Saint Johns River, they may be under the regulatory jurisdiction of the USACE. The nearest river, the Saint Johns River, is about 0.25 miles south of the Project site. According to the Wild and Scenic Rivers Act, there are no designated wild and scenic reaches of the Saint Johns River.

The Project may impact three regulated habitats: Wutchumna ditch, Little Bravo Lake, and an unnamed ditch south of Mulberry Street. As such, Clean Water Act Section 404 permits and 401 certifications as well as California Fish and Game Code Section 1602 notifications may be required if Project activities impact these regulated habitats. Mitigation Measure BIO-3 will reduce any impacts to less than significant.

#### Migratory Movement

The Project has the potential to impede the use of nursery sites for native birds protected under the MBTA and California Fish and Game Code. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and Fish and Game Code. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird in the Project site or immediately adjacent to the construction zone could constitute a significant effect. Implementation of BIO-2 will reduce potential impacts to migratory birds to less than significant.

Local Policies & Ordinances

No trees or biologically sensitive areas will be impacted and as such, there is no impact.

### FINAL IS/MND MITIGATION MEASURES

#### BIO-1

Prior to construction, a qualified biologist shall conduct one Environmental Awareness Training for construction personnel. Environmental Awareness Training shall be given to construction personnel to brief them on how to recognize special status plant species, wildlife species, and sensitive habitats that could occur in the proposed Project area (i.e., special status avian identification and habitat, wetland habitats, riparian habitats, relevant Best Management Practices (BMPs), work area limits, mitigation, and regulations). Environmental Awareness Training reference pamphlets shall also be provided to keep onsite for use by an environmentally trained foreman for training new Project personnel in the absence of the biologist. If special status species are encountered in the work area, construction shall cease and the City and qualified biologist shall be notified for guidance before any construction activities are resumed. Depending on the listing of the observed species and its persistence in the area, the County shall notify the USFWS and/or CDFW for guidance.

#### BIO-2

The City of Woodlake will implement one of the following measures, depending on the specific construction timeframe, to avoid disturbing nesting raptors and other migratory birds.

- 1. If construction activities are scheduled to occur during the nesting season (approximately February 15 through August 31), a qualified wildlife biologist shall be retained to conduct a preconstruction nesting survey within the appropriate habitat.
  - a. Surveys shall be conducted within the proposed Project site and all potential nesting habitat within 250 feet of this area;
  - b. The surveys should be conducted within one week before initiation of construction activities at any time between February 15 and August 31. If no active nests are detected, then no additional mitigation is required; or
  - c. If surveys indicate that migratory bird nests are found in any areas that would be directly affected by construction activities, a no-disturbance buffer shall be established around the site to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged (typically late June to mid-July). The extent of these buffers shall be determined by a qualified biologist and shall depend on the special status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.
- 2. If construction activities begin outside the breeding season (approximately September 1 through February 14) then construction may proceed until it is determined that an active migratory bird nest would be subject to abandonment as a result of construction activities. Optimally, all necessary vegetation removal should be conducted before the breeding season so that nesting birds would not be present in the construction area during construction activities. If any bird nests are in the Project site under pre-existing construction conditions, then it is assumed that they are habituated (or will habituate) to the construction activities. Under this scenario, the preconstruction survey described previously should still be conducted on or after February 15 to identify any active nests in the vicinity. Active sites should be monitored by a qualified biologist periodically until after the breeding season or after the young have fledged (typically late June to mid- July). If active nests are identified on or immediately adjacent to the Project site, then all non-essential construction activities (e.g., equipment storage and meetings) should be avoided in the immediate vicinity of the nest site, but the remainder of construction activities may proceed.

#### BIO-3

If avoidance of the wetlands is not practicable for various engineering or other site constraints, the City of Woodlake shall apply for and obtain a CWA Section 404 Nationwide Permit and comply with the current Corps compensation schedule for any loss of low biological value wetlands. Through the

permitting process, the City shall work with the agencies to ensure that the local and federal "no net loss" of wetlands is properly upheld.

# CONCLUSION

The conclusions from the IS/MND remain unchanged.

# V. CULTURAL RESOURCES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Less Than Significant Impact with Mitigation.	No. The additional Project components will not have significant impacts on a historical resource. Additional cultural/historical surveys were conducted for the new Project components and no historical resources were identified.	No. The additional Project components will not have significant impacts on a historical resource. Additional cultural/historical surveys were conducted for the new Project components and no historical resources were identified.	No. The additional Project components will not have significant impacts on a historical resource. Additional cultural/historical surveys were conducted for the new Project components and no historical resources were identified.	None.
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant with Mitigation Incorporation.	No. The additional Project components will not create any new impacts. No known historic, archaeological, or paleontological resources exist on site.	No. The additional Project components will not create any new impacts. No known historic, archaeological, or paleontological resources exist on site.	No. The additional Project components will not create any new impacts. No known historic, archaeological, or paleontological resources exist on site.	Yes. CUL-1 and CUL-2.
c. Disturb any human remains, including those interred outside of formal cemeteries?	Less Than Significant with Mitigation Incorporation.	No. The additional Project components will not create any new impacts. No known historic resources, archaeological resources, or human remains exist on site.	No. The additional Project components will not create any new impacts. No known historic resources, archaeological resources, or human remains exist on site.	No. The additional Project components will not create any new impacts. No known historic resources, archaeological resources, or human remains exist on site.	Yes. CUL-1 and CUL-2.

## DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have less than significant impacts to cultural resources, with mitigation implemented. A search was conducted at the California Historic Resources Information System (see Section 3.5.3.1.1 of the original IS/MND in Attachment C). One previously recorded cultural resource, a segment of the Visalia Electric Railroad (P-54-004034) and one previously recorded historic property, the Wutchumna Ditch Bridge (P-54-004875), were identified in the Project area. P-54-004034, a segment of the Visalia Electric Railroad, is located at the southeastern end of the Project area. P-54-004034 was visited by archaeologists during the field survey and found to be no longer extant. All traces of the railroad, including the grade, have been decimated, as documented in the most recent site-record update (2017). Therefore, the project will have no impact to P-54-004034. Wutchumna Ditch Bridge is within the Project area. The Wutchumna Ditch Bridge was previously determined ineligible for the NRHP and is therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA and require no further consideration.

As discussed in the original IS/MND, although no known cultural or archaeological resources or human remains exist on site, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measures CUL-1 and CUL-2 will continue to be implemented to ensure that the Project will result in less than significant impacts with mitigation.

#### **Additional Project Components**

Minor changes were made to the Project which included re-routing 1.3 miles of pipeline, as provided in Figure 2. The new Project components will have ground disturbing activities similar to the Approved Project and will occur in the general vicinity of the areas covered under the Approved Project. Mitigation measures applicable to the Approved Project are also applicable to the new project areas.

An Addendum Cultural Report (ACR) for the new Project area was prepared by ASM Affiliates for and is summarized below. The ACR is also provided as Attachment B to this Addendum.

ASM consulted an existing records search from 2020 which covered the current APE. According to the records search, three historic-era resources were recorded which intersect the APE (see Attachment B). A Class III inventory/Phase I survey for the additional 1.3 miles and a 100-foot survey buffer was added to the proposed improvements, creating an Area of Potential Effects (APE) totaling 16.5-acres.

Similar to the original cultural evaluation, no evidence of two of the previously recorded resources (P-54-004034 and P-54-004632) exists within the APE. An unrecorded segment of a previously recorded resource, Wutchumna Ditch (P-54-004875), crosses the APE near the southwest end. The unrecorded segment of Wutchumna Ditch was recorded during the survey. The proposed Project will not result in any impacts to Wutchumna Ditch and, thus, no National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) eligibility evaluation/impacts assessment was performed. No cultural resources of any kind were identified within the remainder of the APE. The possibility of subsurface cultural and archaeological resources remains, and as such, implementation of CUL-1 and CUL-2 will reduce any impacts to less than significant.

## FINAL IS/MND MITIGATION MEASURES

#### CUL-1

If a cultural or Tribal cultural resource is encountered during Project construction, construction shall be halted immediately within 100 feet of the resource and the City shall be immediately notified. A qualified professional archaeologist and local Tribes (if a Tribal cultural resource is encountered) shall be consulted. The qualified archaeologist and local Tribes (if a Tribal cultural resource is encountered) shall evaluate the find and recommend appropriate treatment of the resource. The appropriate treatment of an inadvertently discovered cultural or Tribal cultural resource shall be implemented to ensure that impacts to a resource is avoided. Prehistoric resources may include chert or obsidian flakes, projectile points, mortars and pestles, dark friable soil containing shell and bone dietary debris, and heat-affected rock. Historic resources may include stone or wood foundations or walls, structures or remains with square nails, and refuse deposits.

If a paleontological resource (i.e., a fossil) is found during Project construction, construction shall be halted immediately within 100 feet if the resource and the City shall be immediately notified. A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resource. The appropriate treatment of an inadvertently discovered paleontological resource shall be implemented to ensure that impacts to a resource is avoided.

#### **CUL - 2**

If human remains are encountered, work shall halt within 100 feet and the County Coroner shall be notified immediately pursuant to PRC Section 7050.5. At the same time, an archaeologist shall be

contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the NAHC within 24 hours of this identification. The NAHC shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD shall have an opportunity to make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

# CONCLUSION

The conclusions from the IS/MND remain unchanged.

## VI. ENERGY

	Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
V	ould the project:					
a.	Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operation?	Not evaluated.	No. The Project will not result in inefficient or wasteful use of energy during construction or operation.	No. The Project will not result in inefficient or wasteful use of energy during construction or operation.	No. The Project will not result in inefficient or wasteful use of energy during construction or operation.	None.
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Not evaluated.	No. The Project does not conflict with any applicable energy use plans.	No. The Project does not conflict with any applicable energy use plans.	No. The Project does not conflict with any applicable energy use plans.	None.

This resource was not specifically discussed in the original IS/MND as it was added to CEQA requirements after its adoption. Therefore it is being included in the environmental evaluation within this Addendum.

During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, and pipes. Title 24 Building Energy Efficiency Standards provide guidance on construction techniques to maximize energy conservation and it is expected that contractors and owners have a strong financial incentive to use recycled materials and products originating from nearby sources in order to reduce materials costs. As such, it is anticipated that materials used in construction and construction vehicle fuel energy would not involve the wasteful, inefficient, or unnecessary consumption of energy.

The proposed Project would be required to implement and be consistent with existing energy design standards at the local and state level. The Project would be subject to energy conservation requirements in the California Energy Code and CALGreen. Adherence to state code requirements would ensure that the Project would not result in wasteful and inefficient use of non-renewable resources due to building operation.

# FINAL IS/MND MITIGATION MEASURES

None.

# CONCLUSION

Less than significant impacts will occur with project implementation.

# VII. GEOLOGY AND SOILS

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstance s Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures			
Would the project:								
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:								
i. 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? Refer to Division of Mines and Geology Special Publication 42.	Less Than Significant.	No. The project would not be exposed to fault rupture.	No. The project would not be exposed to fault rupture.	No. The project would not be exposed to fault rupture.	None.			
ii. Strong seismic ground shaking?	Less Than Significant.	No. The project would not increase exposure to risks associated with strong seismic ground shaking.	No. The project would not increase exposure to risks associated with strong seismic ground shaking.	No. The project would not increase exposure to risks associated with strong seismic ground shaking.	None.			

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstance s Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
iii. Seismic-related ground failure, including liquefaction?	Less Than Significant.	No. The project would not increase exposure to seismicrelated ground failure including liquefaction.	No. The project would not increase exposure to seismic-related ground failure including liquefaction.	No. The project would not increase exposure to seismic-related ground failure including liquefaction.	None.
iv. Landslides?	Less Than Significant.	No. The project would not increase exposure to landslides.	No. The project would not increase exposure to landslides.	No. The project would not increase exposure to landslides.	None.
b. Result in substantial soil erosion or the loss of topsoil?	Less Than Significant with Mitigation Incorporation	No. The project would not result in soil erosion or the loss of topsoil.	No. The project would not result in soil erosion or the loss of topsoil.	No. The project would not result in soil erosion or the loss of topsoil.	Yes. GEO-1.
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?		No. The project would not increase exposure to risks associated with unstable geologic units or soils.	No. The project would not increase exposure to risks associated with unstable geologic units or soils.	No. The project would not increase exposure to risks associated with unstable geologic units or soils.	None.
d. Be located on expansive soil, as defined in Table 18- 1-B of the most recently adopted Uniform Building Code creating	Less Than Significant.	No. The project would not increase exposure to risks associated	No. The project would not increase exposure to risks associated with	No. The project would not increase exposure to risks associated with expansive soil.	None.

Env	ironmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstance s Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
	substantial risks to life or property?		with expansive soil.	expansive soil.		
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Less Than Significant.	No. The project would not implement septic tanks or alternative wastewater disposal systems.	No. The project would not implement septic tanks or alternative wastewater disposal systems.	No. The project would not implement septic tanks or alternative wastewater disposal systems.	None.
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant.	No. The project would not directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature.	No. The project would not directly or indirectly destroy a unique paleontologic al resource, site, or unique geologic feature.	No. The project would not directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature.	None.

The original IS/MND identified that no active faults underlay the project site with little risk of strong seismic ground shaking, liquefaction or landslides. The Project site is not located within a currently designated Earthquake Fault Zone (formerly Alquist-Priolo Earthquake Fault Zone). The project does not include the use of septic tanks or other alternative wastewater disposal systems. Mitigation is included to reduce potential erosion impacts to a less than significant level. The same conclusions would apply to the proposed additional Project components. Therefore, with mitigation, the Project impact remains less than significant.

#### FINAL IS/MND MITIGATION MEASURES

#### GEO-1

In compliance with the requirements of the State General Construction Activity Stormwater Permit, the City of Woodlake shall obtain coverage under the current Construction General Permit (2009-0009-DWQ) and prepare a Stormwater Pollution Prevention Plan (SWPPP) that incorporates measures or comparable Best Management Practices (BMPs) which describes the site, erosion and sediment controls, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. The erosion control plan shall provide, at a minimum, measures to trap sediment, stabilize excavated soil, and stabilize and revegetate disturbed areas. Straw bales, coir rolls, hydro seeding and other BMPs shall be used in areas of bare soil, and in drainages near all areas of disturbance to reduce surface runoff velocities and to prevent sediment from entering drainages. Additionally, the SWPPP shall ensure that all stormwater discharges are in compliance with all current requirements of the Construction General Permit (2009-009-DWQ).

#### CONCLUSION

### VIII. GREENHOUSE GAS EMISSIONS

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant.	No. The project would not generate a significant amount of greenhouse gas emissions.	No. The project would not generate a significant amount of greenhouse gas emissions.	No. The project would not generate a significant amount of greenhouse gas emissions.	None.
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant.	No. The project would not conflict with an applicable GHG reduction plan.	No. The project would not conflict with an applicable GHG reduction plan.	No. The project would not conflict with an applicable GHG reduction plan.	None.

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact associated with GHG emissions. The additional Project components described in Section 2.2 – Project Description herein will not significantly increase the severity of greenhouse gas emissions or conflict with any applicable plans or policies pertaining to greenhouse gases, as these Project components would not result in the Project exceeding established greenhouse gas emission thresholds. Construction-related GHG emissions would occur for approximately twelve months and would cease following completion of the Project. The proposed Project is not a land-use development project that would generate vehicle trips and is not a roadway capacity increasing project that could carry additional vehicle trips. Therefore, the proposed Project would not result in a net increase in operational GHG emissions. The Air District rules and regulations identified in the IS/MND pertaining the original project description also apply to the additional Project components.

#### FINAL IS/MND MITIGATION MEASURES

Woodlake Sewer	<b>Improvements</b>	Project
Addendum		

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None.

# CONCLUSION

# IX. HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant with Mitigation Incorporation	No. The project would not create new or increased impact involving hazardous materials.	No. The project would not create new or increased impact involving hazardous materials.	No. The project would not create new or increased impact involving hazardous materials.	Yes. HAZ-1.
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?	Less Than Significant with Mitigation Incorporation	No. The project would not create additional significant hazard to the public or environmental through reasonably foreseeable upset and accident conditions.	No. The project would not create additional significant hazard to the public or environmental through reasonably foreseeable upset and accident conditions.	No. The project would not create additional significant hazard to the public or environmental through reasonably foreseeable upset and accident conditions.	Yes. HAZ-1.
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant with Mitigation Incorporation	No. The project would not emit significant hazardous emissions or acutely hazardous materials within one-quarter mile of an existing or proposed school.	No. The project would not emit significant hazardous emissions or acutely hazardous materials within one-quarter mile of an existing or proposed school.	No. The project would not emit significant hazardous emissions or acutely hazardous materials within one-quarter mile of an existing or proposed school.	Yes. HAZ-1.
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it	Less Than Significant	No. The project is not designated as a site which is included on a list of hazardous materials sites compiled	No. The project is not designated as a site which is included on a list of hazardous materials sites compiled	No. The project is not designated as a site which is included on a list of hazardous materials sites compiled	None.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
create a significant hazard to the public or the environment?		pursuant to Government Code Section 65962.5.	pursuant to Government Code Section 65962.5.	pursuant to Government Code Section 65962.5.	
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 for people residing or working in the project area?	Less Than Significant.	No. The project is within Airport Land Use Plan Zone D, which does not have land use restrictions except ones hazardous to flight. Therefore, the proposed project does not have a significant impact.	No. The project is within Airport Land Use Plan Zone D, which does not have land use restrictions except ones hazardous to flight. Therefore, the proposed project does not have a significant impact.	No. The project is within Airport Land Use Plan Zone D, which does not have land use restrictions except ones hazardous to flight. Therefore, the proposed project does not have a significant impact.	None.
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact.	No. The project would not impair emergency evacuation or response.	No. The project would not impair emergency evacuation or response.	No. The project would not impair emergency evacuation or response.	None.
g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant	No. The project site is not located in an areas susceptible to extreme fire hazards or wildland fires.	No. The project site is not located in an areas susceptible to extreme fire hazards or wildland fires.	No. The project site is not located in an areas susceptible to extreme fire hazards or wildland fires.	None.

The original IS/MND determined that there would be less than significant impacts to hazards and hazardous materials with incorporation of Mitigation Measure HAZ-1. The additional Project components described in Section 2.2 – Project Description herein will not increase any impacts associated with hazards and hazardous materials, as the additional components are related to the original Project

and will not substantially increase the severity of hazard/hazardous materials impacts. The applicable rules and regulations identified in the original IS/MND regarding hazardous materials also apply to the additional area.

#### FINAL IS/MND MITIGATION MEASURES

#### HAZ-1

Prior to construction, the contractor shall develop a Spill Prevention and Contingency Plan for the Project. The plan shall include, but would not be limited to, the following:

- Containment and cleanup equipment (e.g. absorbent pads, mats, socks, granules, drip pans, shovels, and lined clean drums) shall be at the staging areas and construction site for use as needed;
- Construction equipment shall be maintained and kept in good operating condition to reduce the likelihood of line breaks or leakage;
- No refueling service shall be done without absorbed material (e.g. absorbent pads, mats, socks, pillows, and granules) or drip pans underneath to contain spilled material. If these activities result in an accumulation of materials on the soil, the soil shall be removed and properly disposed of as hazardous waste;
- If a spill is detected, construction activity shall cease immediately and the procedures described in the Spill Prevention and Contingency Plan shall be immediately enacted to safely contain and remove spilled materials;
- Spill areas shall be restored to pre-spill conditions, as practicable; and
- Spills shall be documented and reported to the City and appropriate resource agency personnel.

#### CONCLUSION

The conclusions from the IS/MND remain less than significant with mitigation incorporated.

# X. HYDROLOGY AND WATER QUALITY

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant with Mitigation Incorporation	No. The project would not violate water quality standards or waste discharge requirements.	No. The project would not violate water quality standards or waste discharge requirements.	No. The project would not violate water quality standards or waste discharge requirements.	Yes. GEO-1
<ul> <li>b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</li> <li>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onor off-site?</li> </ul>	Less than Significant Impact.  Less Than Significant with Mitigation Incorporation	No. The project would not substantially deplete groundwater resources or impair groundwater recharge.  No. The project would not substantially alter the existing site drainage pattern and it would not alter the course of a stream or river or result in erosion or siltation on or off site.	No. The project would not substantially deplete groundwater resources or impair groundwater recharge.  No. The project would not substantially alter the existing site drainage pattern and it would not alter the course of a stream or river or result in erosion or siltation on or off site.	No. The project would not substantially deplete groundwater resources or impair groundwater recharge.  No. The project would not substantially alter the existing site drainage pattern and it would not alter the course of a stream or river or result in erosion or siltation on or off site.	Yes. GEO-1
i. Result in substantial erosion or siltation on or off site;	Less Than Significant with Mitigation Incorporation	No. The project would not substantially alter the existing site drainage pattern on the site or area, and it would not alter the course	No. The project would not substantially alter the existing site drainage pattern on the site or area, and it would not alter the course	No. The project would not substantially alter the existing site drainage pattern on the site or area, and it would not alter the course	Yes. GEO-1

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
		of a stream or river or substantially increase the rate of runoff in a manner that would result in flooding on- or off- site.	of a stream or river or substantially increase the rate of runoff in a manner that would result in flooding on- or off- site.	of a stream or river or substantially increase the rate of runoff in a manner that would result in flooding on- or off- site.	
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	Less Than Significant with Mitigation Incorporation	No. The project would not increase the rate of runoff in a manner that would result in flooding on- or off- site.	No. The project would not increase the rate of runoff in a manner that would result in flooding on- or off- site.	No. The project would not increase the rate of runoff in a manner that would result in flooding on- or off- site.	Yes. HAZ-1
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	Less Than Significant with Mitigation Incorporation	No. The project would not impede or redirect flood flows.	No. The project would not impede or redirect flood flows.	No. The project would not impede or redirect flood flows.	Yes. GEO-1
iv. Impede or redirect flood flows?	Less Than Significant Impact.	No. The Project would not impede or redirect flood flows.	No. The Project would not impede or redirect flood flows.	No. The Project would not impede or redirect flood flows.	None.
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less Than Significant Impact.	No. The project would not risk release of pollutants due to project inundation.	No. The project would not risk release of pollutants due to project inundation.	No. The project would not risk release of pollutants due to project inundation.	None.
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact.	No. The project would not conflict with or obstruct implementation of a water quality control	No. The project would not conflict with or obstruct implementation of a water quality control	No. The project would not conflict with or obstruct implementation of a water quality control	None.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
		plan or sustainable groundwater management plan?	plan or sustainable groundwater management plan?	plan or sustainable groundwater management plan?	

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact on hydrology and water quality with implementation of Mitigation Measures GEO-1 and HAZ-1. The additional Project components described in Section 2.2 – Project Description herein will not increase any impacts associated with hydrology and water quality, as the additional components are related to the original Project and will not substantially increase the severity of hydrology or water quality impacts. The applicable rules, regulations and mitigation measures identified in the original IS/MND regarding hydrology and water quality also apply to the additional area.

#### FINAL IS/MND MITIGATION MEASURES

See GEO-1 and HAZ-1.

#### CONCLUSION

### XI. LAND USE AND PLANNING

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstance s Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Physically divide an established community?	No Impact.	No. The project would not divide an established community.	No. The project would not divide an established community.	No. The project would not divide an established community.	None.
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?	Less Than Significant Impact.	No. The project is consistent with the allowable land use.	No. The project is consistent with the allowable land use.	No. The project is consistent with the allowable land use.	None.

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have no significant impact on land use and planning. The inclusion of the additional Project components will not result in any changes to land use designations or otherwise conflict with any plans or policies, as the additional improvements are related to the activities evaluated in the original IS/MND and the additional improvements will not significantly increase the severity of these impacts.

### FINAL IS/MND MITIGATION MEASURES

None.

#### CONCLUSION

### XII. MINERAL RESOURCES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
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?	No Impact.	No. The project would not result in the loss of known mineral resources.	No. The project would not result in the loss of known mineral resources.	No. The project would not result in the loss of known mineral resources.	None.
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?	No Impact.	No. The project would not result in the loss of known mineral resources.	No. The project would not result in the loss of known mineral resources.	No. The project would not result in the loss of known mineral resources.	None.

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have no impact on mineral resources. There are no known mineral resources of importance to the region and the Project site is not designated under the City's General Plan as an important mineral resource recovery site. The inclusion of the additional Project components will not result in any additional impacts to mineral resources.

#### FINAL IS/MND MITIGATION MEASURES

None.

#### CONCLUSION

# XIII. NOISE

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
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?	Less Than Significant with Mitigation Incorporation.	No. The project would not expose persons to or generate noise levels in excess of standards established by applicable local, regional or national regulations.	No. The project would not expose persons to or generate noise levels in excess of standards established by applicable local, regional or national regulations.	No. The project would not expose persons to or generate noise levels in excess of standards established by applicable local, regional or national regulations.	Yes. NOISE-1.
b. Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant.	No. The project would not expose persons to excessive groundborne vibration.	No. The project would not expose persons to excessive groundborne vibration.	No. The project would not expose persons to excessive groundborne vibration.	None.
c. For a project located within a private airstrip or 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?	Less Than Significant.	No. The project is not within the established airport noise contour.	No. The project is not within the established airport noise contour.	No. The project is not within the established airport noise contour.	None.

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact associated with noise. The additional Project components described in Section 2.2 – Project Description herein will not substantially increase any noise impacts. Once operational, the Project will not result in an on-going increase in ambient noise, as the sewer collection

system does not itself produce noise. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity; however, they would be temporary and would only occur between the hours of 7:00 am and 7:00 pm on weekdays, and 9:00 am and 5 pm on weekends. The inclusion of the additional Project components will not result in any significant additional impacts to noise.

#### FINAL IS/MND MITIGATION MEASURES

#### **NOISE-1**

The City of Woodlake shall incorporate the following BMPs to minimize noise impacts during construction activities:

- Construction shall be limited to daytime hours between 7:00 a.m. and 7:00 p.m Monday through Friday and 9:00 a.m. and 5:00 p.m. on Saturdays.
- All construction equipment shall be equipped with sound-control devices no less effective than those provided on the original equipment. Equipment shall have a muffled exhaust.
- Appropriate additional noise-reducing measures will be implemented, including but not limited to:
- Changing the location of stationary construction equipment when practical; and
- Shutting off idling equipment.

If construction activities are required outside of the daytime working hours described above, the City of Woodlake shall notify residents 48 hours in advance. If after-hour construction is required due to an emergency, the City of Woodlake will notify nearby residents immediately.

#### CONCLUSION

### XIV. POPULATION AND HOUSING

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Induce substantial 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)?	Less Than Significant Impact.	No. The project would not induce substantial growth in the project area.	No. The project would not induce substantial growth in the project area.	No. The project would not induce substantial growth in the project area.	None.
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	No Impact.	<b>No.</b> The project will not displace existing housing.	<b>No.</b> The project will not displace existing housing.	<b>No.</b> The project will not displace existing housing.	None.

#### **RESPONSES**

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact associated with population and housing. There are no new homes or businesses associated with the proposed Project, nor would Project implementation displace people or housing. The proposed Project is needed to improve existing sewer collection facilities. The additional Project components described in Section 2.2 – Project Description herein does increase any impacts to population and housing.

FINAL IS/MND MITIGATION MEASURES

None.

#### CONCLUSION

# XV. PUBLIC SERVICES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:					
Fire protection?	Less Than Significant with Mitigation Incorporation.	No. The project would not result in a need for new or expanded fire protection facilities.	No. The project would not result in a need for new or expanded fire protection facilities.	No. The project would not result in a need for new or expanded fire protection facilities.	Yes. TRANS- 1.
Police protection?	Less Than Significant with Mitigation Incorporation.	No. The project would not result in a need for new or expanded police protection facilities.	No. The project would not result in a need for new or expanded police protection facilities.	No. The project would not result in a need for new or expanded police protection facilities.	Yes. TRANS- 1.
Schools?	Less Than Significant with	No. The project would not result in a need for new or	No. The project would not result in a need for new or	No. The project would not result in a need for new or	Yes. TRANS- 1.

	Mitigation	expanded	expanded school	expanded	
	Incorporation.	school facilities.	facilities.	school facilities.	
	Less Than	No. The project	<b>No.</b> The project	<b>No.</b> The project	Yes.
	Significant	would not result	would not result	would not	TRANS-
Parks?	with	in a need for	in a need for	result in a need	1.
Tarks:	Mitigation	new or	new or	for new or	
	Incorporation.	expanded park	expanded park	expanded park	
	_	facilities.	facilities.	facilities.	
	Less Than	No. The project	<b>No.</b> The project	<b>No.</b> The project	Yes.
	Significant	would not result	would not result	would not	TRANS-
Other public	with	in a need for	in a need for	result in a need	1.
facilities?	Mitigation	new or	new or	for new or	
	Incorporation.	expanded other	expanded other	expanded other	
		facilities.	facilities.	facilities.	

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact on public services. The proposed Project would not directly or indirectly induce population growth and thus would not increase the need for public services; however, the Project has the potential to impact and disrupt service, mainly along roadways during construction. Mitigation Measure TRANS-1 would be implemented to allow adequate ingress and egress along roadways and would have adequate access for police and fire protection as well as for access to the local parks in the area. The additional Project components described in Section 2.2 – Project Description herein does not increase any impacts to public services and incorporation of TRANS-1 would ensure access to existing public facilities.

#### FINAL IS/MND MITIGATION MEASURES

#### **TRANS-1**

The contractor will develop and submit to the City a traffic management plan. Elements of the plan will likely include, but are not necessarily limited to, the following:

Develop circulation and detour plans to minimize impacts to local street circulation. Truck hauling
routes would be designated to minimize impact on local roadways to the extent possible. Truck
activity would be scheduled to avoid peak traffic hours to the greatest extent possible.

- Signage/flaggers would alert drivers to construction activities and lane closures within the project area and direct traffic as necessary to maintain safe driving conditions.
- Limit lane closures to the greatest extent possible. Lanes would be made accessible by covering trenches with steel plates outside of allowed working hours or when work is not in progress. Construction and Maintenance Work Zones where needed to maintain safe driving conditions.
- Notify emergency service providers of expected lane closures so that alternative routes can be established.
- To the maximum extent feasible, maintain access to private driveways located within construction zones.
- Coordinate with the City and TCAT so that bus routes or bus stops in work zones can be temporarily relocated as deemed necessary.

#### CONCLUSION

# XVI. RECREATION

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
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?	No Impact.	No. The project would not result in the deterioration of an existing park.	No. The project would not result in the deterioration of an existing park.	No. The project would not result in the deterioration of an existing park.	None.
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?	No Impact.	No. The project would not result in a need for new or expanded park facilities.	No. The project would not result in a need for new or expanded park facilities.	No. The project would not result in a need for new or expanded park facilities.	None.

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have no impact on recreation. The proposed Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The additional Project components described in Section 2.2 – Project Description herein does not increase any impacts to recreation.

### FINAL IS/MND MITIGATION MEASURES

None.

# CONCLUSION

# XVII. TRANSPORTATION/TRAFFIC

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less Than Significant with Mitigation Incorporation.	No. The project would not conflict with an applicable plan, ordinance or policy regarding the circulation system.	No. The project would not conflict with an applicable plan, ordinance or policy regarding the circulation system.	No. The project would not conflict with an applicable plan, ordinance or policy regarding the circulation system.	Yes. TRANS-1
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Not evaluated.	No. The project would not conflict with CEQA Guidelines section 15064.3, subdivision (b).	No. The project would not conflict with CEQA Guidelines section 15064.3, subdivision (b).	No. The project would not conflict with CEQA Guidelines section 15064.3, subdivision (b).	None
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant with Mitigation Incorporation.	No. The project would not increase hazards due to a design feature.	No. The project would not increase hazards due to a design feature.	No. The project would not increase hazards due to a design feature.	Yes. TRANS-1
d. Result in inadequate emergency access?	Less Than Significant with Mitigation Incorporation.	No. The project would not result in inadequate emergency access.	No. The project would not result in inadequate emergency access.	No. The project would not result in inadequate emergency access.	Yes. TRANS-1

#### DISCUSSION

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have a less than significant impact on transportation with the incorporation of TRANS-1. The proposed Project would not cause a substantial increase in traffic, reduce the existing level of service or create any

additional congestion at any intersections. The previously adopted MND did not evaluate the Projects consistency with CEQA Guidelines Section 15064.3; however, the construction of pipeline will not generate any additional traffic (beyond construction-related traffic trips) and as such, level of service or VMT standards would not be exceeded. There are no components of the proposed Project that would increase hazards due to a geometric design feature. As traffic due to construction activities would be temporary in nature, the proposed Project would not cause a substantial increase in traffic or result in inadequate emergency access. Construction schedules pertaining to pipelines within roadways will be coordinated with sheriff/fire/emergency services. Adequate emergency access will be maintained at all times with the incorporation of TRANS-1.

Once installed, the new pipelines and manholes would not generate significant additional traffic trips per day, other than as needed for periodic maintenance. The Project would not conflict with a program plan, ordinance, or policy addressing the circulation system. The additional Project components described in Section 2.2 – Project Description herein do not increase any impacts to transportation.

#### FINAL IS/MND MITIGATION MEASURES

#### **TRANS-1**

The contractor will develop and submit to the City a traffic management plan. Elements of the plan will likely include, but are not necessarily limited to, the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Truck hauling
  routes would be designated to minimize impact on local roadways to the extent possible. Truck
  activity would be scheduled to avoid peak traffic hours to the greatest extent possible.
  Signage/flaggers would alert drivers to construction activities and lane closures within the project
  area and direct traffic as necessary to maintain safe driving conditions.
- Limit lane closures to the greatest extent possible. Lanes would be made accessible by covering trenches with steel plates outside of allowed working hours or when work is not in progress.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions.
- Notify emergency service providers of expected lane closures so that alternative routes can be established.
- To the maximum extent feasible, maintain access to private driveways located within construction zones.

• Coordinate with the City and TCAT so that bus routes or bus stops in work zones can be temporarily relocated as deemed necessary.

### CONCLUSION

# XVIII. TRIBAL CULTURAL RESOURCES

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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:	Not evaluated.	No. There are no identified Tribal Cultural Resources in the area.	No. There are no identified Tribal Cultural Resources in the area.	No. There are no identified Tribal Cultural Resources in the area.	None.
h. 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), or	Not evaluated.	No. There are no structures or historical resources on the project site.	No. There are no structures or historical resources on the project site.	No. There are no structures or historical resources on the project site.	None.
ii. 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. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1,	Not evaluated.	No. There are no identified Tribal Cultural Resources in the area.	No. There are no identified Tribal Cultural Resources in the area.	No. There are no identified Tribal Cultural Resources in the area.	None.

the lead agency shall consider the			
significance of the resource to a California			
Native American tribe.			

This resource was not specifically discussed in the original IS/MND as it was added to CEQA requirements after its adoption. Therefore it is being included in the environmental evaluation within this Addendum.

A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Woodlake, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site. As discussed under criterion (b) implementation of Mitigation Measure CUL-1 would reduce impacts to unknown archaeological deposits, including TCRs, to a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans.

On November 1, 2017, a Sacred Lands File & Native American Contracts List Request was sent to the Native American Heritage Commission (NAHC), requesting a review of their sacred lands files for any Native American cultural resources that might be affected by the Project, as part of the original evaluation. The NAHC responded on November 14, 2017 stating that a search of the Sacred Lands File was completed with negative results.

The NAHC also provided a list of local Native American individuals (representing five Tribes) for further consultation who may have knowledge of cultural resources within the APE. Certified letters were mailed to these individuals on January 17, 2018 providing them with information on the Project and maps depicting the Project vicinity, location, and APE. The letters asked for any information or concerns regarding the project. When no responses were received by February 9, 2018, follow-up emails were sent and follow-up phone calls were made. On a phone call with Chairman Woodrow on March 2, 2018,

Chairman Woodrow stated that he is aware of cultural sites in the area but outside the APE and has a great deal of concerns regarding potential impacts to resources from any ground disturbing activities, including areas considered 'previously disturbed' since these areas were disturbed prior to any opportunities for Tribes to engage in efforts to protect their cultural areas. For this reason, Chairman Woodrow advised of Mitigation Measure TRI-1. The additional Project component will be regulated under TRI-1 and as such, the additional Project components will not increase the severity of tribal cultural resource impacts. Impacts are less than significant with mitigation incorporation.

### FINAL IS/MND MITIGATION MEASURES

TRI-1

All ground disturbing activities shall be monitored by an archaeologist and Native American monitor.

#### CONCLUSION

Less than significant impacts will occur with Project implementation.

# XIX. UTILITIES AND SERVICE SYSTEMS

Environn	nental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would th	ie project:					
a. Require relocati constru expand wastew storm velectric gas, or telecomfacilitie constru relocati could could construite could construite could construite relocati	e or result in the con or action of new or led water, water treatment or water drainage, power, natural	Less Than Significant.	No. The project would not require the relocation or construction of new or expanded utilities.	No. The project would not require the relocation or construction of new or expanded utilities.	No. The project would not require the relocation or construction of new or expanded utilities.	None.
supplie serve th reasona develop normal	ufficient water es available to ne project and ably forsee future oment during , dry and le dry years?	Less Than Significant.	No. Impacts resulting from the sewer and water system extensions have been adequately analyzed.	No. Impacts resulting from the sewer and water system extensions have been adequately analyzed.	No. Impacts resulting from the sewer and water system extensions have been adequately analyzed.	None.
wastew provide may ser that it h capacity project' demand the pro- commit	ination by the vater treatment er which serves or rve the project has adequate y to serve the s projected d in addition to vider's existing tments?	Less Than Significant.	No. The project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.	No. The project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.	No. The project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities.	None.
excess of standar the cap	te solid waste in of State or local eds, or in excess of acity of local eucture, or	Less Than Significant Impact.	No. The project would not generate	No. The project would not generate excess solid waste.	<b>No.</b> The project would not generate excess solid waste.	None.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
otherwise impair the attainment of solid waste reduction goals?		excess solid waste.			
e. Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	Less Than Significant Impact.	No. The project would comply with applicable statues and regulations related to solid waste.	No. The project would comply with applicable statues and regulations related to solid waste.	No. The project would comply with applicable statues and regulations related to solid waste.	None.

The previously adopted Mitigated Negative Declaration determined that the proposed Project would have less than significant impacts to utilities and service systems. The proposed Project includes improvements to the District's existing sewer collection system, the results of which would not exceed any wastewater treatment requirements set by the Regional Water Quality Control Board. The Project does not include any expansion of wastewater treatment facilities or processes. The Project is intended to rehabilitate/replace a deteriorating sewer collection system. The additional Project components described in Section 2.2 – Project Description herein does not increase any impacts to utilities and service systems, as it is directly related to the original Project.

#### FINAL IS/MND MITIGATION MEASURES

None.

#### CONCLUSION

Less than significant impacts will result of Project implementation.

# XX. WILDFIRE

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	Not evaluated.	No. The City has reviewed the site plan and has determined that there will be no impairment of emergency plans.	No. The City has reviewed the site plan and has determined that there will be no impairment of emergency plans.	No. The City has reviewed the site plan and has determined that there will be no impairment of emergency plans.	None.
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?	Not evaluated.	No. The project would not exacerbate wildfire risks.	No. The project would not exacerbate wildfire risks.	No. The project would not exacerbate wildfire risks.	None.
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?	Not evaluated.	No. The project does not require installation of infrastructure that exacerbates wildfire risks.	No. The project does not require installation of infrastructure that exacerbates wildfire risks.	No. The project does not require installation of infrastructure that exacerbates wildfire risks.	None.
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire	Not evaluated.	No. There are no substantial slopes or flooding risk in the area and therefore	No. There are no substantial slopes or flooding risk in the area and therefore there is no increased	No. There are no substantial slopes or flooding risk in the area and therefore there is no increased	None.

slope instability, or	there	is no risk due to	o risk due to	
drainage changes?	increa	sed post-fire	post-fire	
	risk d	ue to impacts.	impacts.	
	post-f	ire		
	impac	ets.		

This topic was not included in the Original IS/MND. Therefore, it is being included in the environmental evaluation within this Addendum. The heavily disturbed nature of the site and the vicinity precludes the possibility of impact from or impacts to wildfires. Additionally, the site is not located within or near a state responsibility area and it is not within a fire hazard severity zone. There is no impact.

FINAL IS/MND MITIGATION MEASURES

None.

CONCLUSION

No impact.

# XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
Would the project:					
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation Incorporation.	No. The project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples f the major periods of California history or prehistory.	No. The project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples f the major periods of California history or prehistory.  No. The project	No. The project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples f the major periods of California history or prehistory.  No. The project	None.
impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection	Significant.	would not have cumulatively considerable impacts.	would not have cumulatively considerable impacts.	would not have cumulatively considerable impacts.	none.

Environmental Issue Area	Adopted IS/MND Conclusion	Do Proposed Changes Involve New Impacts?	New Circumstances Involving New Impacts?	New Information Requiring Analysis or Verification?	Adopted IS/MND Mitigation Measures
with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?					
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant with Mitigation Incorporation.	<b>No.</b> The project would not have cumulatively considerable impact.	No. The project would not have cumulatively considerable impact.	No. The project would not have cumulatively considerable impact.	None.

The previously adopted Mitigated Negative Declaration determined that the proposed Project would not cause a significant change to the quality of the environment with the incorporation of mitigation measures. There are no changes to the Project description that would cause an increase in impacts beyond what was previously analyzed. Therefore, the Project impact remains less than significant.

#### FINAL IS/MND MITIGATION MEASURES

AIR-1, BIO-1, BIO-2, BIO-3, CUL-1, CUL-2, GEO-1, HAZ-1, NOISE-1, TRANS-1, TRI-1.

### CONCLUSION

# **ATTACHMENT A**

Biological Resources Evaluation

# **ATTACHMENT B**

Addendum Cultural Report

# **ATTACHMENT C**

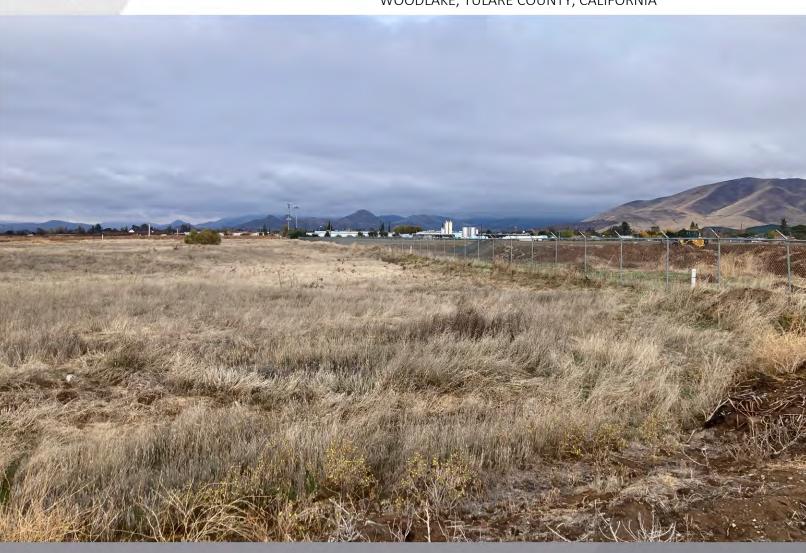
Mitigated Negative Declaration – Woodlake Sewer Improvement Project (2018)



# BIOLOGICAL RESOURCE EVALUATION

**DECEMBER 2022** 

WOODLAKE SEWER IMPROVEMENTS PROJECT WOODLAKE, TULARE COUNTY, CALIFORNIA



PREPARED FOR: Crawford & Bowen Planning, Inc. 113 N. Church Street, Suite 302 Visalia, CA 93291



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# **Executive Summary**

The City of Woodlake proposes a sewer improvements project in Woodlake, Tulare County, California. The proposed project (Project) will involve constructing new sewer line and improving existing sewer line at various locations throughout the city.

This Project will be funded by the Clean Water State Revolving Fund (CWSRF). The CWSRF is a state and federal partnership that offers low cost financing for a wide variety of water quality projects. It is administered by the State of California and is partially funded by the United States Environmental Protection Agency (EPA). Therefore, the Project must not only meet environmental documentation and review requirements under the California Environmental Quality Act (CEQA) but must meet federal cross-cutting requirements as well.

To evaluate whether the Project may affect biological resources under CEQA and federal cross-cutting purview, we (1) obtained official lists from the United States Fish and Wildlife Service and the California Department of Fish and Wildlife of special-status species and designated and proposed critical habitat, (2) reviewed other relevant background information such as satellite imagery and topographic maps, and (3) conducted a field reconnaissance survey of the Project site.

This biological resource evaluation summarizes existing biological conditions on the Project site, the potential for special-status species and regulated habitats to occur on or near the Project site, the potential impacts of the proposed Project on biological resources and regulated habitats, and measures to reduce those potential impacts to a less-than-significant level under CEQA.

We concluded the Project could affect four special-status species: the federally listed as endangered and state listed as threatened San Joaquin kit fox (*Vulpes macrotis mutica*), state species of special concern northwestern pond turtle (*Actinemys marmorata*) and burrowing owl (*Athene cunicularia*), and Sanford's arrowhead (*Sagittaria sanfordii*), a rare plant with a California Rare Plant Rank of 1B.2. The Project could also affect nesting migratory birds. We also concluded the Project could impact three regulated habitats, Little Bravo Lake, Wutchumna Ditch, and an unnamed ditch, which may be regulated by United States Army Corps of Engineers, the California Department of Fish and Wildlife, and the State Water Resources Control Board. However, effects can be reduced to less-than-significant levels with mitigation.

# Abbreviations

rnia Code of Regulations rnia Department of Fish and Game rnia Department of Fish and Wildlife
•
nia Department of Fish and Wildlife
The Department of Fish and Whalife
nia Endangered Species Act
nia Environmental Quality Act
nia Fish and Game Code
of Federal Regulations
nia Natural Diversity Data Base
nia Native Plant Society
nia Rare Plant Rank
Water State Revolving Fund
ial Fish Habitat
ally listed as Endangered
al Emergency Management Agency
al Endangered Species Act
Fully Protected
ally listed as Threatened
tory Bird Treaty Act
nal Environmental Policy Act
nal Marine Fisheries Service
nal Oceanic and Atmospheric Administration
al Resources Conservation Service
isted as Endangered
Species of Special Concern
isted as Threatened
Water Resources Control Board
States Army Corps of Engineers
l States Code
States Fish and Wildlife Service
States Geological Survey

### 1.0 Introduction

#### 1.1 Background

The City of Woodlake proposes to construct new sewer line and improve existing sewer line at various locations throughout the city. This Project will be funded by the Clean Water State Revolving Fund (CWSRF). The CWSRF is a state and federal partnership that offers low cost financing for a wide variety of water quality projects. It is administered by the State of California and partially funded by the United States Environmental Protection Agency (EPA). Due to this federal nexus, issuing funds from the CWSRF constitutes a federal action, one that requires that the EPA determine whether the proposed action may affect federally protected resources. The Project must therefore comply with requirements of both the California Environmental Quality Act (CEQA) and certain federal environmental laws and regulations.

The purpose of this biological resource evaluation is to assess whether the Project will affect state- or federally protected resources pursuant to CEQA and federal cross-cutting regulatory guidelines. Such resources include species of plants or animals listed or proposed for listing under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA), as well as those covered under the Migratory Bird Treaty Act (MBTA), the California Native Plant Protection Act, and various other sections of the California Fish and Game Code. Biological resources considered here also include designated or proposed critical habitat recognized under the FESA. This biological resource evaluation also addresses Project-related impacts to regulated habitats, which are those under the jurisdiction of the United States Army Corps of Engineers (USACE), State Water Resources Control Board (SWRCB), or California Department of Fish and Wildlife (CDFW), as well as those addressed under the Wild and Scenic Rivers Act, Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and Executive Order 11988 pertaining to floodplain management.

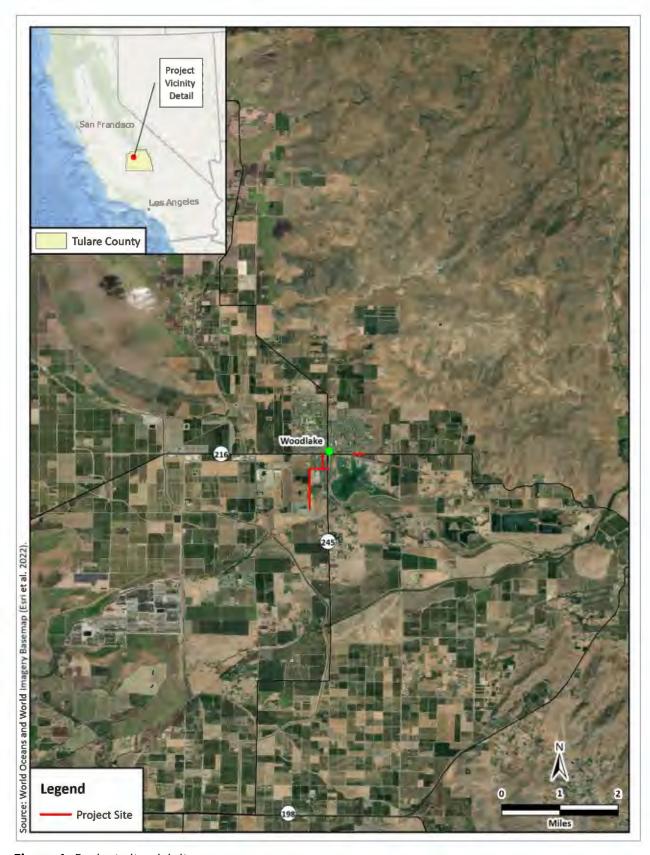
#### 1.2 Project Description

The Project will involve constructing new sewer trunk alignment, constructing a new sewer trunk bypass, and upsizing existing sewer line. The total length of sewer improvements will be approximately 1.3 miles.

#### 1.3 Project Location

The Project will include work at various locations throughout Woodlake, Tulare County, California (Figures 1 and 2). A new sewer trunk alignment will be constructed along South Palm Street from Naranjo Boulevard south to Avenue 342, along Avenue 342 between South Valencia Boulevard and Mulberry Street, and along Mulberry Street and overland from Avenue 342 south to the existing wastewater treatment plant. A new trunk bypass will be installed at the intersection of

Avenue 342 and South Valencia Boulevard. Existing sewer line will be upsized along East Naranjo Boulevard between North Manzanillo Street and North Castle Rock Street.					



**Figure 1.** Project site vicinity map.

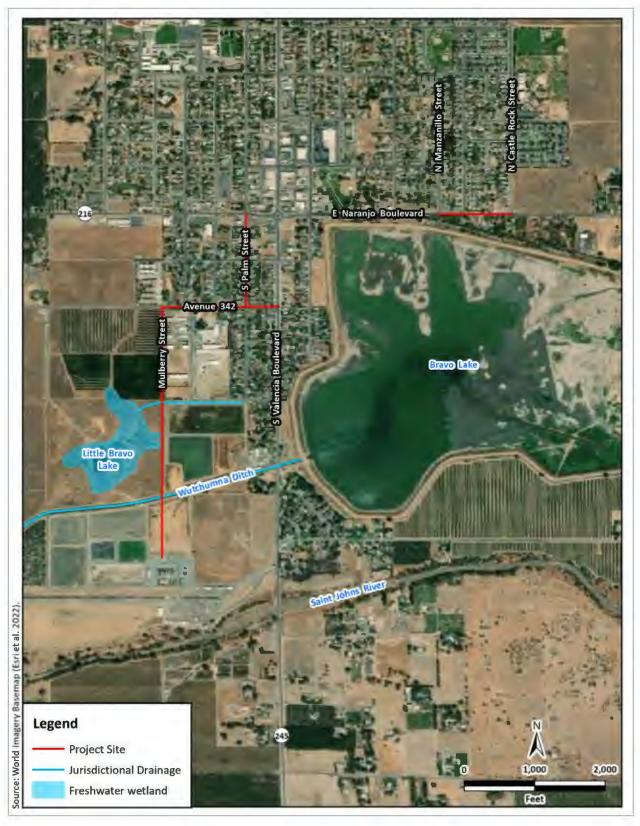


Figure 2. Project site map.

#### 1.4 Purpose and Need of Proposed Project

The purpose of the Project is to upgrade the City of Woodlake sewer system. The Project is needed to protect water quality and public health.

#### 1.5 Consultation History

Lists of all species listed or proposed for listing as threatened or endangered and all designated or proposed critical habitat under the FESA that could occur near the Project site were obtained by Colibri Senior Scientist Ryan Slezak from the United States Fish and Wildlife Service (USFWS) website (https://ecos.fws.gov/ipac/) on 1 December 2022 (Appendix A).

#### 1.6 Regulatory Framework

The relevant regulatory requirements and policies that guide the impact analysis of the Project are summarized below.

#### 1.6.1 Federal Requirements

**Bald and Golden Eagle Protection Act.** The Bald and Golden Eagle Protection Act (16 USC § 668-668d), originally the Bald Eagle Protection Act, was enacted in 1940 to protect bald eagle (*Haliaeetus leucocephalus*), the species selected as a national emblem of the United States. The act was amended in 1962 to include the golden eagle (*Aquila chrysaetos*). As amended, the Act prohibits take, possession, and commerce of bald and golden eagles and their parts, products, nests, or eggs, except by valid permit. Take is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb." Disturb means agitating or bothering to a degree that causes, or is likely to cause, injury, a decrease in productivity, or nest abandonment. This law also prohibits human-induced alterations near previously used nest sites when eagles are not present if upon the eagle's return it is disturbed as defined above. Take permits may be issued for conducting certain types of lawful activities such as scientific research, propagation, and Indian religious purposes. The USFWS is responsible for enforcing this act.

**Executive Order 11988: Floodplain Management.** Executive Order 11988 (42 Federal Register 26951, 3 CFR, 1977 Comp., p. 117) requires federal agencies to avoid to the extent possible the long-term and short-term adverse effects associated with occupying and modifying flood plains and to avoid direct and indirect support of developing floodplains wherever there is a practicable alternative.

**Federal Endangered Species Act**. The United States Fish and Wildlife Service (USFWS) and the National Oceanographic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) enforce the provisions stipulated in the Federal Endangered Species Act of 1973 (FESA, 16 United States Code [USC] § 1531 et seq.). Threatened and endangered species on the

federal list (50 Code of Federal Regulations [CFR] 17.11 and 17.12) are protected from take unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Pursuant to the requirements of the FESA, an agency reviewing a proposed action within its jurisdiction must determine whether any federally listed species may be present in the project site and determine whether the proposed action may affect such species. Under the FESA, habitat loss is considered an effect to a species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species that is listed or proposed for listing under the FESA (16 USC § 1536[3], [4]). Therefore, proposed action-related effects to these species or their habitats would be considered significant and would require mitigation.

Magnuson-Stevens Fishery Conservation and Management Act. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (Public law 94-265; Statutes at Large 90 Stat. 331; 16 U.S.C. ch. 38 § 1801 et seq.) establishes a management system for national marine and estuarine fishery resources. This legislation requires that all federal agencies consult the NMFS regarding all actions or proposed actions permitted, funded, or undertaken that may adversely affect "essential fish habitat (EFH)." EFH is defined as "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The Magnuson-Stevens Act states that migratory routes to and from anadromous fish spawning grounds are considered EFH. The phrase "adversely affect" refers to any effect that reduces the quality or quantity of EFH. Federal activities that occur outside of EFH, but which may affect EFH must also be considered. The Act applies to salmon species, groundfish species, highly migratory species such as tuna, and coastal pelagic species such as anchovies.

Migratory Bird Treaty Act. The federal Migratory Bird Treaty Act (MBTA) (16 USC § 703, Supp. I, 1989) prohibits killing, possessing, trading, or other forms of take of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. "Take" is defined as the pursuing, hunting, shooting, capturing, collecting, or killing of birds, their nests, eggs, or young (16 USC § 703 and § 715n). This act encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA specifically protects migratory bird nests from possession, sale, purchase, barter transport, import, and export, and take. For nests, the definition of take per 50 CFR 10.12 is to collect. The MBTA does not include a definition of an "active nest." However, the "Migratory Bird Permit Memorandum" issued by the USFWS in 2003 and updated in 2018 clarifies the MBTA in that regard and states that the removal of nests, without eggs or birds, is legal under the MBTA, provided no possession (which is interpreted as holding the nest with the intent of retaining it) occurs during the destruction (USFWS 2018).

**National Environmental Policy Act**. The purposes of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. §§ 4321–4347), including all relevant subsequent guidelines and regulations, include encouraging "harmony between [humans] and their environment and promoting efforts which will prevent or eliminate damage to the environment... and stimulate the health and welfare of [humanity]". The purposes of NEPA are accomplished

by evaluating the effects of federal actions. The results of these evaluations are presented to the public, federal agencies, and public officials in document format (e.g., Environmental Assessments and Environmental Impact Statements) for consideration prior to taking official action or making official decisions. Environmental documents prepared pursuant to NEPA must be completed before federal actions can be implemented. The NEPA process requires careful evaluation of the need for action, and that federal actions be considered alongside all reasonable alternatives, including the No Action alternative. NEPA also requires that the potential impacts on the human environment be considered for each alternative. Detailed implementing regulations for NEPA are contained in 40 C.F.R. 1500 et seq.

United States Army Corps of Engineers Jurisdiction. Areas meeting the regulatory definition of "waters of the United States" (jurisdictional waters) are subject to the jurisdiction of the USACE under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as waters of the United States, tributaries of waters otherwise defined as waters of the United States, the territorial seas, and wetlands adjacent to waters of the United States (33 CFR part 328.3). Wetlands on non-agricultural lands are identified using the Corps of Engineers Wetlands Delineation Manual and related Regional Supplement (USACE 1987 and 2008). Construction activities, including direct removal, filling, hydrologic disruption, or other means in jurisdictional waters are regulated by the USACE. The placement of dredged or fill material into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of state water quality certification pursuant to Section 401 of the Clean Water Act. The SWRCB is the state agency (together with the Regional Water Quality Control Boards) charged with implementing water quality certification in California.

*Wild and Scenic Rivers Act.* The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with significant natural, cultural, and recreational values in a free-flowing condition. The Act safeguards the special character of these rivers, while also recognizing the potential for their appropriate use and development.

#### 1.6.2 State Requirements

California Department of Fish and Wildlife Jurisdiction. The CDFW has regulatory jurisdiction over lakes and streams in California. Activities that divert or obstruct the natural flow of a stream; substantially change its bed, channel, or bank; or use any materials (including vegetation) from the streambed, may require that the project applicant enter into a Streambed Alteration Agreement with the CDFW in accordance with California Fish and Game Code Section 1602.

California Endangered Species Act. The California Endangered Species Act (CESA) of 1970 (Fish and Game Code § 2050 et seq., and California Code of Regulations [CCR] Title 14, Subsection 670.2, 670.51) prohibits the take of species listed under CESA (14 CCR Subsection 670.2, 670.5). Take is defined as hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill. Under CESA, state agencies are required to consult with the CDFW when preparing CEQA documents. Consultation ensures that proposed projects or actions do not have a negative effect on state-listed species. During consultation, CDFW determines whether take would occur and identifies "reasonable and prudent alternatives" for the project and conservation of specialstatus species. CDFW can authorize take of state-listed species under Sections 2080.1 and 2081(b) of the California Fish and Game Code in those cases where it is demonstrated that the impacts are minimized and mitigated. Take authorized under section 2081(b) must be minimized and fully mitigated. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Under CESA, CDFW is responsible for maintaining a list of threatened and endangered species designated under state law (Fish and Game Code § 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to the requirements of CESA, a state or local agency reviewing a proposed project within its jurisdiction must determine whether the proposed Project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation. Impacts to species of concern or fully protected species would be considered significant under certain circumstances.

California Environmental Quality Act. The California Environmental Quality Act (CEQA) of 1970 (Subsections 21000–21178) requires that CDFW be consulted during the CEQA review process regarding impacts of proposed projects on special-status species. Special-status species are defined under CEQA Guidelines subsection 15380(b) and (d) as those listed under FESA and CESA and species that are not currently protected by statute or regulation but would be considered rare, threatened, or endangered under these criteria or by the scientific community. Therefore, species considered rare or endangered are addressed in this biological resource evaluation regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity (CNPS 2022). Plants with Rare Plant Ranks 1A, 1B, 2A, or 2B are considered special-status species under CEQA.

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare and endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

California Native Plant Protection Act. The California Native Plant Protection Act of 1977 (California Fish and Game Code §§ 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require the project proponent to notify CDFW at least 10 days in advance of any change in land use, which allows CDFW to salvage listed plants that would otherwise be destroyed.

**Nesting birds.** California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. California Fish and Game Code Section 3511 lists birds that are "Fully Protected" as those that may not be taken or possessed except under specific permit.

**Porter-Cologne Water Quality Control Act.** The Porter-Cologne Water Quality Control Act (CWC § 13000 et. sec.) was established in 1969 and entrusts the State Water Resources Control Board and nine Regional Water Quality Control Boards (collectively Water Boards) with the responsibility to preserve and enhance all beneficial uses of California's diverse waters. The Act grants the Water Boards authority to establish water quality objectives and regulate point- and nonpoint-source pollution discharge to the state's surface and ground waters. Under the auspices of the United States Environmental Protection Agency, the Water Boards are responsible for certifying, under Section 401 of the federal Clean Water Act, that activities affecting waters of the United States comply California water quality standards. The Porter-Cologne Water Quality Control Act addresses all "waters of the State," which are more broadly defined than waters of the Unites States. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. They include artificial as well as natural water bodies and federally jurisdictional and federally non-jurisdictional waters. The Water Boards may issue a Waste Discharge Requirement permit for projects that will affect only federally non-jurisdictional waters of the State.

## 2.0 Methods

#### 2.1 Desktop Review

We obtained a USFWS species list for the Project site as a framework for the evaluation and reconnaissance survey (USFWS 2022a, Appendix A). In addition, we searched the California Natural Diversity Data Base (CDFW 2022, Appendix B) and the CNPS Inventory of Rare and Endangered Plants (CNPS 2022, Appendix C) for records of special-status plant and animal species from the vicinity of the Project site. Regional lists of special-status species were compiled using USFWS, CNDDB, and CNPS database searches confined to the Woodlake 7.5-minute United States Geological Survey (USGS) topographic quadrangle, which encompasses the Project site, and the eight surrounding quadrangles (Auckland, Shadequarter Mountain, Kaweah, Chickencoop Canyon, Rocky Hill, Exeter, Ivanhoe, and Stokes Mountain). A local list of special-status species was compiled using CNDDB records from within 5 miles of the Project site. Species that lack a CEQA-recognized special-status designation by federal or state regulatory agencies or public interest groups were omitted from the final list. Species for which the Project site does not provide habitat were eliminated from further consideration. We also reviewed satellite imagery from Google Earth (Google 2022) and other sources, USGS topographic maps, the Web Soil Survey (NRCS 2022), the National Wetlands Inventory (USFWS 2022b), the National Wild and Scenic Rivers System (USFWS 2022c), Federal Emergency Management Agency (FEMA 2022) flood maps, and relevant literature.

#### 2.2 Reconnaissance Survey

Colibri Senior Scientist Ryan Slezak and Field Scientist Carly Haywood conducted a field reconnaissance survey of the Project site on 2 December 2022. The Project site and a 50-foot buffer surrounding the Project site were walked and thoroughly inspected to evaluate and document the potential for the area to support state- or federally protected resources (Figure 3). All plants except those planted for cultivation or landscaping and all animals (vertebrate wildlife species) observed in the survey area were identified and documented. The survey area, including the Project site and surrounding 50-foot buffer, was evaluated for the presence of regulated habitats, including lakes, streams, and other waters using methods described in the *Wetlands Delineation Manual* and regional supplement (USACE 1987, 2008) and as defined by the CDFW (https://www.wildlife.ca.gov/conservation/lsa) and under the Porter-Cologne Water Quality Control Act.



**Figure 3.** Reconnaissance survey area map.

#### 2.3 Effects Analysis and Significance Criteria

#### 2.3.1 Effects Analysis

Factors considered in evaluating the effects of the Project on special-status species included the (1) presence of designated or proposed critical habitat in the survey area, (2) potential for the survey area to support special-status species, (3) dependence of any such species on specific habitat components that would be removed or modified, (4) the degree of effects to the habitat, (5) abundance and distribution of the habitat in the region, (6) distribution and population levels of the species, (7) cumulative effects of the Project and any future activities in the area, and (8) the potential to mitigate any adverse effects.

Factors considered in evaluating the effects of the Project on bald eagle, golden eagle, and migratory birds included the potential for the Project to result in (1) mortality of eagles or migratory birds or (2) loss of their nests containing viable eggs or nestlings.

Factors considered in evaluating the effects of the Project on regulated habitats included the (1) presence of features comprising or potentially comprising waters of the United States, Wild and Scenic Rivers, essential fish habitat (EFH), floodplains, and lakes or streams within the survey area, and (2) potential for the Project to affect such habitats.

#### 2.3.2 Significance Criteria

CEQA defines "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in the environment" (Pub. Res. Code § 21068). Under CEQA Guidelines Section 15065, a Project's effects on biological resources are deemed significant where the Project would do the following:

- a) Substantially reduce the habitat of a fish or wildlife species,
- b) Cause a fish or wildlife population to drop below self-sustaining levels,
- c) Threaten to eliminate a plant or animal community, or
- d) Substantially reduce the number or restrict the range of a rare or endangered plant or animal.

In addition to the Section 15065 criteria, Appendix G within the CEQA Guidelines includes six additional impacts to consider when analyzing the effects of a project. Under Appendix G, a project's effects on biological resources are deemed significant where the project would do any of the following:

 e) 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;

- f) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- g) 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;
- h) 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;
- i) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- j) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These criteria were used to determine whether the potential effects of the Project on biological resources qualify as significant.

# 3.0 Results

#### 3.1 Desktop Review

The USFWS species list for the Project site included 10 species listed as threatened, endangered, or candidate under the FESA (USFWS 2022a, Table 1, Appendix A). Of those 10 species, nine species could not occur on or near the Project site due to (1) the lack of habitat, (2) the Project site being outside the current range of the species, or (3) the presence of development that would otherwise preclude occurrence (Table 1). The remaining species, San Joaquin kit fox (*Vulpes macrotis mutica* – FE, ST), could occur on or near the Project site. As identified in the species list, the Project site does not occur in USFWS-designated or proposed critical habitat for any species (USFWS 2022a, Appendix A).

Searching the CNDDB for records of special-status species from the Woodlake 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles produced 209 records of 46 species (Table 1, Appendix B). Of those 46 species, eight are not given further consideration because they are not CEQA-recognized as special-status species by state or federal regulatory agencies or public interest groups or are considered extirpated in California (Appendix B). Of the remaining 38 species, 18 are known from within 5 miles of the Project site (Table 1, Figure 4). Of those species, San Joaquin kit fox (mentioned above) and Sanford's arrowhead (*Sagittaria sanfordii* – 1B.2) could occur on or near the Project site (Table 1). In addition, northwestern pond turtle (*Actinemys marmorata* – SSSC) and burrowing owl (*Athene cunicularia* – SSSC) were identified in the nine-quad search and could occur on or near the Project site (Table 1).

Searching the CNPS inventory of rare and endangered plants of California yielded 24 species (CNPS 2022, Appendix C), 20 of which have a CNPS California Rare Plant Rank of 1 or 2 (Table 1). Of those 20 species, only Sanford's arrowhead (mentioned above) could occur on or near the Project site. The remaining species are not expected to occur on or near the Project site due to (1) lack of habitat, (2) the Project site being outside the current range of the species, or (3) lack of detection during the 2 December 2022 field survey (Table 1).

The Project site is underlain by San Joaquin loam, 0 to 9 percent slopes, Seville clay, and Tujunga sand (NCRS 2022). The Project site is at an elevation of 427–438 feet above mean sea level (Google 2022).

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**Table 1.** Special-status species, their listing status, habitats, and potential to occur on or near the Project site.

Species	Status <sup>1</sup>	Habitat	Potential to Occur <sup>2</sup>
Federally and State-Listed Endange	ered or Th	reatened Species	
Greene's tuctoria <sup>3</sup> ( <i>Tuctoria greenei</i> )	FE, 1B.1	Vernal pools in open grassland below 3445 feet elevation.	None. Habitat lacking; the Project site lacked vernal pools.
Hoover's spurge (Euphorbia spurge)	FT, 1B.2	Vernal pools and depressions.	None. Habitat lacking; the Project site lacked vernal pools and depressions.
Kaweah brodiaea <sup>3</sup> ( <i>Brodiaea insignis</i> )	SE, 1B.2	Valley and foothill grassland, meadows, and cismontane woodland with granitic or clay soils at 656–1640 feet elevation.	None. The Project site is outside the current known range of this species.
San Joaquin adobe sunburst <sup>3</sup> ( <i>Pseudobahia peirsonii</i> )	FT, SE, 1B.1	Grassland and bare dark clay.	None. Habitat lacking; grassland at the Project site lacked bare dark clay.
San Joaquin Valley Orcutt grass <sup>3</sup> (Orcuttia inaequalis)	FT, SE, 1B.1	Vernal pools at or below 2700 feet elevation.	None. Habitat lacking; the Project site lacked vernal pools.
Striped adobe-lily (Fritillaria striata)	ST, 1B.1	Adobe clay soils at or below 3280 feet elevation.	None. Habitat lacking; Project site is outside current known range and lacked adobe clay soils.
Conservancy fairy shrimp (Branchinecta conservatio)	FE	Vernal pools and depressions.	None. Habitat lacking; the Project site lacked vernal pools.
Crotch bumble bee <sup>3</sup> ( <i>Bombus crotchii</i> )	SC	Nests or overwinters in open grassland and scrub habitats with Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum as food plants.	None. Habitat lacking; grassland at the Project site was disturbed and lacked Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, or Eriogonum.

Monarch California overwintering population (Danaus plexippus)	FC	Groves of trees within 1.5 miles of the ocean that produce suitable micro-climates for overwintering such as high humidity, dappled sunlight, access to water and nectar, and protection from wind.	None. Habitat lacking; the Project site is not within 1.5 miles of the ocean.
Valley elderberry longhorn beetle <sup>3</sup> ( <i>Desmocerus californicus dimorphus</i> )	FT	sp.) plants with stems > 1-inch diameter at ground level.	None. Habitat lacking; the Project site lacked elderberry plants and is outside the currently recognized range of this species.
Vernal pool fairy shrimp <sup>3</sup> (Branchinecta lynchi)	FT	Vernal pools and ponds.	None. Habitat lacking; the Project site lacked vernal pools and ponds.
Vernal pool tadpole shrimp (Lepidurus packardi)	FE	Vernal pools, clay flats, alkaline pools, and ephemeral stock tanks.	None. Habitat lacking; the Project site lacked vernal pools, alkaline flats, and ephemeral stock tanks.
Delta smelt (Hypomesus transpacificus)	FT, SE	Shallow, fresh, or slightly brackish backwater sloughs and edgewaters.	None. Habitat lacking; Project site lacked connectivity to the aquatic habitat this species requires.
California tiger salamander <sup>3</sup> (Ambystoma californiense)	FT, ST	Vernal pools or seasonal ponds for breeding; small mammal burrows for upland refugia in natural grassland or oak woodland.	None. Habitat lacking; the Project site and nearby areas lacked vernal pools or seasonal ponds required for breeding.
Foothill yellow-legged frog – South Sierra DPS <sup>3</sup> ( <i>Rana boylii</i> )	FC, SE	Perennial streams and rivers with rocky substrates and open, sunny banks in forests, chaparral, or woodlands.	None. Habitat lacking; the Project site lacked rivers with rocky substrates in forests, chaparral, or woodlands.

Bald eagle (Haliaeetus leucocephalus)	SE, FP	Large old-growth trees or snags in remote, mixed stands	None. Habitat lacking; the survey area lacked large trees or snags and was not remote.
California condor (Gymnogyps californianus)	FE, SE	near water.  Mountain and foothill rangeland with cliffs for nesting and grassland and open woodland for foraging.	None. Habitat lacking; the Project site is about 2 miles west of potential foothill habitat.
Tricolored blackbird <sup>3</sup> (Agelaius tricolor)	ST, SSSC	Large freshwater marshes, in dense stands of cattails or bulrushes.	None. The Project site supports a small semipermanent freshwater wetland; however, this wetland lacks the dense cattail or bulrush thickets this species requires for nesting.
Willow flycatcher (Empidonax traillii)	SE	Moist meadows with perennial streams and lowland riparian woodlands dominated by willows and cottonwoods for breeding, willows or other shrubs near standing or running water; shrubby clearings, pastures, and woodland edges often near water.	None. Habitat lacking; The Project site lacked riparian woodlands dominated by willows and cottonwoods.
Fisher – Southern Sierra Nevada DPS ( <i>Pekania pennanti</i> )	FE, ST	Large areas of mature, dense forest stands with snags and greater than 50% canopy closure.	None. Habitat lacking; the Project site is outside the known local range of this species.
San Joaquin kit fox <sup>3</sup> (Vulpes macrotis mutica)	FE, ST	Grassland, upland scrub, and fallowed agricultural lands adjacent to grassland or upland scrub.	Low. The Project site included disturbed grassland and fallowed agricultural lands.

State Species of Special Concern			
Northern California legless lizard (Anniella pulchra)	SSSC	Moist warm loose soil with plant cover in beach dunes, chaparral, pine-oak woodlands, sandy areas, and stream terraces.	None. Habitat lacking; the Project site lacked loose soils in beach dunes, chaparral, pine-oak woodlands, sandy areas, and stream terraces.
Northern leopard frog (Lithobates pipiens)	SSSC	Wet meadows, canals, bogs, marshes, and reservoirs in grassland, forest, and woodland.	None. Habitat lacking the Project site is outside the current known range of this species.
Northwestern pond turtle (Actinemys marmorata)	SSSC	Ponds, rivers, marshes, streams, and irrigation ditches, usually with aquatic vegetation and woody debris for basking and adjacent natural upland areas for egg laying.	Low. Little Bravo Lake, Wutchumna Ditch, and the surrounding upland areas could support this species.
Western spadefoot <sup>3</sup> (Spea hammondii)	SSSC	Rain pools for breeding and small mammal burrows or other suitable refugia for nonbreeding upland cover.	None. Habitat lacking; the Project site lacked seasonal rain pools suitable for breeding.
Burrowing owl (Athene cunicularia)	SSSC	Grassland and upland scrub with friable soil; some agricultural or other developed and disturbed areas with ground squirrel burrows.	Low. The Project site contained disturbed grassland and inactive agricultural fields with friable soils and ground squirrel burrows that could support the species.
American badger ( <i>Taxidea taxus</i> )	SSSC	Open areas including meadows, grasslands, and chaparral with less than 50% plant cover.	None. Although the Project site included disturbed grassland, the surrounding residential and agricultural development

Pallid bat (Antrozous pallidus)	SSSC	Arid or semi-arid locations in rocky areas and sparsely vegetated grassland near water. Rock crevices, caves, mine shafts, bridges, building, and tree hollows for roosting.	precludes this species from occurring on the Project site.  None. Habitat lacking; trees on the Project site were not large enough to support roosting bats.
Western mastiff bat <sup>3</sup> (Eumops perotis californicus)	SSSC	Crevices in face cliffs, tall buildings, and tunnels in open semi- arid habitats.	None. Habitat lacking; trees on the Project site were not large enough to support roosting bats.
California Rare Plants			
Alkali-sink goldfields (Lasthenia chrysantha)	1B.1	Vernal pools and wet saline flats below 320 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.
American manna grass (Glyceria grandis)	2B.3	Bogs and fens, meadows and seeps, marshes and swamps, and margins of lakes and streams below 6890 feet elevation.	None. The Project site is outside the current known range of this species; not detected during reconnaissance survey.
Calico monkeyflower <sup>3</sup> ( <i>Diplacus pictus</i> )	1B.2	Bare, sunny, shrubby areas around granite outcrops in the southern Sierra Nevada at 442–4100 feet elevation.	None. Habitat lacking; the Project site lacked shrubby areas around granite outcrops.
Coulter's goldfields (Lasthenia glabrata ssp. coulteri)	1B.1	Saltmarsh, playas, and vernal pools below 4000 feet elevation.	None. Habitat lacking; the Project site lacked vernal pools.
Earlimart orache (Atriplex cordulata var. erecticaulis)	1B.2	Saline or alkaline soils in Central Valley and foothill grassland below 230 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.

Kaweah monkeyflower (Erythranthe norrisii)	1B.3	Marble crevices in the Kaweah River and Kings River drainages at 1969–4265 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.
Lesser saltscale (Atriplex minuscula)	1B.1	Sandy alkaline soils in chenopod scrub, playa, and grassland in the San Joaquin Valley below 328 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.
Madera leptosiphon ( <i>Leptosiphon serrulatus</i> )	1B.2	Openings in chaparral, cismontane woodland, and low elevation conifer forest at 980–4300 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.
Mouse buckwheat ( <i>Eriogonum nudum</i> var. <i>murinum</i> )	1B.2	Sandy soils in the Kaweah River drainage at 1312– 2300 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.
Recurved larkspur <sup>3</sup> ( <i>Delphinium recurvatum</i> )	1B.2	Poorly drained, fine, alkaline soils in chenopod scrub, cismontane woodland, and valley and foothill grassland at 10–2800 feet elevation.	None. Habitat lacking; the Project site lacked alkaline soils. The CNDDB occurrence from within 5 miles is presumed extirpated.
Sanford's arrowhead <sup>3</sup> (Sagittaria sanfordii)	1B.2	Freshwater marshes and swamps, including some canals, below 650 feet elevation.	Low. Wutchumna Ditch and Little Bravo Lake could support this species.
Spiny-sepaled button-celery <sup>3</sup> (Eryngium spinosepalum)	1B.2	Vernal pools and swales in valley and foothill grassland at 330–4200 feet elevation.	None. Habitat lacking; the Project site lacked vernal pools and swales.
Vernal pool smallscale (Atriplex persistens)	1B.2	Alkaline vernal pools in the Central Valley below 377 feet elevation.	None. Habitat lacking; the Project site is outside the current

			known range of this species.
Winter's sunflower <sup>3</sup> (Helianthus winteri)	1B.2	Steep, south-facing grassy slopes, rock outcrops, and road cuts at 590–1509 feet elevation.	None. Habitat lacking; the Project site is outside the current known range of this species.

CDFW (2022), CNPS (2022), USFWS (2022a).

Status¹	Potential to (	Potential to Occur <sup>2</sup>		
FE = Federally listed Endangered	None:	Species or sign not observed; conditions unsuitable for occurrence.		
FT = Federally listed Threatened	Low:	Neither species nor sign observed; conditions marginal for occurrence.		
FP = State Fully Protected	Moderate:	Neither species nor sign observed; conditions suitable for occurrence.		
FC = Federal Candidate for listing under the FESA	High:	Neither species nor sign observed; conditions highly suitable for occurrence.		
SE = State listed Endangered	Present:	Species or sign observed; conditions suitable for occurrence.		
ST = State listed Threatened				
SSSC = State Species of Special Concern				
SC = State Candidate for listing under the CESA				

CNPS California Rare Plant Rank <sup>1</sup> :	Threat Ranks <sup>1</sup> :
1B – plants rare, threatened, or endangered in California and elsewhere.	0.1 – seriously threatened in California (> 80% of occurrences).
2B – plants rare, threatened, or endangered in California but more common elsewhere.	0.2 – moderately threatened in California (20-80% of occurrences).
3 – plants about which more information is needed.	0.3 – not very threatened in California (<20% of occurrences).
4 – plants have limited distribution in California.	

<sup>&</sup>lt;sup>3</sup>Record from within 5 miles of the Project site.

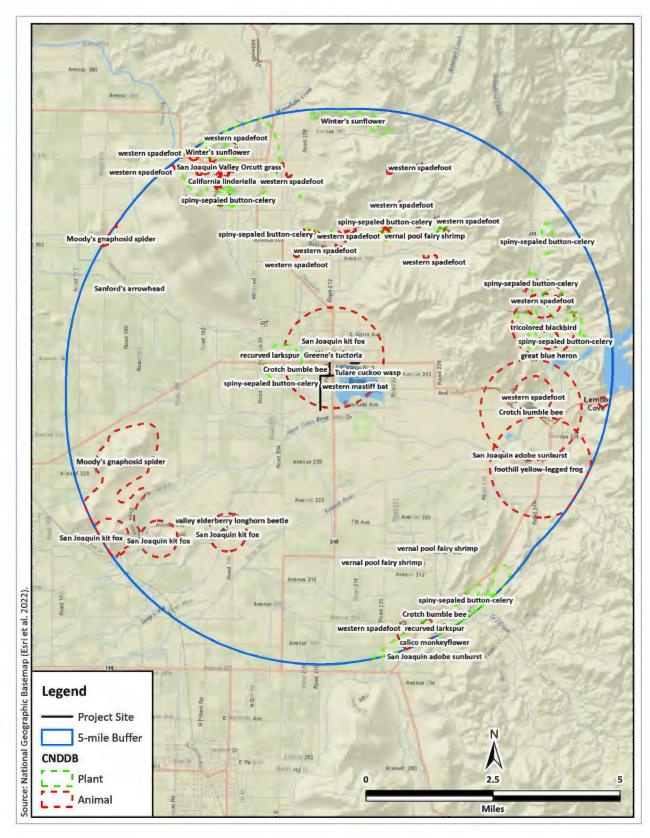


Figure 4. CNDDB occurrence map.

#### 3.2 Reconnaissance Survey

#### 3.2.1 Land Use and Habitats

The Project site consisted of developed and disturbed land cover (Figures 5–11). Land uses included residential and commercial development, transportation, water storage, and water transport.

The Project site along East Naranjo Boulevard, South Palm Street, and Avenue 342 consisted of paved roads surrounded by residential and commercial development (Figures 5 and 6). The Project site along Mulberry Street consisted of a dirt road bordered by a recently cleared and grubbed orchard to the west and a row of olive trees and commercial development to the east (Figure 7). Vegetation in the recently cleared and grubbed orchard was dominated by ruderal forbs. South of Mulberry Street, the Project site crossed an unnamed drainage ditch and followed an earthen berm between an artificial wetland (Little Bravo Lake) and several maintained detention basins (Figures 8 and 9). Land cover along the berm consisted of disturbed grassland. The Project site then crosses Wutchumna Ditch, a canal that drains Bravo Lake (Figure 10). Dirt levee roads flanking Wutchumna Ditch were armored with riprap. Wutchumna Ditch supported emergent vegetation. South of Wutchumna Ditch, the Project site consisted of a recently disked fallow field that supported ruderal vegetation (Figure 11). Small mammal burrows were present at a moderate density in the survey area between Avenue 342 and Wutchumna Ditch.



**Figure 5.** Photograph of the Project site, looking west along East Naranjo Boulevard, showing residential development.

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**Figure 6.** Photograph of the Project site, looking west along Avenue 342, showing residential development.



**Figure 7.** Photograph of the Project site, looking south along Mulberry Street, showing a dirt road, recently cleared and grubbed orchard, and commercial development.



**Figure 8.** Photograph of the Project site crossing an unnamed ditch, looking west (downstream) toward Little Bravo Lake.



**Figure 9.** Photograph of the Project site, looking southwest, showing disturbed grassland, an earthen berm, and Little Bravo Lake.



Figure 10. Photograph of the Project site crossing Wutchumna Ditch, looking north.



**Figure 11.** Photograph of a Project site, looking south from Wutchumna Ditch, showing a recently disked field with the wastewater treatment plant in the background.

#### 3.2.2 Plant and Animal Species Observed

A total of 45 plant species (16 native and 29 nonnative), 25 bird species, and four mammal species were observed during the survey (Table 2).

**Table 2.** Plant and animal species observed during the reconnaissance survey.

Common Name	Scientific Name	Status
Plants		
Family Araceae		
Duckweed	Lemna sp.	Native
Family Arecaceae		
Mexican fan palm	Washingtonia robusta	Nonnative
Family Asteraceae		
Bull thistle	Cirsium vulgare	Nonnative
Common dandelion	Taraxacum officinale	Nonnative
Common groundsel	Senecio vulgaris	Nonnative
Common spikeweed	Centromadia pungens	Native
Flax-leaved horseweed	Erigeron bonariensis	Nonnative
Prickly lettuce	Lactuca serriola	Nonnative
Silver wormwood	Artemisia ludoviciana	Native
Telegraph weed	Heterotheca grandiflora	Native
Wild tarragon	Artemisia dracunculus	Native
Wire lettuce	Stephanomeria pauciflora	Native
Yellow star-thistle	Centaurea solstitialis	Nonnative
Family Boraginaceae		
Common fiddleneck	Amsinckia intermedia	Native
Family Brassicaceae		
Wild radish	Raphanus sativus	Nonnative
Family Chenopodiaceae	,	
Lamb's quarters	Chenopodium album	Nonnative
Family Cucurbitaceae	· · · · · · · · · · · · · · · · · · ·	
Coyote melon	Cucurbita palmata	Native
Family Euphorbiaceae	-	
Spotted spurge	Euphorbia maculata	Nonnative
Turkey-mullein	Croton setiger	Native
Family Fabaceae	-	
California burclover	Medicago polymorpha	Nonnative
Family Geraniaceae		
Redstem stork's bill	Erodium cicutarium	Nonnative
Family Haloragaceae		
Parrot feather watermilfoil	Myriophyllum aquaticum	Nonnative
Family Lamiaceae		

Common Name	Scientific Name	Status
Vinegarweed	Trichostema lanceolatum	Native
White horehound	Marrubium vulgare	Nonnative
Family Malvaceae		
Cheeseweed	Malva parviflora	Nonnative
Family Meliaceae	·	
Chinaberry	Melia azedarach	Nonnative
Family Moraceae		
White mulberry	Morus alba	Nonnative
Family Onagraceae		
Panicled willowherb	Epilobium brachycarpum	Native
Family Poaceae		
Bermuda grass	Cynodon dactylon	Nonnative
Creeping bentgrass	Agrostis stolonifera	Nonnative
Italian ryegrass	Festuca perennis	Nonnative
Johnsongrass	Sorghum halepense	Nonnative
Ripgut brome	Bromus diandrus	Nonnative
Saltgrass	Distichlis spicata	Native
Slender wild oat	Avena barbata	Nonnative
Soft brome	Bromus hordeaceus	Nonnative
Family Polygonaceae		
Common knotweed	Persicaria lapathifolia	Native
Common sheep sorrel	Rumex acetosella	Nonnative
Curly dock	Rumex crispus	Nonnative
Family Potamogetonaceae	•	
Pondweed	Potamogeton nodosus	Native
Family Solanaceae		
Silverleaf nightshade	Solanum elaeagnifolium	Nonnative
Tree tobacco	Nicotiana glauca	Nonnative
Family Urticaceae		
Stinging nettle	Urtica dioica	Native
Family Verbenaceae		
Turkey tangle frogfruit	Phyla nodiflora	Native
Family Zygophyllaceae	,	
Puncture vine	Tribulus terrestris	Nonnative
Birds		
Family Anatidae		
Canvasback	Aythya valisineria	MBTA, CFGC
Green-winged teal	Anas carolinensis	MBTA, CFGC
Mallard	Anas platyrhynchos	MBTA, CFGC
Northern shoveler	Spatula clypeata	MBTA, CFGC
Family Ardeidae		•
Great blue heron	Ardea herodias	MBTA, CFGC

Common Name	Scientific Name	Status
Great egret	Ardea alba	MBTA, CFGC
Green heron	Butorides virescens	MBTA, CFGC
Family Charadriidae		
Killdeer	Charadrius vociferus	MBTA, CFGC
Family Columbidae		
Eurasian collared-dove	Streptopelia orientalis	Nonnative
Family Corvidae		
California scrub-jay	Aphelocoma californica	MBTA, CFGC
Common raven	Corvus corax	MBTA, CFGC
Family Fringillidae		
House finch	Haemorhous mexicanus	MBTA, CFGC
Family Icteridae		
Great-tailed grackle	Quiscalus mexicanus	MBTA, CFGC
Western meadowlark	Sturnella neglecta	MBTA, CFGC
Family Mimidae		
Northern mockingbird	Mimus polyglottos	MBTA, CFGC
Family Parulidae		•
Yellow-rumped warbler	Setophaga coronata	MBTA, CFGC
Family Passerellidae		
White-crowned sparrow	Zonotrichia leucophrys	MBTA, CFGC
Family Passeridae		
House sparrow	Passer domesticus	Nonnative
Family Ptiliogonatidae		
Phainopepla	Phainopepla nitens	MBTA, CFGC
Family Rallidae		•
American coot	Fulica americana	MBTA, CFGC
Family Scolopacidae		·
Lesser yellowlegs	Tringa flavipes	MBTA, CFGC
Family Trochilidae		•
Anna's hummingbird	Calypte anna	MBTA, CFGC
Family Turdidae		
American robin	Turdus migratorius	MBTA, CFGC
Family Tyrannidae	-	
Black phoebe	Sayornis nigricans	MBTA, CFGC
Say's phoebe	Sayornis saya	MBTA, CFGC
Mammals		
Family Geomyidae		
Botta's pocket gopher	Thomomys bottae	
Family Mephitidae		
Striped skunk	Mephitis mephitis	
Family Procyonidae		
Raccoon	Procyon lotor	

Common Name	Scientific Name	Status		
Family Sciuridae				
California ground squirrel	Otospermophilus beecheyi			

MBTA = Protected under the Migratory Bird Treaty Act (16 USC § 703 et seq.); CFGC = Protected under the California Fish and Game Code (FGC §§ 3503 and 3513), ST = State-listed as Threatened.

#### 3.2.3 Bald Eagle and Golden Eagle

The Project site and surrounding area contained foraging habitat for bald eagle and golden eagle but did not contain nesting habitat for either species.

#### 3.2.4 Nesting Birds and the Migratory Bird Treaty Act

Migratory birds could nest on or near the Project site. Species that may nest on or near the Project site include but are not limited to California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), and northern mockingbird (*Mimus polyglottos*).

#### 3.2.5 Regulated Habitats

Project site was within 50 feet of three potentially regulated habitats: Wutchumna Ditch, Little Bravo Lake, and an unnamed ditch south of Mulberry Street. The unnamed ditch drains to Little Bravo Lake, which drains to Wutchmna Ditch, and eventually to the Saint Johns River (Figure 2). As streams and lakes in California, they are likely under the regulatory jurisdiction of the CDFW; as potential surface waters in California, they are likely under the regulatory jurisdiction of the SWRCB; and as potential tributaries of the Saint Johns River, they may be under the regulatory jurisdiction of the USACE. The nearest river, the Saint Johns River, is about 0.25 miles south of the Project site. According to the Wild and Scenic Rivers Act, there are no designated wild and scenic reaches of the Saint Johns River (USFWS 2022c).

No marine or estuarine fishery resources or migratory routes to and from anadromous fish spawning grounds are present in the survey area. In addition, no EFH, defined by the Magnuson-Stevens Act as those resources necessary for fish spawning, breeding, feeding, or growth to maturity, are present in the survey area.

The Project site south of Wutchumna Ditch and along East Naranjo Boulevard is in a FEMA-designated flood zone classified as Zone A. Parcels in Zone A have a 1-percent-annual-chance of flooding and a 26-percent chance of flooding over a 30-year period (FEMA 2022). The remainder of the Project site is in a FEMA-designated flood zone classified as Zone X, otherwise described as "Other Flood Areas". Parcels in Zone X have either (1) a 0.2% annual chance of flooding during a 100-year flood event, (2) a 1% annual chance of flooding (during a 100-year flood event) with average depths of < 1 foot or with drainage areas less than 1 square mile, or (3) areas protected by levees from a 1% annual chance of flooding during a 100-year flood event (FEMA 2022).

### 3.3 Special-Status Species

The following four special-status species could occur on or near the Project site based on the presence of habitat:

#### 3.3.1 San Joaquin Kit Fox

San Joaquin kit fox is a federally listed as endangered and state listed as threatened member of the family Canidae (USFWS 1998; CDFW 2022). San Joaquin kit fox is primarily nocturnal and typically occupies valley grassland or mixed shrub/grassland habitats in low, rolling hills and valleys (Morrell 1972). San Joaquin kit fox will use grazed grasslands as well as grasslands with scattered structures such as power poles and wind turbines. This species also lives adjacent to, and forages in, tilled and fallow fields and irrigated row crops. However, large tracts of higher quality grassland or rangeland nearby is required to support the species (Warrick et al. 2007). The diet of the San Joaquin kit fox varies geographically, seasonally, and annually, but throughout most of its range consists primarily of rodents, rabbits, ground-nesting birds, and insects (Scrivner et al. 1987; Spiegel et al. 1996). Giant kangaroo rat (*Dipodomys ingens*) is a favored prey item (Cypher et al. 2000).

The San Joaquin kit fox requires underground dens to regulate its temperature and for shelter, reproduction, and predator avoidance (Morrell 1972). It commonly modifies and uses dens constructed by other animals, such as ground squirrels and badgers, and will use human-made structures as well (USFWS 1998). Dens are usually made in loose-textured soils on slopes less than 40 degrees, but the number of openings, entrance shape, and the slope of the ground on which they occur vary across the geographic range of the species (USFWS 1998). San Joaquin kit fox changes den locations often, typically using numerous dens each year. Koopman et al. (1998) estimated that a San Joaquin kit fox will use an average of about 12 dens over the course of a year and will often not use the same dens the following year. This species is subject to predation or competitive exclusion by other species such as coyote (*Canis latrans*), domestic dog (*Canis familiaris*), bobcat (*Felis rufus*), and nonnative red fox (*Vulpes vulpes*), as well as large raptors (Benedict and Forbes 1979; Cypher and Spencer 1998; Clark et al. 2005, 2007).

There are three CNDDB records of San Joaquin kit fox from within 5 miles of the Project site. In addition, the Project site is in a non-specific 1990 CNDDB occurrence polygon (CNDDB 2022). The Project site contained fallowed agricultural fields and disturbed grassland that could provide habitat for this species. Ground squirrel burrows on the Project site could serve as dens or provide temporary refuge. However, the Project site is subject to human disturbance and is relatively isolated from natural lands. Therefore, the potential for San Joaquin kit fox to occur on or near the Project site is low.

#### 3.3.2 Northwestern Pond Turtle

Northwestern pond turtle (family Emydidae) is one of only two native freshwater turtles in California. This species is long-lived, diurnal, and aquatic (Nafis 2022). It occurs in ponds, lakes, rivers, creeks, marshes, and irrigation ditches and requires exposed banks, logs, rocks, or cattail mats for basking (Nafis 2022). Commercial harvesting beginning in the 19th century, wetland destruction and degradation in the early 20th century, and introduction of nonnative species including other turtle species and bullfrogs are the primary contributors to population declines (Nafis 2022). Mating occurs in April and May, after which females travel onto land to dig a nest, usually along stream or pond banks (Nafis 2022).

Although there are no CNDDB records of northwestern pond turtle from within 5 miles of the Project site (CNDDB 2022), Little Bravo Lake and Wutchumna Ditch provide potential aquatic habitat. The disturbed grassland adjacent to Little Bravo Lake and Wutchumna Ditch could represent potential nesting habitat. Due low habitat quality, however, the potential for northwestern pond turtle to occur on or near the Project site is low.

#### 3.3.3 Burrowing Owl

Burrowing owl is a member of the family Strigidae recognized as a species of special concern by the CDFW (CDFW 2022). Burrowing owl depends on burrow systems excavated by other species such as California ground squirrel (*Otospermophilus beecheyi*) and American badger (*Taxidea taxus*) (Poulin et al. 2020). Burrowing owl uses burrows for protection from predators, weather, as roosting sites, and dwellings to raise young (Poulin et al. 2020). It commonly perches outside burrows on mounds of soil or nearby fence posts. Prey types include insects, especially grasshoppers and crickets, small mammals, frogs, toads, and lizards (Poulin et al. 2020). The nesting season begins in March, and incubation lasts 28–30 days. The female incubates the eggs while the male forages and delivers food items to the burrow-nest; young then fledge between 44 and 53 days after hatching (Poulin et al. 2020). Adults can live up to 8 years in the wild.

Although there are no CNDDB records of burrowing owl known from within 5 miles of the Project site (CNDDB 2022), the disturbed grassland and inactive agricultural fields south of Mulberry Street contained burrows that could support burrowing owl. The nearby grassland and detention basins could also provide foraging habitat. However, the habitat was disturbed, and no sign of burrowing owl was detected during the 2 December 2022 reconnaissance survey. Therefore, the potential for this species to occur on or near the Project site is low.

#### 3.3.4 Sanford's Arrowhead

Sanford's arrowhead is an aquatic, rhizomatous perennial herb in the family Alismataceae with a California Rare Plant Rank of 1B.2. It is endemic to the Central Valley of California where it

occupies ponds and ditches below 984 feet elevation; it flowers May–October (Turner et al. 2012).

One CNDDB record from 2018 is known from within 5 miles of the Project site (CNDDB 2022). Although this species was not detected during the reconnaissance survey, which was conducted outside of the blooming period, the aquatic habitat in Wutchumna Ditch and Little Bravo Lake could support this species. Due low habitat quality, however, its probability of occurrence is low.

# 4.0 Environmental Effects

#### 4.1 Effects Determinations

#### 4.1.1 Critical Habitat

We conclude the Project will have **no effect** on critical habitat as no critical habitat has been designated or proposed in the survey area.

#### 4.1.2 Special-Status Species

We conclude the Project may affect but is not likely to adversely affect the federally listed as endangered and state listed as threatened San Joaquin kit fox, the state species of special concern northwestern pond turtle and burrowing owl, and Sanford's arrowhead, a rare plant with a California Rare Plant Rank of 1B.2. The Project is not expected to affect any other special-status species due to the lack of habitat or known occurrence records for those species near the Project site.

#### 4.1.3 Migratory Birds

We conclude the Project may affect but is not likely to adversely affect nesting migratory birds.

#### 4.1.4 Regulated Habitats

We conclude the Project may affect and is likely to adversely affect three regulated habitats: Wutchumna ditch, Little Bravo Lake, and an unnamed ditch south of Mulberry Street. As such, Clean Water Act Section 404 permits and 401 certifications as well as California Fish and Game Code Section 1602 notifications may be required if Project activities impact these regulated habitats. However, the project will have **no substantial adverse effect** on state or federally protected wetlands or other regulated habitats under CEQA purview.

# 4.2 Significance Determinations

This Project, which will result in temporary impacts to developed and previously disturbed land, two channelized ditches, and an artificial wetland, will not: (1) substantially reduce the habitat of a fish or wildlife species (criterion a) as no such habitat is present on the Project site; (2) cause a fish or wildlife population to drop below self-sustaining levels (criterion b) as no such potentially vulnerable population is known from the area; (3) threaten to eliminate a plant or animal community (criterion c) as no such potentially vulnerable communities are known from the area; (4) substantially reduce the number or restrict the range of a rare or endangered plant or animal (criterion d) as no such potentially vulnerable species are known from the area; (5) have a

substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS (criterion f) as no riparian habitat or other sensitive natural community was present in the survey area; (6) 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 (criterion g) as only minimal, temporary impacts to wetlands may occur; (7) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (criterion i) as no trees or biologically sensitive areas will be impacted; or (8) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan (criterion j) as no such plan has been adopted. Thus, these significance criteria are not analyzed further.

The remaining statutorily defined criteria provided the framework for Criteria BIO1 and BIO2 below. These criteria were used to assess the impacts to biological resources stemming from the Project and provide the basis for determinations of significance:

- <u>Criterion BIO1</u>: 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 (significance criterion e).
- <u>Criterion BIO2</u>: 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 (significance criterion h).

#### 4.2.1 Direct and Indirect Effects

# **4.2.1.1** Potential Effect #1: Have a Substantial Effect on Any Special-Status Species (Criterion BIO1)

The Project could adversely affect, either directly or through habitat modifications, four special-status animals that occur or may occur on or near the Project site. Construction activities such as excavating, trenching, or using other heavy equipment that disturbs or harms a special-status species or substantially modifies its habitat could constitute a significant impact. We recommend that Mitigation Measures BIO1–BIO4 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

#### Mitigation Measure BIO1. Protect San Joaquin kit fox.

 To protect San Joaquin kit fox, a qualified biologist shall conduct a preconstruction survey within 30 days prior to the start of ground-disturbing activities to identify potential dens (burrows larger than 4 inches in diameter) in suitable land cover types on and within 250 feet of the Project site. If potential dens for San Joaquin kit fox are present, their disturbance and destruction shall be avoided. Exclusion zones shall be implemented based on the type of den and current use: Potential Den—50 feet; Known Den—100 feet; Natal or Pupping Den—to be determined on a case-by-case basis in coordination with USFWS and CDFW. All pipes greater than 4 inches in diameter stored on the construction site shall be capped, and exit ramps shall be installed in trenches and other excavations to avoid direct mortality. When possible, construction shall be conducted outside of the breeding season from October 1 to November 30. If den avoidance is not possible, procedures in U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior or During Ground Disturbance (USFWS 2011) shall be followed.

#### Mitigation Measure BIO2. Protect northwestern pond turtle.

A pre-construction clearance survey shall be conducted by a qualified biologist to 1. ensure that northwestern pond turtle will not be impacted during Project construction. The pre-construction clearance survey shall be conducted no more than 14 days prior to the start of construction activities. During this survey, the qualified biologist shall search all aquatic habitat and all potential nesting habitat on the Project site for active turtle nests. If a turtle is found, it will be allowed to the leave the area on its own. If an active turtle nest is found, the qualified biologist shall determine the extent of a construction-free buffer to be established and maintained around the nest for the duration of the nesting cycle. The biologist shall then work with construction personnel to install wildlife exclusion fencing along the buffer. This fencing should be a minimum of 36 inches tall and towed-in 6 inches below ground prior to construction activities. If fencing cannot be toed-in, the bottom of the fence will be weighted down with a continuous line of long, narrow sand bags or similar, to ensure there are no gaps under the fencing where wildlife could enter. One-way exit funnels directed away from construction activities will be installed to allow turtles and other small wildlife to exit the fenced enclosure.

#### Mitigation Measure BIO3. Protect burrowing owls.

- 1. Conduct focused burrowing owl surveys to assess the presence/absence of burrowing owl in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) and *Burrowing Owl Survey Protocol and Mitigation Guidelines* (CBOC 1997). These involve conducting four pre-construction survey visits.
- 2. If a burrowing owl or sign of burrowing owl use (e.g., feathers, guano, pellets) is detected on or within 500 feet of the Project site, and the qualified biologist determines that Project activities would disrupt the owl(s), a construction-free buffer, limited operating period, or passive relocation shall be implemented in consultation with the CDFW.

#### Mitigation Measure BIO4. Protect Sanford's arrowhead.

1. A rare plant survey for Sanford's arrowhead shall be conducted by a qualified biologist on and within 100 feet of the Project site during the appropriate season (May to October). If this species is detected, implement a minimum 50-foot avoidance buffer and avoid impacts to the extent practicable. If impacts are unavoidable, salvage and relocate the plants in consultation with CDFW.

# 4.2.1.2 Potential Effect #2: Interfere Substantially with Native Wildlife Movements, Corridors, or Nursery Sites (Criterion BIO2)

The Project has the potential to impede the use of nursery sites for native birds protected under the MBTA and California Fish and Game Code. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and Fish and Game Code. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird in the Project site or immediately adjacent to the construction zone could constitute a significant effect. We recommend that Mitigation Measure BIO5 (below) be included in the conditions of approval to reduce the potential effect to a less-than-significant level.

#### Mitigation Measure BIO5. Protect nesting birds.

- 1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
- 2. If it is not possible to schedule construction between September and January, preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

#### 4.2.2 Cumulative Effects

The Project will involve improving approximately 1.3 miles of sewer line at various locations throughout the City of Woodlake. Although all land in and immediately adjacent to the Project site was developed or disturbed, the Project site provides potential habitat for San Joaquin kit fox, northwestern pond turtle, burrowing owl, Sanford's arrowhead, and migratory birds. However, implementing Mitigation Measures BIO1–BIO5 would reduce any contribution to cumulative impacts on biological resources to a less-than-significant level.

### 4.2.3 Unavoidable Significant Adverse Effects

No unavoidable significant adverse effects on biological resources would occur from implementing the Project.

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<b>Appendix A.</b> U	JSFWS list of thre	eatened and enc	langered species	



# United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: December 01, 2022

Project Code: 2023-0020830

Project Name: Woodlake Sewer Project

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

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(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

**Migratory Birds**: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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# Attachment(s):

• Official Species List

12/01/2022

# **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office** 

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 (916) 414-6600 12/01/2022 2

# **Project Summary**

Project Code: 2023-0020830

Project Name: Woodlake Sewer Project

Project Type: Wastewater Pipeline - Maintenance / Modification - Below Ground Project Description: The project consists of sewer repair and trunk alignment at various

locations in Woodlake, Tulare County, California

#### **Project Location:**

Approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@36.41374745">https://www.google.com/maps/@36.41374745</a>,-119.0912198,14z



Counties: Tulare County, California

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# **Endangered Species Act Species**

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

#### **Mammals**

NAME **STATUS** 

Fisher *Pekania pennanti* 

Endangered

Endangered

Population: SSN DPS

There is **proposed** critical habitat for this species. Your location does not overlap the critical

Species profile: https://ecos.fws.gov/ecp/species/3651

San Joaquin Kit Fox Vulpes macrotis mutica

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/2873

**Birds** 

**NAME STATUS** 

California Condor *Gymnogyps californianus* 

**Endangered** 

Population: U.S.A. only, except where listed as an experimental population

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/8193

**Amphibians** 

NAME **STATUS** 

California Tiger Salamander *Ambystoma californiense* 

Threatened

Population: U.S.A. (Central CA DPS)

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/2076

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#### **Fishes**

NAME STATUS

#### Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>

#### **Insects**

NAME STATUS

#### Monarch Butterfly *Danaus plexippus*

Candidate

No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>

#### Crustaceans

NAME STATUS

#### Conservancy Fairy Shrimp Branchinecta conservatio

Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>

### **Flowering Plants**

NAME STATUS

#### Greene's Tuctoria Tuctoria greenei

Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/1573

#### San Joaquin Adobe Sunburst Pseudobahia peirsonii

Threatened

No critical habitat has been designated for this species.

Species profile: <a href="https://ecos.fws.gov/ecp/species/2931">https://ecos.fws.gov/ecp/species/2931</a>

#### San Joaquin Orcutt Grass Orcuttia inaequalis

Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/5506

#### **Critical habitats**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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# **IPaC User Contact Information**

Agency: Colibri Ecological Services

Name: Ryan Slezak

Address: 9493 N Ft Washington Rd

City: Fresno State: CA Zip: 93730

Email rslezak@colibri-ecology.com

Phone: 5592426178

**Appendix B.** CNDDB occurrence records.



#### California Department of Fish and Wildlife

#### **California Natural Diversity Database**



**Query Criteria:** 

Quad<span style='color:Red'> IS </span>(Woodlake (3611941)<span style='color:Red'> OR </span>Kaweah (3611848)<span style='color:Red'> OR </span>Shadequarter Mtn. (3611858)<span style='color:Red'> OR </span>Auckland (3611951)<span style='color:Red'> OR </span>Chickencoop Canyon (3611838)<span style='color:Red'> OR </span>Exeter (3611932)<span style='color:Red'> OR </span>Style='color:Red'> OR </span>Style='color:Red'> OR </span>Ityle='color:Red'> O

				Elev.		E	Element Occ. Ranks			<u> </u>	Population	on Status		Presence	)	
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	Х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agelaius tricolor tricolored blackbird	G1G2 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	505 540	955 S:2	0	0	0	0	0	2	1	1	2	0	0
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	G2G3T3 S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	345 743	1265 S:9	0	6	2	0	0	1	2	7	9	0	0
Anniella pulchra Northern California legless lizard	G3 S3	None None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	377 1,023	383 S:3	1	0	0	0	0	2	1	2	3	0	0
Antrozous pallidus pallid bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	368 368	420 S:1	1	0	0	0	0	0	0	1	1	0	0
Ardea herodias great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	500 500	156 S:1	0	0	0	0	0	1	1	0	1	0	0
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	343 343	2011 S:1	1	0	0	0	0	0	0	1	1	0	0
Atriplex cordulata var. erecticaulis Earlimart orache	G3T1 S1	None None	Rare Plant Rank - 1B.2	335 335	23 S:1	1	0	0	0	0	0	0	1	1	0	0
Atriplex minuscula lesser saltscale	G2 S2	None None	Rare Plant Rank - 1B.1	335 335	52 S:1	0	1	0	0	0	0	0	1	1	0	0
Atriplex persistens vernal pool smallscale	G2 S2	None None	Rare Plant Rank - 1B.2	345 355	41 S:2	2	0	0	0	0	0	0	2	2	0	0



#### **California Department of Fish and Wildlife**



				Elev.		Element Occ. Ranks				5	Population	on Status		Presence		
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	Х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Batrachoseps regius Kings River slender salamander	G2G3 S2S3	None None	IUCN_VU-Vulnerable USFS_S-Sensitive	2,000 5,500	14 S:2	0	0	0	0	0	2	2	0	2	0	0
Bombus crotchii Crotch bumble bee	G2 S1S2	None Candidate Endangered	IUCN_EN-Endangered	450 1,000	437 S:5	0	0	0	0	0	5	5	0	5	0	0
Branchinecta lynchi vernal pool fairy shrimp	G3 S3	Threatened None	IUCN_VU-Vulnerable	335 950	796 S:19	2	3	0	0	0	14	6	13	19	0	0
Brodiaea insignis Kaweah brodiaea	G1 S1	None Endangered	Rare Plant Rank - 1B.2 USFS_S-Sensitive	560 3,300	27 S:11	2	4	2	0	0	3	10	1	11	0	0
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	GNR SNR	None None		1,100 1,100	11 S:1	0	1	0	0	0	0	1	0	1	0	0
Chrysis tularensis Tulare cuckoo wasp	G1G2 S1S2	None None		450 450	5 S:1	0	0	0	0	0	1	1	0	1	0	0
Delphinium recurvatum recurved larkspur	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	340 440	119 S:4	0	0	0	0	1	3	2	2	3	0	1
Desmocerus californicus dimorphus valley elderberry longhorn beetle	G3T2T3 S3	Threatened None		405 960	271 S:2	0	0	1	0	0	1	2	0	2	0	0
Diplacus pictus calico monkeyflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	600 600	73 S:1	0	0	0	0	0	1	1	0	1	0	0
Empidonax traillii willow flycatcher	G5 S1S2	None Endangered	IUCN_LC-Least Concern USFS_S-Sensitive	570 570	90 S:1	0	0	0	0	0	1	1	0	1	0	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	70 1,000	1404 S:3	0	0	0	0	0	3	3	0	3	0	0
Eriogonum nudum var. murinum mouse buckwheat	G5T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	1,280 3,400	11 S:4	0	0	0	0	0	4	4	0	4	0	0



#### California Department of Fish and Wildlife



				Elev.		E	Eleme	ent O	cc. F	Rank	s	Population	on Status		Presence	
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Eryngium spinosepalum spiny-sepaled button-celery	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	335 2,000	108 S:20	3	9	2	0	1	5	11	9	19	1	0
Erythranthe norrisii Kaweah monkeyflower	G2 S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,200 2,700	8 S:2	0	0	0	0	0	2	2	0	2	0	0
Eumops perotis californicus western mastiff bat	G4G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	450 940	296 S:5	0	0	0	0	0	5	5	0	5	0	0
Euphorbia hooveri Hoover's spurge	G1 S1	Threatened None	Rare Plant Rank - 1B.2	335 345	29 S:2	0	0	1	1	0	0	0	2	2	0	0
Fritillaria striata striped adobe-lily	G1 S1	None Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive		23 S:1	0	0	0	0	1	0	1	0	0	0	1
Glyceria grandis American manna grass	G5 S3	None None	Rare Plant Rank - 2B.3		10 S:1	0	0	0	0	0	1	1	0	1	0	0
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	G1 S1.1	None None		320 320	33 S:1	0	1	0	0	0	0	1	0	1	0	0
Gymnogyps californianus California condor	G1 S1	Endangered Endangered	CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_CR-Critically Endangered NABCI_RWL-Red Watch List	1,000 1,000	13 S:1	0	0	0	0	0	1	1	0	1	0	0
Haliaeetus leucocephalus bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive	912 912	332 S:1	0	1	0	0	0	0	0	1	1	0	0



#### California Department of Fish and Wildlife



				Elev.		Element Occ. Ranks			<u> </u>	Population	on Status		Presence			
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	Х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Helianthus winteri Winter's sunflower	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	460 2,500	55 S:32	6	20	4	1	0	1	0	32	32	0	0
Lasthenia chrysantha alkali-sink goldfields	G2 S2	None None	Rare Plant Rank - 1B.1	380 380	55 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasthenia glabrata ssp. coulteri Coulter's goldfields	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	350 350	111 S:1	0	0	0	0	0	1	0	1	1	0	0
Lepidurus packardi vernal pool tadpole shrimp	G4 S3	Endangered None	IUCN_EN-Endangered	340 345	329 S:2	0	1	0	0	0	1	1	1	2	0	0
Leptosiphon serrulatus  Madera leptosiphon	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	1,000 3,500	27 S:2	0	0	0	0	0	2	2	0	2	0	0
Linderiella occidentalis California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	513 516	508 S:2	0	0	0	0	0	2	0	2	2	0	0
Lithobates pipiens northern leopard frog	G5 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern		19 S:1	0	0	0	0	0	1	1	0	1	0	0
Lytta moesta moestan blister beetle	G2 S2	None None		1,000 1,000	12 S:1	0	0	0	0	0	1	1	0	0	1	0
Lytta morrisoni Morrison's blister beetle	G1G2 S1S2	None None		960 960	10 S:1	0	0	0	0	0	1	1	0	0	1	0
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	G1 S1.1	None None		435 475	21 S:2	0	0	0	0	0	2	2	0	2	0	0
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	G3 S3.1	None None		345 345	126 S:1	0	0	0	0	0	1	1	0	1	0	0
Orcuttia inaequalis San Joaquin Valley Orcutt grass	G1 S1	Threatened Endangered	Rare Plant Rank - 1B.1	515 515	47 S:1	0	0	0	0	1	0	1	0	0	0	1



#### California Department of Fish and Wildlife



				Elev.		Element Occ. Ranks			<b>3</b>	Populatio	on Status		Presence	)		
Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Range (ft.)	Total EO's	Α	В	С	D	х	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Pseudobahia peirsonii San Joaquin adobe sunburst	G1 S1	Threatened Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	600 1,420	51 S:3	0	0	0	1	0	2	3	0	3	0	0
Rana boylii pop. 5 foothill yellow-legged frog - south Sierra DPS	G3T2 S2	Proposed Endangered Endangered	BLM_S-Sensitive USFS_S-Sensitive	520 2,211	271 S:10	0	0	0	0	10	0	10	0	0	0	10
Sagittaria sanfordii Sanford's arrowhead	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	400 400	143 S:1	0	0	1	0	0	0	0	1	1	0	0
Spea hammondii western spadefoot	G2G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	0 743	1425 S:31	0	26	1	0	0	4	4	27	31	0	0
Sycamore Alluvial Woodland Sycamore Alluvial Woodland	G1 S1.1	None None		580 580	17 S:1	0	0	0	0	0	1	1	0	1	0	0
Talanites moodyae Moody's gnaphosid spider	G1G2 S1S2	None None		400 1,200	6 S:4	0	0	0	0	0	4	4	0	4	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	370 370	594 S:1	0	0	1	0	0	0	1	0	1	0	0
Tuctoria greenei Greene's tuctoria	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1	450 450	50 S:1	0	0	0	0	1	0	1	0	0	0	1
Valley Sacaton Grassland Valley Sacaton Grassland	G1 S1.1	None None		370 370	9 S:1	0	0	0	0	0	1	1	0	1	0	0
Vulpes macrotis mutica San Joaquin kit fox	G4T2 S2	Endangered Threatened		345 720	1020 S:7	0	0	0	0	0	7	7	0	7	0	0

**Appendix C.** CNPS plant list.

# **CNPS Rare Plant Inventory**



# **Search Results**

24 matches found. Click on scientific name for details

Search Criteria: <u>9-Quad</u> include [**3611848**:**3611941**:**3611858**:**3611951**:**3611838**:**3611931**:**3611932**:**3611952**:**3611942**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RAF PLANT RANK
<u>Atriplex cordulata</u> var. erecticaulis	Earlimart orache	Chenopodiaceae	annual herb	Aug- Sep(Nov)	None	None	G3T1	S1	1B.2
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	None	None	G2	S2	1B.1
<u>Atriplex persistens</u>	vernal pool smallscale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G2	S2	1B.2
<u>Brodiaea insignis</u>	Kaweah brodiaea	Themidaceae	perennial bulbiferous herb	Apr-Jun	None	CE	G1	S1	1B.2
<u>Delphinium</u> recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2
<u>Diplacus pictus</u>	calico monkeyflower	Phrymaceae	annual herb	Mar-May	None	None	G2	S2	1B.2
Eriogonum nudum var. murinum	mouse buckwheat	Polygonaceae	perennial herb	Jun-Nov	None	None	G5T2	S2	1B.2
<u>Eryngium</u> spinosepalum	spiny-sepaled button-celery	Apiaceae	annual/perennial herb	Apr-Jun	None	None	G2	S2	1B.2
<u>Erythranthe</u> acutidens	Kings River monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G2G3	S2S3	3
Erythranthe norrisii	Kaweah monkeyflower	Phrymaceae	annual herb	Mar-May	None	None	G2	S2	1B.3
Erythranthe sierrae	Sierra Nevada monkeyflower	Phrymaceae	annual herb	Mar-Jul	None	None	G2	S2	4.2
Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep(Oct)	FT	None	G1	S1	1B.2
Fritillaria striata	striped adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	СТ	G1	S1	1B.1
<u>Glyceria grandis</u>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.3
Goodmania luteola	golden goodmania	Polygonaceae	annual herb	Apr-Aug	None	None	G3	S3	4.2
Helianthus winteri	Winter's sunflower	Asteraceae	perennial shrub	Jan-Dec	None	None	G2?	S2?	1B.2
<u>Lasthenia</u> chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1
<u>Leptosiphon</u>	Madera	Polemoniaceae	annual herb	Apr-May	None	None	G3	S3	1B.2

2, 2:30 PM			CNPS Rare Plant Invento	ry   Search Results					
<u>Orcuttia inaequalis</u>	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FI	CE	GT	51	ТВ.Т
<u>Pseudobahia</u> <u>peirsonii</u>	San Joaquin adobe sunburst	Asteraceae	annual herb	Feb-Apr	FT	CE	G1	S1	1B.1
<u>Sagittaria sanfordii</u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	None	None	G3	S3	1B.2
<u>Streptanthus</u> farnsworthianus	Farnsworth's jewelflower	Brassicaceae	annual herb	May-Jun	None	None	G4	S4	4.3
<u>Tuctoria greenei</u>	Greene's tuctoria	Poaceae	annual herb	May- Jul(Sep)	FE	CR	G1	S1	1B.1

Showing 1 to 24 of 24 entries

# **Suggested Citation:**

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 1 December 2022].



ASM Project Number: 36790.13

21 December 2022

Ms. Emily Bowen, LEED AP Principal Environmental Planner Crawford & Bowen Planning, Inc. 113 N. Church Street, Suite 302 Visalia, CA 93291

**RE**: Addendum Report on Additional Survey for the Woodlake Sewer Improvements Project, Kern County, California

Dear Ms. Bowen:

This letter documents completion of a Class III inventory/Phase I survey for an additional 7,250 linear feet of proposed sewer line expansion for the Woodlake Sewer Improvements Project (Project), Tulare County, California (Figure 1). A 100-foot survey buffer was added to the proposed improvements, creating an Area of Potential Effects (APE) totaling 16.5-acres (ac). This letter serves as an addendum to an existing cultural report completed by Stantec in 2018 for the Project. In that report, Stantec made a recommendation of "No Historic Properties Affected" for the Project. Background to the proposed Project is available in the 2018 Stantec report. This inventory was conducted to assist in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). Peter A. Carey, M.A., RPA, served as Principal Investigator.

In summary, three previously recorded linear resources cross the APE. No evidence of two of the previously recorded resources (P-54-004034 and P-54-004632) exists within the APE. An unrecorded segment of a previously recorded resource, Wutchumna Ditch (P-54-004875), crosses the APE near the southwest end. The unrecorded segment of Wutchumna Ditch was recorded during the survey. The proposed Project will not result in any impacts to Wutchumna Ditch and, thus, no National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) eligibility evaluation/impacts assessment was performed. No cultural resources of any kind were identified within the remainder of the APE, and a determination of no adverse effect/no significant impact is recommended for the Project.

#### **Project Description and Location**

The City of Woodlake is proposing to expand sewer lines for a total of 7,250 linear feet. The expansion will include upsized lines, new trunk alignments, and a new trunk bypass sewer. The new trunk alignment will connect to the existing City of Woodlake Wastewater Treatment Facility

(WWTF) near the Woodlake Airport. The crossing of Wutchumna Ditch will be accomplished by boring under the ditch, thereby avoiding any impacts, either physical or visual, to the ditch.

The expansion will be taking place to the east of Bravo Lake along S Palm St, Ave 342, and Mulberry St. A small section of upsized line will occur along Ave 344 north of Bravo Lake. Much of the expansion project will occur along paved roads, with the exception of the portion along Mulberry St, which is graded dirt, and south of Mulberry St, which is open field.

#### **Records Search**

ASM consulted an existing records search from 2020 which covered the current APE. The records search was conducted by the Southern San Joaquin Valley Information Center (IC), California State University, Bakersfield. The records search was consulted to determine whether the APE had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on it. Further, the records search was consulted to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the project area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

According to the IC records search, five previous archaeological surveys had partially covered portions of the pipeline APE (Table 1). One additional study conducted by ASM Affiliates in 2020 also included portions of the APE (see Table 1). As a result of these studies, three historic-era resources were recorded which intersect the APE (Table 2). An additional eight previous archaeological surveys had been conducted within 0.5-miles of the APE (Table 3), resulting in the recordation of one additional resource, the Bravo Lake berm (P-54-004033), within that same radius. The 2020 records search consulted for this study is available in Appendix A, along with APE maps depicting previous surveys and resources in relation to the current APE.

Table 1. Survey Reports within the APE

Report No.	Year	Author (s)/Affiliation	Title
TU-00015	1995	JS Kus and CA Mader /California State University, Fresno	Negative Archaeological Survey Report for the Proposed Development of a Parcel of Land at 248 Valencia Blvd. (State Highway 65) in the City of Woodlake, Tulare County, California
TU-01013	1999	K Hovey and W Tackett/ Caltrans	Negative Archaeological Survey Report to Construct an Asphalt Concrete Overlay and Shoulder Backing on State Route 245 from State Route 198 to State Route 201 In Tulare County, California
TU-01196	2004	JS Kus / James S. Kus & Associates	Negative Archaeological Survey Report for the Woodlake Wastewater Treatment Facility Expansion
TU-01392	2009	AM Greenwald and K Goetter / LSA Associates, Inc.	Cultural and Paleontological Resources Study for the Woodlake Wastewater Treatment Facility Project, Woodlake, Tulare County, California
TU-01813	2017	KD Thomas / Helix Environmental	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CVL03488 (Acacia Street), 353 South Acacia Street, Woodlake, Tulare County, California (/ebI Project # 6117002307

Report No.	Year	Author (s)/Affiliation	Title
TU-00015	1995	JS Kus and CA Mader /California State University, Fresno	Negative Archaeological Survey Report for the Proposed Development of a Parcel of Land at 248 Valencia Blvd. (State Highway 65) in the City of Woodlake, Tulare County, California
N/A	2020	ASM Affiliates, Inc.	Class III Inventory/Phase I Survey, Woodlake Stormwater Basin Project, City of Woodlake, Tulare County, California

#### **Table 2.** Resources within the APE

Primary #	Туре	Description
P-54-004034	Structure	Visalia Electric Railroad
P-54-004632	Structure	Atchison Topeka and Santa Fe Railway
P-54-004875	Structure	Wutchumna Ditch

Table 3. Survey Reports within 0.5-miles of the APE

Report No.	Year	Author (s)/Affiliation	Title
TU-00008	1997	JS Kus /California State University, Fresno	Negative Archaeological Survey Report for the Woodlake Self-Help Project
TU-00014	1996	JS Kus and CA Mader /California State University, Fresno	Negative Archaeological Survey Report for the Woodlake HOME-95 Project
TU-00016	1996	JS Kus and CA Mader /California State University, Fresno	Negative Archaeological Survey Report for the Woodlake BEGIN Project
TU-00409	1981	D O'Connor / Caltrans	Archaeological Survey Report for Grade Raising Project Between Road 204 and Cypress Street, Near Woodlake, Tulare County, California
TU-00423	1994	J Miller/Peak & Associates, Inc.	Cultural Resources Assessment of the Proposed Woodlake Valley Apartments I and II, Woodlake, Tulare County, California
TU-01389	2009	RE Parr / Cal Heritage	Cultural Resource Assessment for the Replacement of Seven Deteriorated Power Poles on the Southern California Edison Company Aurora, Elk, Merryman, Milk, Redbanks, and Sargent 12kV Circuits, TulareCounty, California
TU-01394	2009	RE Parr / Cal Heritage	Cultural Resource Assessment for the Replacement of Eleven Deteriorated Power Poles on the Southern California Edison Company Bravo, Cairns, Campbell, Homer, Merryman, and Redbanks 12 kV Circuits Tulare County, California
TU-01445	2010	S Hudlow/ Hudlow Cultural Resource Associates	A Phase I Cultural Resource Survey for Woodlake Village II, City of Woodlake, California

#### **Methods and Results**

The APE was examined by walking parallel 15-m transects along the 100-ft wide survey corridor. Areas of denser vegetation were examined purposively and opportunistically to determine whether they contained cultural resources, using narrower transects, and with particular attention paid to rodent burrow spoils piles, cut-banks, cleared edges of disturbed areas, and other spots with better ground surface visibility.

12/21/2022 Emily Bowen Page 4 of 9

The Class III inventory/Phase I survey was completed on 2 December 2022 by ASM Assistant Archaeologist Maria Silva, B.A. The APE is located along paved and graded dirt roads (Figures 2 and 3) and open, though previously disturbed, areas. Ground visibility was generally good within the unpaved areas of the APE; however, patchy grasses and overgrowth along the edges of roadways and within open areas occasionally inhibited visibility.

Two previously recorded linear resources (P-54-004034 and P-54-004632) which are identified by the IC as intersecting with the APE are no longer present. P-54-004034 was also reported by Stantec (2018) to no longer be present within the APE. The recorded segments of both are now part of paved city roads. An unrecorded segment of previously recorded resource P-54-004875 (Wutchumna Ditch) intersects with the APE near the southwest end. This unrecorded segment was recorded during the survey. A DPR site form for this segment is available in Appendix B. A description of the resource is provided below.

*Wutchumna Ditch (P-54-004875)* 

In 2007, Pacific Legacy recorded one 380-ft long segment of Wutchumna Ditch (Canal). The segment is located east of the City of Visalia, approximately 9.5-miles southwest of the current segment. Based on a picture available in the site record, the ditch appears to be an unimproved, hand-dug earthen ditch.

The segment of the Wutchumna Ditch recorded here is approximately 60-ft wide at the top of the channel. The canal was carrying water at the time of the survey and so no accurate measurements of bottom width or depth could be made. The canal has been channelized and its walls lined with riprap consisting of fractured concrete slabs, brick segments, and other materials.

Construction on the Wutchumna Ditch was begun in 1872 by the newly formed Wutchumna Water Company. The ditch was constructed to carry water from the Kaweah River into Bravo Lake, and then west into the valley by way of an upper and lower division, all the way to a point 4-miles south of Goshen. The previously recorded segment of the ditch is part of the lower division, which was constructed in 1873 or 1874 and established a connection between St. Johns River and Visalia Creek (Grunsky 1898). The segment of the Wutchumna Ditch that intersects the APE is part of the main canal just as it empties west out of Bravo Lake.

The proposed Project will cross under Wutchumna Ditch via inverted siphon and not impact the ditch, either physically or visually, in any way. Crossing under Wutchumna Ditch will be accomplished by boring and placing pipe underneath the canal. Access points and inlet and outlet boxes with sluice gates will be placed along the pipeline route on the outer edges of the graded dirt canal roads. Since Wutchumna Ditch will not be impacted by the Project, no NRHP/CRHR eligibility evaluation/impacts assessment was performed.

#### **Summary and Recommendations**

A previously unrecorded segment of Wutchumna Ditch (P-54-004875) was recorded during the Class III inventory/Phase I survey of the APE. The newly recorded segment will not be impacted by the proposed Project in any way. No other resources were identified or recorded as a result of

12/21/2022 Emily Bowen Page 5 of 9

the survey. A determination of no adverse effect/no significant impact is recommended for the Project.

Please feel free to contact me if you have any questions.

Sincerely,

Peter A. Carey, M.A., RPA Director

#### References

Grunsky, Carl Ewald 1898 Irrigation Near Fresno, California. Irrigation Papers No. 18. Government Printing Office, Washington.

Kersten, Meagan 2018 City of Woodlake Sewer Improvements Project. Report prepared for City of Woodlake.

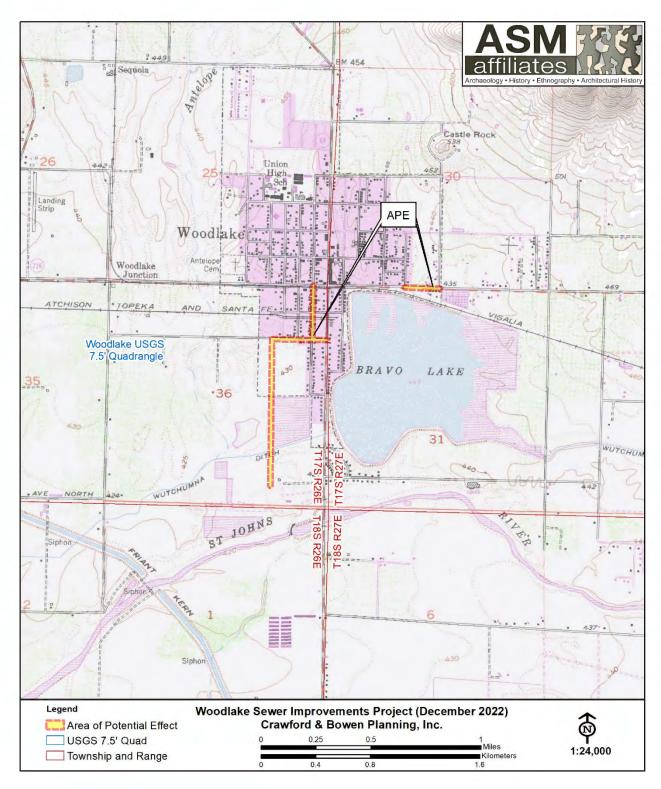


Figure 1. Location of the expansion APE for the Woodlake Sewer Improvements Project, Kern County, California.



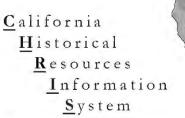
Figure 2. Overview of the APE along Ave 344. View west.



Figure 3. Overview of the APE along graded dirt road (Mulberry St). View north.

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Appendix A: Records Search Results Page is intentionally blank





Fresno Kern Kings Madera Tulare Southern San Joaquin Valley Information Center California State University, Bakersfield Mail Stop: 72 DOB 9001 Stockdale Highway Bakersfield, California 93311-1022 (661) 654-2289

E-mail: ssjvic@csub.edu Website: www.csub.edu/ssjvic

3/2/2020

David Whitley ASM Affiliates, Inc. 20424 West Valley Blvd., Suite A Tehachapi, CA 93561

Re: Crawford & Bowen – Woodlake Storm Basin Project

Records Search File No.: 20-088

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Woodlake USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: □ custom GIS maps ☒ shapefiles

Resources within project area:	P-54-004033, 004034, 004632
Resources within 0.5 mile radius:	P-54-004875
Reports within project area:	TU-00423, 01013, 01445, 01813
Reports within 0.5 mile radius:	TU-00008, 00014, 00015, 00016, 00409, 01196, 01389, 01392,
	01394

Resource Database Printout (list):	$oxed{\boxtimes}$ enclosed	$\square$ not requested	$\square$ nothing listed
Resource Database Printout (details):	$\square$ enclosed	$oxed{\boxtimes}$ not requested	$\square$ nothing listed
Resource Digital Database Records:	$\square$ enclosed	$oxed{\boxtimes}$ not requested	$\square$ nothing listed
Report Database Printout (list):	⊠ enclosed	$\square$ not requested	$\square$ nothing listed
Report Database Printout (details):	oxtimes enclosed	$\square$ not requested	$\square$ nothing listed
Report Digital Database Records:	$\square$ enclosed	$oxed{\boxtimes}$ not requested	$\square$ nothing listed
Resource Record Copies:	oxtimes enclosed	$\square$ not requested	$\square$ nothing listed
Report Copies:	$\square$ enclosed	□ not requested	$\square$ nothing listed
OHP Built Environment Resources Directory:	⊠ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	$\square$ enclosed	$\square$ not requested	oxtimes nothing listed
CA Inventory of Historic Resources (1976):	$\square$ enclosed	$\square$ not requested	□ nothing listed

**Caltrans Bridge Survey:** 

Not available at SSJVIC; please see

http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

**Ethnographic Information:** Not available at SSJVIC

<u>Historical Literature:</u> Not available at SSJVIC

<u>Historical Maps:</u>
Not available at SSJVIC; please see

http://historicalmaps.arcgis.com/usgs/

**Local Inventories:**Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see

http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or

http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see

http://www.slc.ca.gov/Info/Shipwrecks.html

Soil Survey Maps: Not available at SSJVIC; please see

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Celeste M. Thomson Coordinator



## **Report List**

#### SSJVIC Record Search 20-088

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TU-00008	NADB-R - 1141081	1997	Kus, James S.	Negative Archaeological Survey Report for the Woodlake Self-Help Project	California State University, Fresno	
TU-00014	NADB-R - 1141082	1996	Kus, James S. and Mader, Claudia A.	Negative Archeaological Survey Report for the Woodlake HOME-95 Project	California State University, Fresno	
TU-00015	NADB-R - 1140746	1995	Kus, James S. and Mader, Claudia A.	Negative Archaeological Survey Report for the Proposed Development of a Parcel of Land at 248 Valencia Blvd. (State Highway 65) in the City of Woodlake, Tulare County, California	California State University, Fresno	
TU-00016	NADB-R - 1141084	1996	Kus, James S. and Mader, Claudia A.	Negative Archaeological Survey Report for the Woodlake BEGIN Project	California State University, Fresno	
TU-00409	Caltrans - 06-TUL- 216 PM 13.0-13.6 CU 06200 EA 206301	1981	O'Connor, Denise	Archaeological Survey Report for Grade Raising Project Between Road 204 and Cypress Street, Near Woodlake, Tulare County, California	California Department of Transportation	
TU-00423		1994	Miller, Jeff	Cultural Resources Assessment of the Proposed Woodlake Valley Apartments I and II, Woodlake, Tulare County, California	Peak & Associates, Inc.	
TU-01013	Caltrans - 06-TUL- 245 PM 0.0/12.0 EA 06-44810K	1999	Hovey, Kevin and Tackett, Will	Negative Archaeological Survey Report to Construct an Asphalt Concrete Overlay and Shoulder Backing on State Route 245 from State Route 198 to State Route 201 In Tulare County, California	California Department of Transportation	
TU-01196		2004	Kus, James S.	Negative Archaeological Survey Report for the Woodlake Wasterwater Treatment Facility Expansion	James S. Kus & Associates	
TU-01389	Submitter - CH- 076/77; Submitter - WO 6051- 4800, E-4857; Submitter - WO 6051- 4800, F-4807	2009	Parr, Robert E.	Cultural Resource Assessment for the Replacement of Seven Deteriorated Power Poles on the Southern California Edison Company Aurora, Elk, Merryman, Milk, Redbanks, and Sargent 12kV Circuits, Tulare County, California	Cal Heritage	
TU-01392	Submitter - LSA Project #CGU0803	2009	Greenwald, Alexandra M. and Goetter, Karin	Cultural and Paleontological Resources Study for the Woodlake Wastewater Treatment Facility Project, Woodlake, Tulare County, California	LSA Associates, Inc.	

Page 1 of 2 SSJVIC 2/25/2020 11:10:15 AM

## **Report List**

#### SSJVIC Record Search 20-088

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TU-01394	Submitter - CH-080; Submitter - WO 6051- 4800; F-4803, F- 4805, F-4820	2009	Parr, Robert E.	Cultural Resource Assessment for the Replacement of Eleven Deteriorated Power Poles on the Southern California Edison Company Bravo, Cairns, Campbell, Homer, Merryman, and Redbanks 12 kV Circuits Tulare County, California	Cal Heritage	
TU-01445		2010	Hudlow, Scott M.	A Phase I Cultural Resource Survey for Wooklake Village II, City of Woodlake, California	Hudlow Cultural Resource Associates	
TU-01813	OHP PRN - FCC_2017_0718_007	2017	Thomas, Katherine D.	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CVL03488 (Acacia Street), 353 South Acacia Street, Woodlake, Tulare County, California (/ebl Project # 6117002307	Helix Environmental Planning	

Page 2 of 2 SSJVIC 2/25/2020 11:10:15 AM

## **Resource List**

## SSJVIC Record Search 20-088

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-54-004033		Resource Name - Bravo Lake; OHP PRN - FHWA010730A	Structure	Historic	HP22	2001 (Kelly Hobbs, Caltrans District 6); 2017 (Sandra Speas, Victoria Harvey, Stantec)	
P-54-004034		Resource Name - Visalia Electric Railroad; OHP PRN - FHWA010730A; OHP PRN - FHWA000411B	Structure	Historic	AH07	(M. O'Neill, M. Walton, Pacific Legacy); 1999 (Douglas W. Dodd, Cal Trans); 2001 (Kelly Hobbs, Cal Trans); 2017 (Sandra Speas, Victoria Harvey, Stantec)	TU-01675
P-54-004632	CA-TUL-002885H	Resource Name - JTU-204; Resource Name - Atchison, Topeka, Santa Fe Railroad Branch Line; Resource Name - Historic Railroad Segment	Structure, Object, Site	Historic	AH04; AH07	1995 (Carrie D. Wills, Allen Estes, William Self Associates); 2001 (S. Ashkar, C. Fish, Jones & Stokes); 2007 (M. Armstrong, R. Ottenhoff, P. Paramoure, L. MacDonald, Pacific Legacy, Inc.); 2009 (Steven J. Melvin, Rebecca Flores, JRP Historical Consulting, LLC.); 2012 (M. O'Neill, M. Walton, Pacific Legacy, Inc.)	
P-54-004875	CA-TUL-003027H	Resource Name - PL-09; Resource Name - Wutchumna Ditch	Object	Historic	HP20	2007 (R. Ottenhoff, L. MacDonald, P. Paramoure and M. Armstrong, Pacific Legacy, Inc.)	

Page 1 of 1 SSJVIC 2/25/2020 11:11:02 AM

State of California & Natural Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary# P-54-004034 (Update) HRI # Trinomial

## CONTINUATION SHEET

Property Name:

\*Resource Name or # Visalia Electric Railroad

Page 1 of 2

\*Recorded by: Sandra Speas & Victoria Harvey

\*Date: 10/2/2017

■ Update □ Continuation

This site consists of a Visalia Electric Railroad grade that was constructed between 1905 and 1907. This resource was originally recorded by Douglas Dodd, an architectural historian with Caltrans, in 1999 and describes the site as significantly deteriorated. The few features of the railroad's original construction that remain include a single track railroad grade, crossing signals, a bridge, and rail segments. This resource was updated by M. O'Neil and M. Walton of Pacific Legacy but the date of the update is unknown. This update explains that the corridor of the railway still exists but "the railway and all features have been removed". In 2001, Kelly Hobbs, an architectural historian with Caltrans, updated the portion of this site that is located approximately 200' north of Bravo Lake. Hobbs notes that all features associated with the Visalia Electric Railroad, within the APE, have been removed. However, a section of standard gauge steel track lies adjacent to the APE but does not provide a specific location for the tracks.

Sandra Speas and Victoria Harvey updated this site on October 2, 2017 during a road survey of a proposed sewer line in Woodlake, Ca (see attached survey map). A portion of Hwy. 216, which is approximately 200' north of this resource, was surveyed and resulted in negative findings. The portion of the original railway grade that is directly north of Bravo Lake is currently being utilized for recreation activities such as bicycling and gardening. The Botanical Gardens are located adjacent to a bike path that was built on top of the railway grade. The gardens have been maintained by volunteers of the community for 15 years. This resource is located within the APE however, much of the railway grade has been planted, paved, or built over. There is no evidence of the grade so it will not be affected.



Description: View of Woodlake Botanical Gardens. Bike path runs through middle of picture. Photo taken from the top of Bravo Lake berm on the northwest side of the lake.

View Toward: NE

Date: 10/2/2017

Frame#

20171002 135828

## UPDATE

State of California & Natural Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary# P-54-004034 (Update) HRI # Trinomial

## **CONTINUATION SHEET**

Property	Marso:
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\*Resource Name or # Visalia Electric Railroad

Page 2 of 2

## Survey Map



## UPDATE

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

### PRIMARY RECORD

Primary # P-54-004034

HRI#

Trinomial

NRHP Status Code 6Y

Other Listings **Review Code** 

Reviewer

Date

Page 1 of 2

\*Resource Name or #:

P1. Other Identifier: Visalia Electric Railway, PL-44 (Armstrong and Ottenhoff 2007)

\*P2. Location: ☑ Not for Publication ☐ Unrestricted \*a. County: Tulare \*b. USGS 7.5' Quad: Woodlake Date: 1952 (revised 1969) T 17S; R 26E; NW 1/4 of SW 1/4 of Sec 12; M.D. B.M.

c. Address: None City: Elderwood d. UTM: Zone11N: 310341mE/4037177mN (N end): 310341mE/4037147mN (S end): (Map)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 480 feet amsl The location of the original corridor discussed in this record is east of Seville and Colvin Mountain, south of Elderwood, west of Lone Oak Mountain, and northwest of Sentinel Butte. From Seville, on Hwy 201 (Avenue 376), travel east and cross Hwy 69 (Millwood Drive) and turn right (south) on Road 204. The shoulder, on the east side of Road 204, was the original corridor for the Visalia Electric Railway (VE). Travel south along Road 204, for approximately .75 miles to the documented section.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This 100 foot long north/south segment of the resource, on the east side of Road 204, no longer exists. As well, the resource is no longer present to the north or south on Road 204 (see photos below). The corridor still appears to be present on the shoulder (21'wide) of the road (25'-wide), as far as the width is still present to accommodate the railway, but the railway and all features have been removed. The east side of Road 204 has been planted in olive trees. The Visalia Electric Railroad was a subsidiary of the Southern Pacific Railroad, and operated in Tulare County from 1906 to 1990. The line originated in Exeter and extended to the east to Lemon Cove and Terminus, to the south to Strathmore, to the north to Elderwood and west to Visalia. Operation of the line between Visalia and Exeter was by joint track agreement with Southern Pacific. The railroad originally operated as an agriculturerelated transportation hauler and thereafter it became a passenger carrier as well. In 1924 passenger service was discontinued and electrical operation was abandoned in 1945 in exchange for operation of diesel locomotives. Two segments on the Visalia Electric Railway have been previously documented in Tulare County (Armstrong and Ottenhoff 2007, Hobbs 2001). See both site records for historical information and location of the segments in Woodlake and Merryman. The resource has been evaluated as ineligible (5-30-2000) for the NRHP and not evaluated for the CRHR.

\*P3b. Resource Attributes: (List attributes and codes) AH7 (Railroad Grade)

\*P4. Resources Present: □Building Structure □ Object □Site □District □Element of District □Other (Isolates, etc.)

P5b. Description of Photo: DSCN 149: View of east side of Road 204 where the corridor for the Visalia Electric Railway still exists (shoulder width is wide enough to accommodate the railway); shot N. Camera #1: 148-151; Camera 2: 1175-1176.

\*P6. Date Constructed/Age and Sources: **⊠Historic** □Prehistoric □Both

P7. Owner and Address: Unknown

\*P8. Recorded by: M. O'Neill and M. Walton Pacific Legacy, Inc., 2641 HWY 4, Suite 2B Arnold, CA 95223

**DSCN 149** 

\*P10. Survey Type: (Describe) Intensive pedestrian survey \*P11. Report Citation:

\*Attachments: 

NONE 

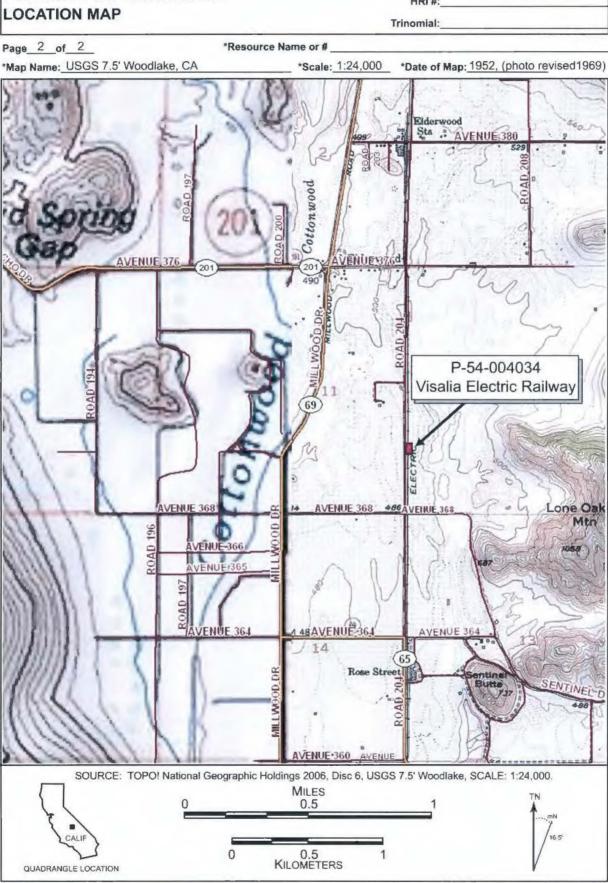
Location Map 

Sketch Map □Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature □Photograph Record □ Other (List):



DSCN 1175: View of east side (shoulder) of Road 204, which was the original corridor for the VE; olive trees outside the ROW; shot S.

State of California - The Resources Agency	Primary #:	P-54-004034	
DEPARTMENT OF PARKS AND RECREATION	HRI #:	7 07 00 100 1	
LOCATION MAP			
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State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION		Primary #: HRI #	P-54-004034	
PRIMARY REC	ORD	Trinomial		
	SUPPLEMENT*	NRHP Status Cod Other Listings	de:	
	Ontif Control of	Review Code	Reviewer	Date
*Resource Name or #:	Visalia Electric Railroad	1 1	Map	Reference No.: 1
P1. Other Identifier:	County/Rout	e/Postmile: 06-TUL-198	8, P.M. 21,4/26 8	
*P2Location:	Tulare			
*a. County b. Address	parallel to State Route 198 between	een PM 21.5 and PM 23	3.0	
	Zip 93221	cen i wi 21.5 and i wi 2.	3.0	
*c. UTM: USGS O	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	d. UTM: N/A		
*e. Other Location	al Data:	W-16-2-4-16		
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	Road 220 and Avenue 300. The railro			
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Tulare County," P.M. 21.4/26.8, October 1999, by Douglas W. Dodd

## BUILDING, STRUCTURE, AND OBJECT RECORD

Map Reference No.: 1

\*Resource Identifier: Visalia Electric Railroad Historic Name: Visalia Electric Railroad B1

Common Name: Visalia Electric Railroad B2.

B3. Original Use: Railroad line

\*B5. Architectural Style: N/A Construction History: \*B6.

\*NRHP Status Code: 6

Original Location:

County/Route/Postmile: 06-TUL-198, P.M. 21 4/26.8

B4. Present Use: Abundened/agriculture

The Visalia Electric Railroad, an interurban rail line connecting Visalia, Exeter, and Lemon Cove, was constructed in 1905 and 1996. John Hays Harrimond, a director of the Mount Whitney Power Company, conceived the project in 1903. In 1904, he signed an agreement with the Southern Pacific Company, which purchased the franchises, rights-of-way, planning maps, and design work undertaken by Hammond. The Southern Pacific Company organized and incorporated the Visalia Electric Railroad as a wholly owned subsidiary. Construction of the main line between Exeter and Lemon Cove commenced in 1905 and was completed in July 1906. Initially, steam locomotives provided motive power, until the system could be fully electrified. In 1908, with the installation of the system's catenary wires, the railroad switched to electric motor cars which hauled passenger and express cars, and a heavier-duty Baldwin-Westinghouse electric Locomotive for hadling freight. In 1908 and 1909, the Visulia Electric constructed the Terminus Branch, which extended its tracks from Lemon Cove to a popular resort area on the Kaweah River, known as Terminus Beach. Between 1909 and 1910, the railroad built an 11-mile branch from Letnon Cove to Redbanks, and in 1913-1915 completed a branch line to Elderwood. In 1916, the Visalia Electric looked south and expanded by building a long branch line (which was never electrified) from the junction at Wirts, just east of Exeter, to Strathmore.

\*B7. Moved? ■ No ☐ Yes ☐ Unknown

Related Features: \*B8. B9a. Architect: N/A

\*B10. Significance: Theme: N/A

Period of Significance: N/A

Property Type: N/A

B9b. Builder: Unknown Area: N/A

Date: N/A

Applicable Criteria: N/A

Although the railroad was significant on a local level for its role in promoting the development of towns, agriculture, citriculture, and tourism in the foothill country of Tulare County, what remains of the railroad appears to lack sufficient integrity of design and setting to make it eligible for listing in the National Register of Historic Places. All of the overhead electrical catenary wires have been removed, and no physical remains of the line electrical system are extant. The tracks have all been removed, except for at grade crossings, where the rails remain embedded in the road pavement. What rails have survived, however, are not the original 50-pound and 75-pound rails of the electric interurban system, but are the later heavy rails of the dieselized freight railroad that the line became after 1945. At Road 22% crossing gates remain, but are no longer functioning and have broken guard arms. Even the rail bed--er grade--has had its integrity diminished. Several segments of the original grade in or near the APE have been obliterated. In these cases, the line can through an orchard and the land owner has removed the railroad grade, leveled it to match the surrounding land, and planted orchard trees where the grade used to be. Examples of this practice can be found near Postnule 20.50, south of the point where the old railroad alignment crosses Route 198, west of the alignment's intersection with Road 220, and south of the alignment's intersection with Avenue 300. Due to its loss of integrity of design and setting, the alignment of the Visalia Electric Rullroad does not appear eligible for listing in the National Register of Histone Places, nor is it a historic resource for the purposes of CEQA.

B11. Additional Resource Attributes: N/A

B12. References: Renovich, Stephen B. "Visalia Electric Railroad." The Western Railroader 15 (June 1959): 3-14; "Visalia Electric Railroad," Los Tulares, 22 (March 1955): 1,4.

B13. Remarks: N/A

B14. Evaluator: Douglas W. Dodd Department of Transportation 3402 N. Blackstone Av., Ste. 201 Fresno, CA 93726

(559) 243-8209

Date of Evaluation: September 15, 1999

(This space reserved for official comments.)

ALLAUL 300 550 Road

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

## PRIMARY RECORD

Primary #:	P-54-01	14034	
Trinomial NRHP Status Code	9.		-
Other Listings _			
Review Code	Reviewer	Date	

11-5-1-1-11-Wa

\*Resource Name or #: Visalia Electric Railroad Map Reference No.: 1

P1. Other Identifier: County/Route/Postmile: 06-TUL-00

\*P2.

Location: Woodlake

\*a. County Tulare

Address N/A b.

Zip 93286

Woodlake City

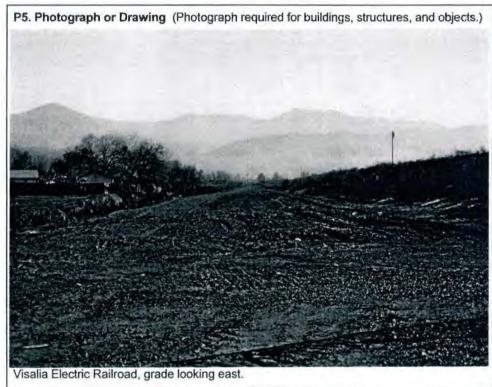
\*c. UTM: USGS Quad: Woodlake

\*e. Other Locational Data (APN #): N/A \*P3a.

Description: The resource consists of a grade that carried the Visalia Electric Railroad. Where this grade still exists in the area of potential effects (APE), it measures approximately one foot in height and ten feet in width (Photo Sheet ref. 1). In sporadic locations (Photo Sheet ref. 2 and 3), the grade has been scraped with a harrow, plow or other similar device. The Visalia Electric Railroad was an electric interurban railroad, all features associated with such operation in the APE have been removed, and these features would include electric overhead, crossing arms, bridges/culverts, and buildings. Adjacent to the APE a section of standard gauge steel track lies in an at-grade crossing (Photo Sheet ref. 4). A better representation of the grade also exists outside the APE and is shown for reference (Photo Sheet ref. 5).

d. UTM: N/A

\*P3b. Resource Attributes: AH7



- \*P4. Resources Present: Building ☐ Structure ■ Object ☐ District ☐ Element of ☐ Site District
- Description of Photo: VE grade looking east, Woodlake.
- \*P6. Date Constructed/Age: 1910 ■Historic
- Owner and Address: City of Woodlake
- \*P8. Recorded by: Kelly Hobbs, Architectural Historian, Caltrans District 6, 3402 N. Blackstone, Ste. 201, Fresno, CA 93726. (559) 243-8209
- \*P9. Date Recorded: January 2001
- \*P10. Type of Survey: ■ Intensive Describe: HRER

Report Citation: HISTORIC RESOURCE EVALUATION REPORT FOR City of Woodlake Bicycle Path 06-FRE-CR-0 E.A.: 06-965100-3ENVR-6ENVRREV

\*Attachments: Building, Structure, and Object Record, Photograph Record

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary #: HRI#:

## **BUILDING, STRUCTURE, AND OBJECT RECORD**

\*NRHP Status Code: 6

\*Resource Identifier: Visalia Electric Railroad Grade

B1. Historic Name: N/A

B2. Common Name: N/A B3. Original Use: Railroad County/Route/Postmile: 06-TUL-00 B4. Present Use: Abandoned

\*B5. Architectural Style: N/A \*B6. Construction History:

The Visalia Electric Railroad (VE) was incorporated in 1904 by the Southern Pacific Railroad. Construction began in 1905, and by 1907, twenty-one miles of track was in operation between Exeter and Lemon Cove. The railroad was extended by an addition of track to Redbanks in 1910, among other additions to Elderwood, Strathmore, and Wirt's Junction. It eventually included more than 45 miles of track.

The Redbanks branch included the section that runs through the city of Woodlake. The track laid through Woodlake was standard gauge fifty-pound rail on wooden ties and laid over sand ballast. The electric overhead consisted of wood poles with wooden brackets spaced 120 to 150 feet apart and supported a single catenary, which supplied power for locomotion from a 7/16-inch steel messenger cable. The catenary was hung from the overhead at twenty-two feet above the rails. The VE originated with steam power but was converted to electricity 1908 with the introduction of a Westinghouse 15-cycle 3300-volt alternating current power plant. As service demand decreased the VE's parent company dismantled the electric overhead and diesel service began in 1945. The VE continued operation until the early 1990swhen it was abandoned. In January 1996 the steel track was removed.

\*B7. Moved? ■ No ☐ Yes ☐ Unknown

Date: N/A

Original Location:

\*B8. Related Features:

No structures exist within the APE. One section of steel track lies in a former at-grade crossing outside of the APE

B9a. Architect: Southern Pacific Railroad
\*B10. Significance: Theme: Transportation

B9b. Builder: Visalia Electric Railroad

Area: Woodlake, CA

Significance: Theme: Transportation Period of Significance: 1908-1945

Property Type: AH7 Applicable Criteria: N/A

The Visalia Electric Railroad was the creation of John Hays Hammond, a director of the Mt. Whitney Power Company. Unable to secure private financing, Hammond persuaded the Southern Pacific Railroad (SP) to build the line. The VE began as a diesel powered railroad but was converted in 1908 to electricity. Despite its primary existence to serve citrus packing industry it provided passenger service throughout its system and additional service between Woodlake and Visalia over the SP lines until 1924. Many of the trolleys that provided passenger service were transferred to the Pacific Electric Railroad in Southern California. Freight service increased and at the height of its existence, prior to World War II, 2000 carloads of freight was handled on the railroad annually. But decreasing during World War II caused the Southern Pacific called for the removal of the electric overhead and conversion to diesel. The VE remained in use until the early 1990s as a freight only railroad. (Continued)

B11. Additional Resource Attributes: N/A

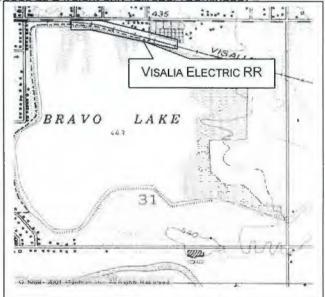
B12. References:

B13. Remarks: N/A B14. Evaluator: Kelly Hobbs

Department of Transportation 3402 N. Blackstone, Ste. 201

Fresno, CA 93726 (559) 243-8209

(This space reserved for official comments.)



# P -5 4 - 00 4034

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION CONTINUATION SHEET

Primary # HRI # Trinomial

Page	30	f 3		
			10	 110

\*Resource Name or # Visalia Electric Railroad

\*Recorded by: Kelly Hobbs \*Date January 2001 ■Continuation □ Update

(B10 Significance continued) The section of the Visalia Electric Railroad (VE) grade that runs through the City of Woodlake does not appear eligible for inclusion in the National Register of Historic Places. Its construction beginning in 1905 is not associated with events that have made significant contributions to the broad patterns of our history. There was already rail service in the vicinity and the use of electricity to power the railroad does not represent a significant event in history due to the construction of other electrified interurban railroads throughout the Central San Joaquin Valley and California (Criterion A). Although John Hays Hammond (an official of the Mt. Whitney Power Company) initially suggested the construction of the VE, it was constructed by the Southern Pacific Company, which purchased the rights-of-way and was in control of its location, design, and operation. The SP maintained the track and rolling stock through the employees of the VE, however, when decisions were made affecting service and purchase of equipment it was usually left to the parent company. Therefore its existence, although established in thought by Mr. Hammond, was a creation by an already existing railroad company that was continually extending interurban rail service throughout the Central San Joaquin Valley (Criterion B). The VE grade neither embodies the distinctive characteristics of a type period, or method of construction. It does not represent the work of a master, and lacks high artistic value. Finally it does not represent a distinguishable entity (Criterion C). Although the VE grade remains in its original location, it lacks six other aspects of integrity including setting, design, materials, workmanship, and feeling and association; it has been severely altered to the point of destruction. Its overhead and canternary were removed in 1945. The VE continued diesel service until the early 1990s but on January 5, 1996 the steel track was removed for scrap. Since then the grade has been scraped, plowed and otherwise removed from an existence that would reflect its history.

P-54 004054.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

PHOTO SHEET

Visalia Electric Railroad 06-Tul-00

Primary # HRI#

Trinomial

EA 965100

\*Taken By: Kelly Hobbs

\*Resource Name

\*Date: January 2001



Reference 2 Visalia Electric Railroad Grade, Woodlake, California Looking East



Reference Number 3 Visalia Electric Railroad Grade, Woodlake, California Looking West

P-54-004034

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

**PHOTO SHEET** 

Visalia Electric Railroad 06-Tul-00

HRI#

Trinomial

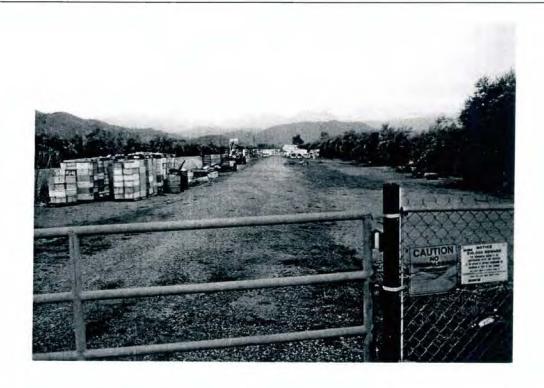
Primary #

EA 965100

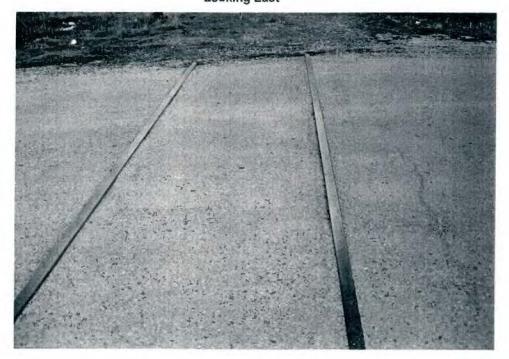
\*Taken By: Kelly Hobbs

\*Resource Name

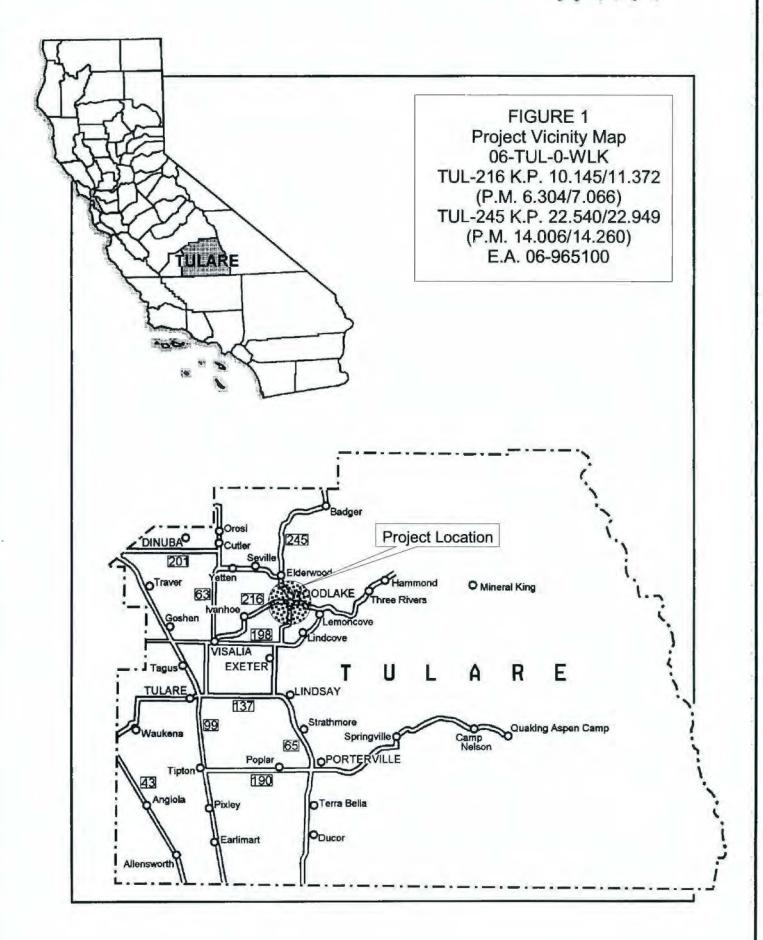
\*Date: January 2001



Reference 4 Visalia Electric Railroad Grade, Woodlake, California **Looking East** 



Reference Number 5 Visalia Electric Railroad Grade, Woodlake, California **Looking East** 



# OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION

P-54-004034



P.O. BOX 942896 SACRAMENTO, CA 94296-0001 (916) 653-6624 Fax: (916) 653-9824 calshpo@ohp.parks.ca.gov

August 28, 2001

Reply To: FHWA010730A

Michael G. Ritchie, Division Administrator U.S. Department of Transportation Federal Highway Administration California Division 980 Ninth Street, Suite 400 Sacramento, CA 95814-2724

Re: Determination of Eligibility and Effect for the Proposed Construction of a Bicycle Path along the Berm of Bravo Lake, Woodlake, CA

Dear Mr. Ritchie:

You have provided me with the results of your efforts to determine whether the project described above may affect historic properties. You have done this, and are consulting with me, in order to comply with Section 106 of the National Historic Preservation Act and implementing regulations codified at 36 CFR Part 800.

The Federal Highway Administration (FHWA) has determined that there are no archeological properties located within the APE. The FHWA has also determined that the following properties are not eligible for the National Register of Historic Places (NRHP) and that no historic properties will be affected by this undertaking:

- Bravo Lake
- Visalia Electric Railroad

Based on review of the submitted documentation, I have the following comments:

- 1) The project's area of potential effect (APE) is defined appropriately.
- 2) The cultural resource studies conducted to date are adequate.
- 3) The properties listed above are not eligible for the NRHP.
- 4) There are no other properties within the APE that are eligible for the NRHP.
- 5) No historic properties will be affected by this undertaking.

Thank you for considering historic properties during project planning. If you have any questions, please call Natalie Lindquist at (916) 654-0631 or e-mail at <a href="mailto:nlindquist.n

Sincerely.

Dr. Knox Mellon State Historic Preservation Officer



### U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION CALIFORNIA DIVISION 980 Ninth Street, Suite 400 Sacramento, CA. 95814-2724 July 27, 2001

P-54-604034

IN REPLY REFER TO HDA-CA File #: 06-TUL-0-WLK Document #: P36209

## CERTIFIED RETURN RECEIPT REQUESTED: 7000 0520 0024 1902 1285

Dr. Knox Mellon, State Historic Preservation Officer Office of Historic Preservation P.O. Box 942896 Sacramento, CA 94296-0001

JUL 3 0 2001

Dear Dr. Mellon:

SUBJECT: CITY OF WOODLAKE BICYCLE PATH; TULARE COUNTY

The City of Woodlake, in conjunction with the California Department of Transportation and the Federal Highway Administration (FHWA) is proposing to construct a bicycle path in the city along the berm of Bravo Lake. The path would cross State Route 216 at Pomegranate Avenue. continue on Danielle Way and end at Sierra Avenue. Additional work includes construction of curbs and gutters on State Route 245 (Valencia Boulevard) between Deltha Avenue and the Wutchumna Ditch and on State Route 216 (Naranjo Boulevard) between Valencia Boulevard and Magnolia Street. The project includes landscaping, new signage and construction of irrigation ditches on the berm.

Enclosed is one copy of the Historic Property Survey Report. Two properties, Lake Bravo and the Visalia Electric Railroad grade, were formally evaluated to determine their eligibility for listing on the National Register of Historic Places (NRHP). FHWA has determined that these two properties are not eligible. Therefore, no historic properties would be affected by the proposed project. In addition, no archaeological resources were discovered during field investigations.

FHWA is requesting your concurrence that the Area of Potential Effect is adequately identified, that, to date, adequate good-faith efforts have been done to identify cultural resources, that the berm around Lake Bravo and the Visalia Electric Railroad grade are not eligible for listing on the NRHP and no historic properties will be affected by the work.

If you have any questions, contact Brian Zewe at (916) 498-5348 or Larry Vinzant at (916) 498-5048.

Sincerely,

Michael G. Ritchie Division Administrator

Enclosure

STATE OF CALIFORNIA - THE RESOURCES AGENCY

P.O. BOX 942896

SACRAMENTO, CA 94295-0001 (916) 653-6624 Fax: (916) 653-9824 calshpo@ohp.parks.ca.gcv

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION

P32201

GRAY DAVIS. Governor

P-54-604034



May 3, 2000

Reply To: FHWA000411B

Michael G. Ritchie, Division Administrator U.S. Department of Transportation Federal Highway Administration California Division 980 Ninth Street, Suite 400 Sacramento, CA 95814-2724

Re: Determinations of Eligibility for the Proposed Rehabilitation of the Existing Roadway and Widening of the Existing Shouders on a Five-Mile Section of State Route 198 West of Lemon Cove, Tulare County, CA

Dear Mr. Ritchie:

You have provided me with the results of your efforts to determine whether the area of potential effect (APE) for the undertaking described above contains historic properties. You have done this, and are consulting with me, in order to comply with Section 106 of the National Historic Preservation Act and implementing regulations codified at 36 CFR Part 800.

The Federal Highway Administration (FHWA) has determined that there are sixteen properties located within the APE. Eight properties were treated under the 1989 Memorandum of Understanding (MOU) Regarding Evaluation of Post-1945 Buildings, Moved Pre-1945 Buildings and Altered Pre-1945 buildings, Updated in the Interim Post-1945 Guidelines of July 7, 1997. The Yokohl Creek Bridge was previously determined not eligible for the National Register of Historic Places (NRHP) as part of the 1986 Caltrans Historic Highway Bridge Survey. Two standard-design concrete box culverts were treated under the Memorandum of Understanding (MOU) for Bridge Evaluations dated December 12, 1980. A historic marker for the Trans-Sierra Jordan Toll Trail, erected in 1977, did not require evaluation because it is less than fifty years old. The FHWA has also determined that the following properties are not eligible for the (NRHP):

- Visalia Electric Railroad, Exeter, CA
- Residence at 22370, Avenue 300, Exeter, CA
- Foothill Ditch, Exeter, CA
- Old Foothill Ditch, Exeter, CA

Based on review of the submitted documentation, I have the following comments:

- The project's area of potential effect (APE) is defined appropriately.
- The cultural resource studies conducted to date are adequate.
- 3) The properties listed above are not eligible for the NRHP.
- 4) There are no other properties within the APE that are eligible for the NRHP.

Since there are no historic properties within the APE, the FHWA could have concluded this consultation with one submittal by including a finding of "no historic properties affected" [36 CFR §800.4(d)(1)]. In order to expedite closure of this consultation I will assume that the FHWA has made this finding. If this assumption is incorrect, please



P-54-004034

Mr. Ritchie May 3, 2000 Page 2

advise me within 10 days after receipt of this letter. In the future please explicitly state in your cover letter what your effect determination is.

Thank you for considering historic properties during project planning. If you have any questions, please call Natalie Lindquist at (916) 654-0631 or e-mail at nlind@ohp.parks.ca.gov.

Sincerely,

Daniel Abeyta, Acting State Historic Preservation Officer

PROJ.REVW AND RES. PROT. UNIT

LOG-OUT PRINTOUT

NATALIE THOMPSON

Undertaking Identifier: FHWA000411B

07/14/00 Page:

Undertaking Name: 06-TUL-198;21.5/26.7,SR 198 LEMONCOVE REHAB; WIDEN SHOULDERS

Applicant: FHWA

city: WOODLAKE County(ies): TUL

Due: 05/11/00

TRANSACTION HISTORY

DATE OUT BY ACTION DATE IN TO \_\_\_\_\_ \_\_\_\_\_ ----\_\_\_\_\_\_ 04/11/00 NT - 05/03/00 NT C5, D7

\* \* There are 4 Hist. Prop. and no Arch. Sites involved in this undertaking :

\*\*\*\*\*\*\*\*\*\*\*\*\*

Property number: 124970 VISALIA ELECTRIC RAILROAD

Address:

SR 198 93221

Vicinity:

Parcel #:

# of Props:

Pres. Use: V

Builder:

05/03/00

CHL #:

X-Street:

Category: S F Owner Type:

Other Recognition:

Dates of Construction: 1905 - 1907 Architect:

Historic Attributes: ENGINEER.STRUCT.

Eth:

NATALIE THOMPSON

County: TUL

Previous Determinations on this property:

Program Prog. Ref Number Eval Crit Eval-date Evaluator 05/03/00 HIST.RES. DOE-54-00-0001-0000 6Y2 NATALIE THOMPSON

PROJ. REVW. FHWA000411B 6Y2 State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-54-004632/54-004016/54-002183

HRI#

Trinomial CA-TUL-2885H NRHP Status Code 6Y

Other Listings Review Code

Reviewer

Date

Page 1 of 8

\*Resource Name or #:

P1. Other Identifier: Atchenson, Topeka, and Santa Fe Railroad Grade; PL-05 (Armstrong and Jackson 2008); P-54-4632 (TUL-2885H [Melvin and Flores 2009]); P-54-4016 Jones & Stokes 2001); P-54-2183 (Wills and Estes 1995).

\*P2. Location: 

Not for Publication 

Unrestricted

c. Address: No Address City: Yettem

\*a. County: Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad: Ivanhoe Date: 1950 (revised 1969)

T 16S; R 25E; N 1/2 of Sec 34; M.D. B.M.

Zip:

d. UTM: Zone: 11S; 299269 mE/ 4041443 mN (Garmin GPSmap 60CSx G.P.S. NAD 83)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 350 feet amsl from Visalia by taking Highway 198 to the Highway 63 North exit, and proceeding north along Highway 63 for approximately 11 miles to the intersection with Highway 201. Turn east on Highway 201 and drive approximately 1.5 miles to the intersection with Road 144. Turn north on Road 144 and drive approximately 1 mile to the intersection with Avenue 392. Turn east on Avenue 392 and proceed for approximately 1500 feet to the entrance of the Kayo Ranch. The railroad grade runs SE-NW parallel to an unnamed dirt road that is south of the Kayo Ranch entrance. To reach the garbage scatter, turn southeast on the unnamed dirt road south of the Kayo Ranch entrance and proceed for approximately 1500 feet until you reach a triangular, cleared area where towers 58/8 of the Big Creek Transmission Line are located.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries). This resource is a railroad grade from the Atchenson, Topeka, and Santa Fe Railroad. The grade runs for several miles through Tulare County, but the portion recorded here runs SE-NW through the path of the Big Creek Transmission Line. The railroad operated from 1898 through 1992, after which time the tracks were decommissioned and removed.

A trash scatter sits to the south of the grade near the Big Creek Hydroelectric line. The scatter contains trash ranging in age from as early as the 1960's through to the 1980's. The scatter may represent the continuous use of this location as a dump over the course of several decades, or it may indicate a single episode of dumping in the late 20<sup>th</sup> century in which a large amount of accumulated garbage was dumped in one location. The grade sits on Holocene alluvium, and the local soils are a reddish-brown sity loam. Local vegetation is primarily from agriculture — orange trees and grasses from the cattle pastures. The trash scatter area has been previously disturbed by the construction of the Big Creek Hydroelectric Line (likely prior to the formation of the trash scatter), and the apparent plowing of the field.

\*P3b. Resource Attributes: (List attributes and codes) AH7 (Railroad Grade), AH4 (Trash Scatter)

\*P4. Resources Present: □Building □Structure 図Object □Site □District □Element of District □Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #) Randy Ottenhoff standing on the railroad grade, camera facing southeast.

\*P6. Date Constructed/Age and Sources:

☑Historic □Prehistoric □Both

\*P7. Owner and Address: Unknown

\*P8. Recorded by: (Name, affiliation, and address) M. Armstrong, R. Ottenhoff, P. Paramoure, L. MacDonald. Pacific Legacy, Inc. 1525 Seabright Ave, Santa Cruz, CA 95062.

\*P9. Date Recorded: 11-29-2007

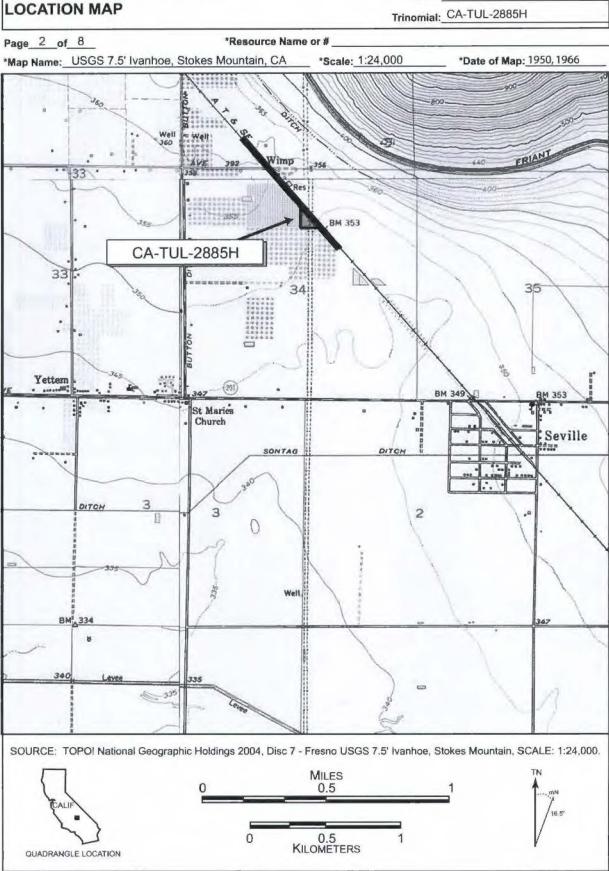
\*P10. Survey Type: (Describe)
Intensive pedestrian survey utilizing 15meter transects.

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Matthews, R., J. Burnnett. (1965) Geologic Map of California, Olaf P. Jenkins Edition, Fresno Sheet. California Division of Mines and Geology. Armstrong, M. and T. Jackson (2008) Cultural Resources Inventory of the Southern California Edison Company Cross Valley Transmission Project, Tulare County, California. Submitted to Southern California Edison Company, Rosemead, CA.

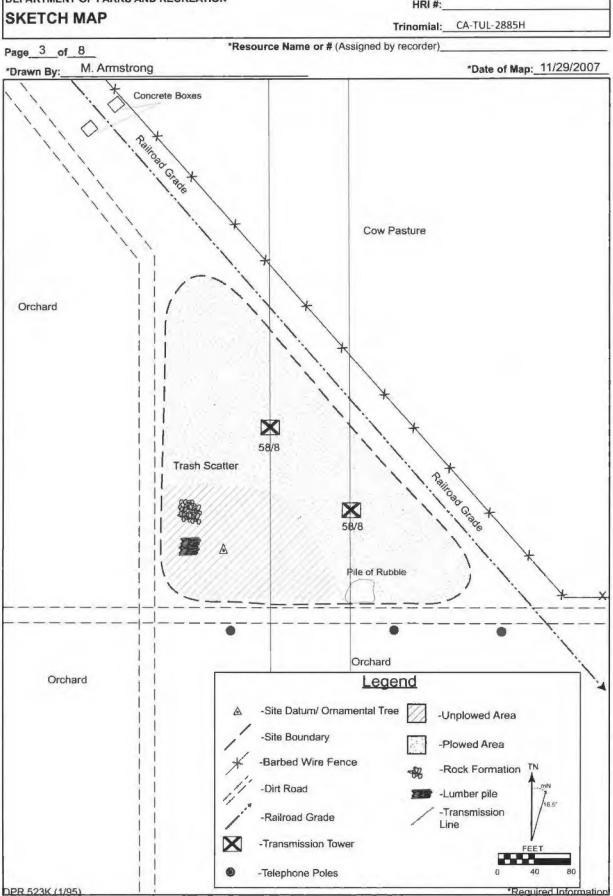
UPRR n.d., online at <a href="http://www.uprr.com/customers/shortline/lines/tv.shtml">http://www.uprr.com/customers/shortline/lines/tv.shtml</a>

\*Attachments: DNONE \(\overline{D}\)Location Map \(\overline{D}\)Sketch Map \(\overline{D}\)Continuation Sheet \(\overline{D}\)Building, Structure, and Object Record \(\overline{D}\)Archaeological Record \(\overline{D}\)District Record \(\overline{D}\)Linear Feature Record \(\overline{D}\)Milling Station Record \(\overline{D}\)Rock Art Record \(\overline{D}\)Artifact Record \(\overline{D}\)Photograph Record \(\overline{D}\) Other (List):

DPR 523A (1/95)



State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION Primary #: P-54-4632/54-4016/54-2183 HRI#: SKETCH MAP CA-TUL-2885H Trinomial:



State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION Primary # P-54-4632/54-4016/54-2183

HRI#

Trinomial CA-TUL-2885H NRHP Status Code: 6Y

#### BUILDING, STRUCTURE, AND OBJECT RECORD

Page 4 of 8

Resource Name or #:

Historic Name: Atchison, Topeka, Santa Fe Railroad B1. Common Name: Atchison, Topeka, Santa Fe Railroad B2.

B3. Original Use: Railroad

B4. Present Use: Not in use, rails have been removed

\*85. Architectural Style: NA

Construction History: (Construction date, alterations, and date of alterations) \*B6.

Originally a branch line of the San Francisco and San Joaquin Valley Railway (SF&SJV), this stretch of railroad ran from the main SF&SJV line in Calwa through Reedley and Visalia before rejoining the main SF&SJV line in Corcoran. Completed in 1897, this portion of the track provided railroad access to the eastern San Jogauin Valley and the entire SF&SJV line integrated California from San Diego to San Francisco via the railroad. (Bryant 1992) In 1898, the Atchison, Topeka, and Santa Fe Railroad (ATSF) bought the SF&SJV track with the intention of linking Central and Northern California to the southeast United States via the existing ATSF line that ran from Kansas to San Diego. (Britannica Online 2007; Bryant 1992; UPRR n.d.) Throughout the last quarter of the 20th century, the ATSF underwent a series of both attempted and successful mergers and buyouts, and began selling off portions of its railways (Britannica Online 2007). In 1992, this portion of the railway was bought by the Tulare County Railroad Company (A subsidiary of the San Joaquin Railroad Company, formed in 1992), who subsequently decommissioned and removed the track (Bowen 1995).

\*87. Moved? , No , Yes ⊠Unknown Date: Original Location:

Property Type: Railroad Berm

Related Features: Adjacent to a trash scatter, it is unknown what, if any, relationship exists between these two \*B8. features.

B9a. Architect: Unknown

b. Builder: San Francisco and San Joaquin Valley Railway Company

\*B10. Significance: Theme: Transportation, Settlement of the West

Area: National, California, Tulare County

**Applicable** 

Period of Significance: Late 19th Late 20th century

Criteria: A (associated with significant events in history)

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) Along with the Union Pacific and smaller regional railroad companies the SF&SJV railroad played a role in the economic, social, and political integration of the remote towns in the rural California with each other, as well as with the developing cities within California (foremost among them, San Francisco) by allowing easier transport of both goods and people throughout the state. Upon being joined with the ATSF, the railroad also provided easier access to the southwestern states, as well as an alternative to the Union Pacific for transporting goods and people eastward. The development, financing, and construction of the SF&SJV railroad was a significant event in the development of transportation within California. The development of the ATSF is a significant even in the history of the United States The changes that the ATSF company experienced in the late 20th century and the impacts that this had on the subsequent decommissioning and removal of tracks is arguably demonstrative of the broader changes occurring to large corporations throughout the U.S. and worldwide in the late 20th century.

B11. Additional Resource Attributes: (List attributes and codes) None

\*B12. References:

Bowen, D. 1995. "The San Joaquin Valley Railroad at Milepost 3." Available online at http://www.donsdarkroom.com/sivr\_article.htm. Accessed 1-7-07.

Britannica Online, 2007, "Atchison Topeka and Santa Fe Railway Company". Hosted on the Encyclopedia Britannica website at http://www.britannica.com/eb/article-9010043/Atchison-Topeka-and-Santa-Fe-Railway-Company accessed 1-7-07

Bryant, K. 1992. History of the Atchison, Topeka, and Santa Fe Railway. University of Nebraska Press.

UPRR, n.d. "Short Line Directory Tulare Valley Railroad Company TVRR #839" Hosted on The Union Pacific Railroad website at http://www.uprr.com/customers/shortline/lines/ty.shtml, accessed 1-7-07.

R13 Remarks: None.

**\*B14**. Evaluator: Not evaluated. Recorded by M. Armstrong, R. Ottenhoff, L. MacDonald, P. Paramoure. Pacific Legacy, Inc. 1525 Seabright Ave, Santa Cruz, CA 95062.

\*Date of Evaluation: Not evaluated, recorded 11-29-2007.

DPR 523B (1/95)

\*Required information



State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION LINEAR FEATURE RECORD

Primary # P-54-4632/54-4016/54-2183
HRI #
Trinomial CA-TUL-2885H

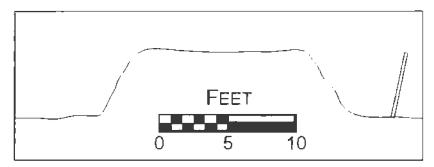
#### Page 5 of 8

#### \*Resource Name or #:

- L1. Historic and/or Common Name: Atchison, Topeka, and Santa Fe Railroad
- L2a. Portion Described: Entire Resource 🗵 Segment Point Observation Designation:
  - b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.)
     The resource is located at the UTM coordinates Zone 11S 299232 mE/4041588mN to 299377 mE/4041416mN. The resource is located south of the Kayo Ranch pastures 1.0 mile northeast of Yettern.
- L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

The feature is a berm that once held the track for the Atchison, Topeka, and Santa Fe Railroad. The track was completed in 1898, and appears on the photorevised 1969 Ivanhoe USGS 7.5 minute quadrangle map. The railway was purchased by the Tulare Valley Rairoad Company in 1992, who subsequently abandoned most of the track within Tulare County (and apparently removed the track from this location) (UPRR n.d., online at http://www.uprr.com/customers/shortline/lines/tv shtml)

L4e. Sketch of Cross-Section (include scale) Facing: NW



- L4. Dimensions: (In feet for historic features and meters for prehistoric features)
  - a. Top Width 13 feet
  - b. Bottom Width 18 feet
  - c. Height or Depth 4 to 6 feet
  - d. Length of Segment 880 feet
- L5. Associated Resources: May be associated with the trash scatter located adjacent to the berm to the southwest.
- **L6.** Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.): The grade runs through agricultural land in Tulare County, including both orchards and pastures. The topography is relatively flat, although natural undulations occur, requiring alterations to the height and width of the grade. Local soils are composed of alluvium
- L7. Integrity Considerations: The railroad track is no longer on the berm, but the berm itself appears to be in good shape, minor erosion not having impacted it very much. This is unsurprising as the track would have been subject to routine maintenance through the 1990's.
- L8a. Photo, Map, or Drawing: See attached continuation sheet.
- L8b. Description of Photo, Map, or Drawing (View, scale, etc.)
- L9. Remarks: None
- L10. Form Prepared by: (Name, affiliation, and address) M. Armstrong, R. Ottenhoff, P. Paramoure, L. MacDonald, Pacific Legacy, Inc. 1525 Seabright Ave, Santa Cruz, CA 95062.
- L11. Date: 11/29/2007

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

#### CONTINUATION SHEET

Primary #:_	P-54-4632/54-4016/54-2183
HRI #:_	
Trinomial:	CA-TUL-2885H

Page 6 of 8

\*Resource Name or # (Assigned by recorder)

\*Recorded By: M. Armstrong, R. Ottenhoff, L. MacDonald, P. Paramoure



Figure 1, Frame 77. Looking north through orchard towards garbage scatter and the railroad berm.



Figure 2, Frame 78. Looking east towards garbage scatter and the railroad berm, ornamental tree in center of the image.



Figure 3, Frame 80. Rock concentration next to the lumber pile.

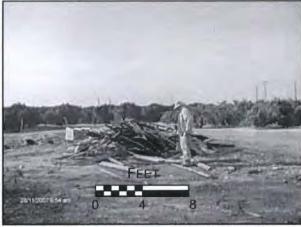


Figure 4, Frame 81. Looking south at lumber pile, Randy Ottenhoff standing next to the pile.



Figure 5, Frame 84. sanitary cans and glass shards within the garbage scatter, at foot of railroad berm.



Figure 6, Frame 85. Glass shards, juice bottle, concrete fragments, and ceramic shards in garbage scatter.

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

#### CONTINUATION SHEET

Primary #:_	P-54-4632/54-4016/54-2183		
HRI #:_			
Trinomial:	CA-TUL-2885H		

Page 7 of 8

\*Resource Name or # (Assigned by recorder)

\*Recorded By: M. Armstrong, R. Ottenhoff, L. MacDonald, P. Paramoure



Figure 7, Frame 88. Randy Ottenhoff standing on the grade. Camera facing north.



Figure 8, Frame 89. Randy Ottenhoff standing on the grade. Camera facing southeast.

State of California – The Resources Agency DEPARTMENT OF PARKS AND RECREATION

## PHOTOGRAPHIC RECORD

Primary # P-54-4632/54-4016/54-2183 HRI #

Trinomial \_\_CA-TUL-2885H

Page 8 of 8

Resource Name:

Year: 2007

Camera Format: Film Type and Speed: Digital, 5 megapixel NA, 400 speed Lens Size: NA

Negatives Kept at: Pacific Legacy, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
11	29	8:51	76	Trash scatter overview	W	
11	29	8:52	77	Trash scatter overview	N	
11	29	8:53	78	Trash scatter overview	Е	
11	29	8:53	79	Wood pile	Е	
11	29	8:53	80	Rock concentration west of trash scatter	Е	
11	29	8:54	81	R. Ottenhoff standing next to wood pile	S	
11	29	8:54	82	Rock concentration west of trash scatter	NA	
11	29	8:54	83	P. Paramoure next to ornamental tree	Е	
11	29	8:55	84	Cans in trash scatter	NA	
11	29	8:56	85	Trash scatter close-up	NA	
11	29	8:57	86	RC Cola bottle	NA	
11	29	9:00	87	Shoe polish bottle	NA	
11	29	9:02	88	R. Ottenhoff standing on railroad grade	NW	
11	29	9:02	89	R. Ottenhoff standing on railroad grade	SE	

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

#### PRIMARY RECORD

Primary # P-54-004632/4016/2183 HRI#

Trinomial CA-TUL-2885H NRHP Status Code 6Y

Other Listings **Review Code** 

Reviewer

Date

Page 1 of 3

\*Resource Name or #:

P1. Other Identifier: Atchison, Topeka, and Santa Fe Railroad Grade; PL-05 (Armstrong et al. 2007); P-54-4632 (TUL-2885H [Melvin and Flores 2009]); P-54-4016 Ashkar and Fish 2001); P-54-2183 (Wills and Estes 1995).

\*P2. Location: 

Not for Publication 
Unrestricted

\*a. County: Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad: Ivanhoe Date: 1950 (revised 1969); T 17S; R 25E; NE 1/4 of Sec 12; SW 1/4 of Sec 7; M.D. B.M.

c. Address: None City: Twin Buttes

Zip:

d. UTM: Zone: 11N; 301776 mE/ 4038553 mN (NW end); 302081 mE/ 4038186 mN (SE end); (Trimble Geo XT NAD 83)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 360 feet amsl. This segment is south of Seville, west of Colvin Mountain, west of the Friant-Kern Canal and east of Cottonwood Creek. From Yettem travel east a short distance on Hwy 201 (Avenue 384) to Road 144 and turn right (south). Turn left (east) on Avenue 376 and travel ~.75 mile to the NW end of the documented portion of the old railroad grade (on the south side of the road). If you arrive at Road 164 you have gone too far. Travel south on Road 164 to get to center of documented segment.

\*P3a. Description: Four segments or points on the Atchison -Topeka & Santa Fe Railroad (AT&SF) have been previously documented in Tulare County (Armstrong et al. 2007, Melvin and Flores 2009, Ashkar and Fish 2001, Wills and Estes 1995). Other segments or points on the AT&SF in Fresno County and Kern County have been documented as well. The Atchison-Topeka & Santa Fe Railroad is one of many railroads that operated in the San Joaquin Valley in the late 1800s and early-to-mid 1900s. The railroad merged with the Burlington Northern Santa Fe Corporation in 1996 to become the Burlington Northern and Santa Fe Railway (BNSF) (Wikipedia 2102). See other records for more historical information.

This segment of the resource is documented in the area of Twin Buttes from Avenue 376 southeast for approximately 6,500 feet; Road 164 cuts through the center of the documented section. This segment of the line extends through citrus groves and orchards with farm buildings, a few residential structures and outbuildings. The railroad line no longer functions and only portions of the railbed remain and one intact section of rail across Road 164. The railroad operated from 1898 through 1992, after which time the most of the tracks were decommissioned and removed. The resource has been evaluated as ineligible for the NRHP (2-25-2000) and not evaluated for the CRHR. \*P3b. Resource Attributes: (List attributes and codes) AH7 (Railroad Grade)

\*P4. Resources Present: Building Structure Delect Site District Delement of District Other (Isolates, etc.)

P5b. Description of Photo: DSCN 1149: From east side of Road 164 with rail still intact; portions of railroad bed intact from here to Avenue 376; shot NW. Camera 2: 1147-1161.

\*P6. Date Constructed/Age and Sources: ☑Historic □Prehistoric □Both

\*P7. Owner and Address: Unknown \*P8. Recorded by: M. O'Neill and M. Walton; Pacific Legacy, Inc., 2641 HWY 4, Suite 2B Arnold, CA 95223

\*P9. Date Recorded: 5/4/2012 \*P10. Survey Type: (Describe) Intensive pedestrian survey



\*P11. Report Citation: Wikipedia 2012 BNSF Railway. Available online at http://en.wikipedia.org/wiki/BNSF RR (accessed 4-25-12). REALLY 17

\*Attachments: 

NONE 

Location Map 

Sketch Map □Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record ☑Linear Feature □Artifact Record □Photograph Record □ Other (List):



DSCN 1147: View from west side of Road 164 down old railroad corridor through citrus groves; no features intact from here to SE end; shot SE.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

#### LINEAR FEATURE RECORD

Primary # P-54-004632/4016/2183 HRI #

Trinomial CA-TUL-2885H NRHP Status Code 6Y

Page 2 of 3

Resource Name or #: (Assigned by recorder)

L1. Historic and/or Common Name: Atchison, Topeka & Santa Fe Railroad

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation:

b. Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map). Segment documented is NW and SE of Road 164 in Tulare County. The north end of the segmentextends from Road 164 to the NW to end at Avenue 376. Across Avenue 376 the railbed no longer exists and the area is planted with citrus groves. The south end of the documented segment extends from Road 164 to the SE, to end in the orchards, approximately 3250 distant. In this portion features of the railroad no longer exist as the area has been planted with citrus groves and orchards.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) The last remnant of the documented portion of the railroad is the bermed railbed in the north end and the rails that cross Road 164, in the central portion. Southeast of Road 164 the railroad corridor has been converted to a graveled access road that extends through working citrus groves and other orchards. The NW corridor still has the raised/bermed railbed but no tracks, ties, spikes or any other debris from the railroad. Road 164, which crosses the documented segment, still has the steel rails intact. Evidence of the cut rails is present; the rail is not buried but has been sheared at the shoulders of the road. The rails at Avenue 376 have been removed and the road (17 ft wide) repaired. The section of railbed from Avenue 376 to approximately mid-way to Road 164 still mostly has the volcanic base rock (scoria, basalt) intact within the berms and railbed. The corridor at the SE end still exists but all evidence of the railroad is gone; no berms, railbed or other features are present. Only the graveled access road is present.

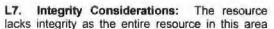
L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width: 8 ft wide

b. Bottom Width: 24-26 ft wide c. Height or Depth: 1.5 – 3 ft d. Length of Segment: 6,500 ft

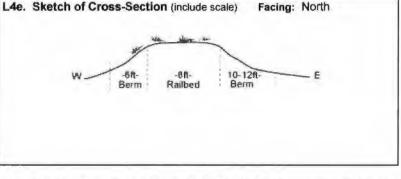
L5. Associated Resources: None

**L6. Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.) The documented railroad corridor is within citrus groves in the Southern San Joaquin Valley.



has been removed with the exception of the rails in the road and portions of the railbed. The railroad is not present and no longer functions.





L8b. Description of Photo, Map, or Drawing (View, scale, etc.) DSCN 1154: North end of documented section is view of partially intact railbed on south side of Avenue 376 with M. O'Neill and citrus groves across street; railbed and corridor no longer exist to the north, in the citrus grove; shot NW.

L9. Remarks: See other site records ((Armstrong et al. 2007, Melvin and Flores 2009, Ashkar and Fish 2001, Wills and Estes 1995) for description and history of the railroad.

L10. Form Prepared by: (Name, affiliation, and address)
Documented by:
M. O'Neill and M. Walton;
Pacific Legacy, Inc., 2641 HWY 4,
Suite 2B Arnold, CA 95223
L11. Date:

DPR 523E (1/95)

Documented: 5/4/2012

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION Primary #: P-54-004632/4016/2183 HRI #: **LOCATION MAP** 

Trinomial: CA-TUL-2885H Page 3 of 3 \*Resource Name or # \*Date of Map: 1950, (photo revised1969) \*Map Name: USGS 7.5' Ivanhoe, CA \*Scale: 1:24,000 DODGE AVE **AVENUE 380** ROAD, 172 106 **AVENUE 376** PIEDRA AVE CA-TUL-2885H Atchison Topeka & Santa Fe Twin Buttes AVENUE AD 164 SOURCE: TOPO! National Geographic Holdings 2006, Disc 6, USGS 7.5' Ivanhoe, SCALE: 1:24,000. MILES 0.5 0.5 KILOMETERS 0

QUADRANGLE LOCATION

State of California — The Resourd DEPARTMENT OF PARKS AND RE PRIMARY RECORD		Primary # HRI # Trinomial NRHP Sta		4-00 -7UL-	4016 2885H	
	Review Code	Reviewer			Date	
Page _ 1 _ of _ 3 _	*Resource Name or #: (	(Assigned by Recorder)	Atchison Top	eka and Sar	nta Fe Railroad	
P1. Other Identifier: Historic Railro	ad segment					
P2. Location: Not for Publicati		*a. Cou	nty Tulare			
and (P2b and P2c or P2d. Attach a *b. USGS 7.5' Quad Porterville c. Address n/a	Location Map as necessar Date PR		R 27 E : N City Porterville	E&SE 1/4		423 B.M Zip 93258
d. UTM: (Give more than one for lar e. Other Locational Data: (e.g. pare	-		316667 propriate)	mE/	3996985	mN
This segment of the Atchisor .28 miles north of North Grar		e railroad is located	d approcimate	ely 50 fee	east of North	Main Street,
the removal of railroad ties a segment of tie was noted on granitic rocks and vesicular to edge of orange orchards in the northwest, and south-southe	the eastern side, at the pasalt. The railroad grais location. Boundari ast.	ne base of the balla rade is currently be ies of this feature e	st. The remaing used as a xtend beyond	ining balla dirt road	ast is compos- which skirts the ct area to the	ed of angular he western
*P3b. Resource Attributes: (List attrib				The section of the se		
*P4. Resources present: Buildin P5a. Photograph or Drawing (Photog		. – –	_	date,	Description of F accession #) R ent. View to the	ailroad grade
	,			. *P6. I	Date Constructe	d/Age and
	(A) 1101			ca. 19	Phistoric P10 Dwner and Addr son Topeka and	
				Railro	Recorded by: S	. Ashkar, C. Fish
				Jones 2600	s & Stokes V Street amento, CA 9581	
				*P10.	Date Recorded: Survey Type: (D sive pedestrian s	escribe)
P11. Report Citation: (Cite survey rep Report for the Proposed Widening of No	orth Main Street, Porterville	, Tulare County, Califor	nia.			
	strict Record X Linea	r Feature Record	tion Sheet  Milling Statio	_	g, Structure, and	
Artifact Record Ph	otograph Record  Other	r (List):		_	*Pegu	ired Information

State of California — The Resources Agency	Primary # P - 5 4 · 0 0 4 0 1 6
DEPARTMENT OF PARKS AND RECREATION	HRI#
LINEAR FEATURE RECORD	Trinomial CA-TUC-2885H

LINEAR I LATE	NE NECOND		Trinomial Cit	INC 50024	
Page 2 of 3	*Resource Nan	ne or #: (Assigned	by Recorder) _Atchison Top	peka and Santa Fe railroad	
1. Historic And/or Commo	on Name: ATSF Railroad	d grade			
.2a. Portion Described:	Entire Resource	X Segment	Point Observation	Designation: Intersection	
been field inspected on a L	ocation Map) oned ATSF Railroad spans	s the southeast an		I locational data. Show the area that I in 15 of the Porterville USGS 7.5' Quad	

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This linear feature is a segment of the abandoned Atchison Topeka and Santa Fe railroad grade. Alterations include the removal of railroad ties and rails. One spike was located on the western side of the ballast and one decaying segment of tie was noted on the eastern side, at the base of the ballast. The remaining ballast is composed of angular granitic rocks and vesicular basalt. The railroad grade is currently being used as a dirt road which skirts the western edge of orange orchards in this location. Boundaries of this feature extend beyond the project area to the north-northwest, and south-southeast.

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. Top Width 12 feet

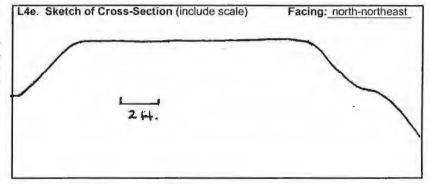
b. Bottom Width 20 feet

c. Height or Depth 2 feet (average)

d. Length of Segment 445 feet (approximate)

L5. Associated Resources:

One railroad spike and one decaying tie.



L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
Adjacent to North Main Street, between orange orchard and foothills, and central valley floor. The ATSF abandoned segment is approximately .13 miles east of the Southern Pacific Railroad.

L7. Integrity Considerations:

All the ties and rails have been removed from this segment of the railroad. Therefore it tacks integrity in terms of feeling, association, workmanship, design, and materials. The railroad grade ballast is all that remains and is currently being used as a dirt road.



L8b. Description of Photo, Map, or Drawing (View, scale, etc.) Atchison, Topeka, and Santa Fe segment, view to SSE

L9. Remarks:

L10. Form Prepared by: S. Ashkar, C. Fish Jones & Stokes 2600 V Street Sacramento, CA 95818

L11. Date: 2/26/01

State of	California	-The R	esour	ces A	gency
DEPART	MENT OF	PARKS	AND	RECR	EATION

# LOCATION MAP

Primary # P -5 4-00 40 16

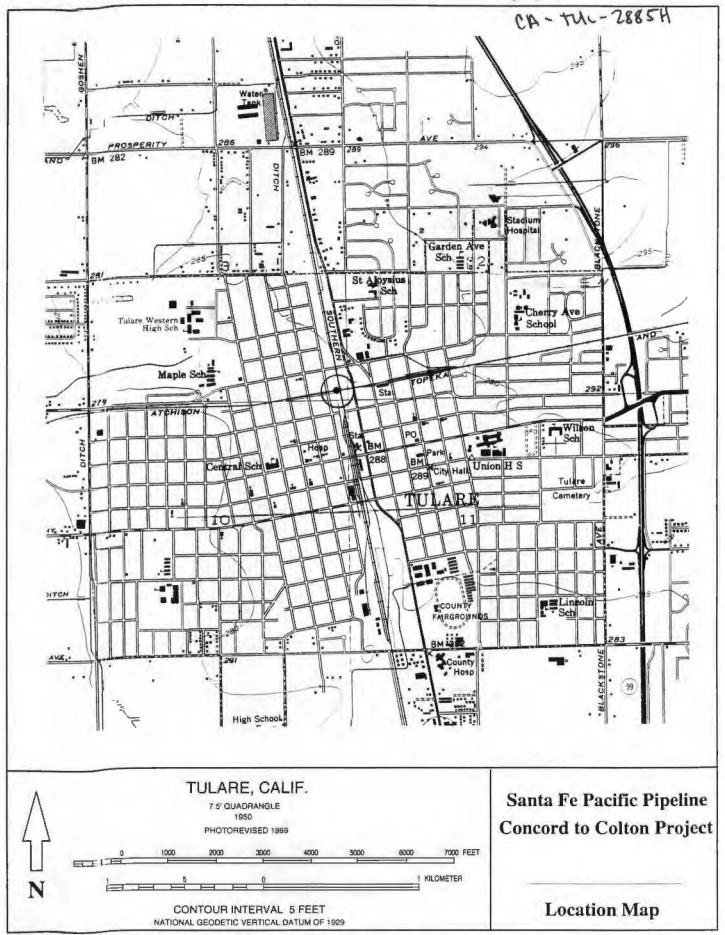
HRI #

Trinomial CA-TUL- 2885H

Page 3 of 3

\*Resource Name or #: Atchison Topeka and Santa Fe Railroad USGS 7.5' Porterville Quad \*Scale: 1:24,000 (1"=2,000") \*Date of Map: PR 1969 \*Map Name: 10 Zante Lewis HIH Atchison Topeka and Santa Fe Railroad estfield School LOCUST Monache High Sch 1,000 2,000 3,000 4,000 5,000 teet Scale = 1:24,000 Base map: USGS 7.5'-series Porterville, TN California, quadrangles (PR 1969)

Page 1 of 2 "Resource Name or #: (Assigned by recorder) _Alchison, Topeka & Santa Fe Railroad	State of California — The Resource DEPARTMENT OF PARKS AND REC		Primary # _F	2-54-002183	
Page _1 of _2	PRIMARY RECORD				
Page 1 of 2 "Resource Name or #: (Assigned by recorder) _Alchison_Topeka & Santa Fe Railroad P1. Other Identifier:SFPP-31 P2. Location: Not for Publication _M Unrestricted		Other Listings	NRHP Status	Code	
P1. Other Identifier: SFP2-31 P2. Location: □ Not for Publication ☑ Unrestricted and (P2b and P2c or P26. Attach a Location Map as necessary.) *b. USGS 7.5 QuadTulare			Reviewer	Date	
P1. Other Identifier: SFP2-31 P2. Location: □ Not for Publication ☑ Unrestricted and (P2b and P2c or P26. Attach a Location Map as necessary.) *b. USGS 7.5 QuadTulare					
and (P2b and P2c or P2d. Attach a Location Map as necessary.)  *b. USGS 7.5 'QuadTulare Date1969T205; R24E;SE1/4 ofSE1/4 ofSE1/4 ofSE		e or #: (Assigned by reco	rder) <u>Atchison. Top</u>	eka & Santa Fe Railroad	
*b. USGS 7.5 Quad Tulare Date 1969 T 20S; R 24E; SE 144 of SE 144 of Sec 3 : MD B.M. c. Address			ted *a. Count	y Tulare	
c. Actress 3/// (Difference than one for large and/or linear resources) Zone 11 288865 ms/ 4009785 mN e. Other Locational Data (e.g., parcel #, legal description, directions to resource, elevation, etc., as appropriate):  In the town of Tulare; travel south on J Street, turn right on Cross Street and left on North I. Alchison, Topeka & Santa Fe tracks run in an east/west direction between San Joaquin and Cross Streets and left on North I. Alchison, Topeka & Santa Fe Tracks run in an east/west direction between San Joaquin and Cross Streets.  P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Portion of historic, single rail Atchison, Topeka & Santa Fe RR line running in an east/west direction. Railroad line has been unused for quite a long time; condition is fair to poor, rust apparent on rails. Weeds are growing along and up through railroad lites. The surrounding area is urban with paved streets, sidewalks and buildings.  P3b. Resource Attributes: (List attributes and codes) _AH7  P4. Resources Present:			4E . SE 14 of	CE 14 CE 14 of Con 3	· MDRM
d. UTM: (Give more than one for large and/or linear resources) Zone 11		1 200, N 2			
In the town of Tulare; travel south on J Street, turn right on Cross Street and left on North I. Atchison, Topeka & Santa Fe tracks run in an east/west direction between San Joaquin and Cross Streets.  P3 a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Portion of historic, single rail Atchison, Topeka & Santa Fe RR line running in an east/west direction. Railroad line has been unused for quite a long time; condition is fair to poor, rust apparent on rails. Weeds are growing along and up through railroad lites. The surrounding area is urban with paved streets, sidewalks and buildings.  P3b. Resource Attributes: (List attributes and codes)_AH7_ P4. Resources Present:   Building			ie 11 , 288	865 mE/ 4009785 n	
tracks run in an east/west direction between San Joaquin and Cross Streets.  P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Portion of historic, single rall Atchison, Topeka & Santa Fe RR line running in an east/west direction. Railroad line has been unused for quite a long time; condition is fair to poor, rust apparent on rails. Weeds are growing along and up through railroad ties. The surrounding area is urban with paved streets, sidewalks and buildings.  P3b. Resource Attributes: (List attributes and codes)_AH7  P4. Resources Present: □ Building ☑Structure □Object □Site □District □Element of District □Other (Isolates, etc.)  P5b. Description of Photo (view, date, accession #)East: 4-26-95: SFPP-CW-4-17  *P6. Date Constructed/Age and Sources: □ Historic □ Prehistoric □ Both  *P7. Owner and Address: □ Carrie D. Wills & Allen Estes: William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563  *P9. Date Recorded: _April 26, 1995  *P10. Survey Type: (Describe)Reconnaissance.  *P11. Report Citation (Cite survey report and other sources, or enter "none."): _Class I Overview Santa Fe Pacific Pipeline Partners. LP., Proposed Concord to Celton Pipeline Project.  *Attachments: □ NONE ☑ Location Map □Sketch Map □Continuation Sheet □Building, Structure, and Object Record □Milling Station Record □District Record □Linear Resource Reco					
P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Portion of historic, single rail Atchison, Topeka & Santa Fe RR line running in an east/west direction. Railroad line has been unused for quite a long time; condition is fair to poor, rust apparent on rails. Weeds are growing along and up through railroad ties. The surrounding area is urban with paved streets, sidewalks and buildings.  P3b. Resource Attributes: (List attributes and codes)_AH7  P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)  P5b. Description of Photo (view, date, accession #)_East: 4-26-95: SFPP-CW-4-17  *P6. Date Constructed/Age and Sources: Historic Prehistoric Both  *P7. Owner and Address: Both  *P7. Owner and Address: Carrie D. Wills & Allen Estes: William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563  *P9. Date Recorded: April 26, 1995  *P10. Survey Type: (Describe)  Reconnaissance.  *P11. Report Citation (Cite survey report and other sources, or enter "none."): Class I Overview Santa Fe Pacific Pipeline Partners, LP. Proposed Concord to Colton Pipeline Project.  *Attachments: DNONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Resource Reco				on Notin I. Atchison, Tope	eka di Salila Fe
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*P6. Date Constructed/Age and Sources: ☐ Historic☐ Prehistoric☐ Both☐ Both☐ Both☐ Both☐ P7. Owner and Address: ☐ P8. Recorded by (Name, affiliation, and address): ☐ Carrie D. Wills & Allen Estes; William Self Associates 4 Orinda Way Suite 200A Orinda. CA 94563☐ P9. Date Recorded: April 26, 1995☐ P10. Survey Type: (Describe)☐ Reconnaissance.☐ P11. Report Citation (Cite survey report and other sources, or enter "none."): ☐ Class I Overview Santa Fe Pacific Pipeline Partners. ☐ P. Proposed Concord to Colton Pipeline Project.  *Attachments: ☐ NONE ☑ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record☐ Archaeological Record☐ District Record☐ Unear Resource Reco☐ Milling Station Record☐ Rock Art Record☐ Unear Resource Reco☐ Milling Station Record☐ Rock Art Record☐ Unional Record☐ Rock Art Record☐ College	P5b. Description of Photo (view, date, accession	#) _ East: 4-26-95; SFPP	-CW-4-17		
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affiliation, and address):Carrie D. Wills & Allen Estes; William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563  *P9. Date Recorded: _April 26, 1995  *P10. Survey Type: (Describe)Reconnaissance.  *P11. Report Citation (Cite survey report and other sources, or enter "none."): _Class   Overview Santa Fe Pacific Pipeline Partners. L.P., Proposed Concord to Colton Pipeline Project.  *Attachments: □ NONE ☒ Location Map □ Sketch Map □ Continuation Sheet □ Building, Structure, and Object Record □ Archaeological Record □ District Record □ Linear Resource Reco □ Milling Station Record □ Rock Art Record	and the same of the same	-			
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Associates 4 Orinda Way Suite 200A Orinda, CA 94563  *P9. Date Recorded: April 26, 1995  *P10. Survey Type: (Describe) Reconnaissance.  *P11. Report Citation (Cite survey report and other sources, or enter "none."): Class I Overview Santa Fe Pacific Pipeline Partners. L.P., Proposed Concord to Colton Pipeline Project.  *Attachments:  NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Resource Reco	and the second				stes: William Self
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State of California - The Resource DEPARTMENT OF PARKS AND F		Primary # HRI #	P-54-004632
PRIMARY RECORD		Trinomial NRHP State	(A-TUL-2885 H us Code 7
	Other Listings Review Code	Reviewer	Date
age 1 of 5	*Resource Name or #	#: JTU-204	
	cation ✓ Unrestricted *a photorevised 1969); T16S R2 039962 mN NAD27 Datum e community of Seville at GIS- evement, and partially within the	i. County: Tulare  5E, Sec. 35; MDBM  -based post mile 17.21 ne highway right-of-way	on both sides of State Route (SR) 201, . The resource is located 200 feet west o regment datum.
Topeka, and Santa Fe Railroad ( eastern Tulare County. The line foothills to Porterville (Weber 19	ATSF) built this line around 19 diverged from the ATSF Visali 14; Bradley 1916; Bryant 1974	915, primarily to provide ia branch line at Cutler : 175-176). ATSF ever	eway in rural Tulare County. The Atchisor erail transportation for orange growers in and continued southeast, skirting the stually abandoned the line, and after 1969 Record for a description of the resource.
P3b. Resource Attributes: AH7 (FP4. Resources Present: Build		✓ Site	Element of District Other (Isolates, etc.  *P5b. Description of Photo: Photograph 1. JTU-204, 01, NW 0272; facing northwest, railroad grade with SR 201 in foreground.
			*P6. Date Constructed/Age & Sources  ✓ Historic Prehistoric Both Circa 1915 (Weber 1914; Bradley 1916)
		arcive o	*P7. Owner and Address: Private or Caltrans, 2015 E. Shields Ave., Ste. 100 Fresno, CA 93726
		also de la	*P8. Recorded by: Steven J. Melvin and Rebecca Flores JRP Historical Consulting, LLC, 1490 Drew Ave, Suite 110, Davis, CA 9561
	7		*P9. Date Recorded: 6/5/2009  *P10. Survey Type: Reconnaissance
Fresno, Inyo, Kern,	Kings, Madera, Mono, and Tu	lare Counties. Submitte	ts 6 & 9 Rural Conventional Highways in ed to Caltrans District 6, Fresno, CA.   Building, Structure, and Object Recore.
	☐ District Record   Linear	and the second s	#Required Information

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

# LINEAR FEATURE RECORD

Primary # HRI #	P-54-004632	_
Trinomial	CA-TUL-2885H	

#### Page 2 of 5

\*Resource Name or #: JTU-204

L1. I	Historic and/or	Common	Name:	Atchison.	Topeka,	Santa	Fe	Railroad	branch	line
-------	-----------------	--------	-------	-----------	---------	-------	----	----------	--------	------

L2a. Portion Described: ☐ Entire Resource Segment ☐ Point Observation Designation:

### L2b. Location of Point or Segment:

The resource is located at GIS-based post mile 17.21 on State Route 201.

Segment UTMs: 300391mE/ 4040205mN to 300460mE/ 4040123mN

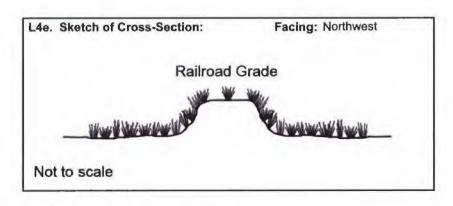
### L3. Description:

This is an old railroad grade running on a southeast/northwest alignment. The ties and tracks have been removed and what remains is only the roadbed, which is built up approximately four feet above the adjacent land. Grasses grow between two wheel tracks on the grade, suggesting current use by motor vehicles.

#### L4. Dimensions:

a. Top Width: 12 feet
b. Bottom Width: 15 feet
c. Height or Depth: 4 feet
d. Length of Segment: 100 feet
L5. Associated Resources:

None



### L6. Setting:

The resource is located in the flat agricultural landscape of the eastern San Joaquin Valley.

### L7. Integrity Considerations:

The tracks and ties have been removed.



# L8b. Description of Photo, Map, or Drawing

JTU-204, 03, SE -- 0274; facing southeast, railroad grade with SR 201 in foreground.

### L9. Remarks:

L10. Form Prepared By:

S. Melvin/C. Miller, JRP Historical Consulting, LLC, 1490 Drew Ave, Suite 110, Davis CA 95618

L11. Date: 7/28/2009

DPR523E (1/95)

State of California - The Resources Agency **DEPARTMENT OF PARKS AND RECREATION** 

### CONTINUATION SHEET

Primary #	P-54-104632
HRI#	
Trinomial	CA-TUL-2885H

Page 3 of 5

\*Resource Name or #: JTU-204

\*Recorded By: S. Melvin and R. Flores, JRP Historical Consulting, LLC

\*Date: 6/5/2009

✓ Continuation | Update

P3a. Description (continued):

### References:

Bradley, Walter W. California Mineral Production for 1919. Bulletin No. 88. California State Mining Bureau. San Francisco: State Printing Office, 1920.

Bryant, Keith L. History of the Atchison, Topeka and Santa Fe Railway. New York: Macmillan, 1974.

Moye, Laurence A. "Official Map of Tulare County, California." n.p.: Moye, 1920.

USGS. "Ivanhoe," 1:31680 topographic map, 1926.

USGS. "Ivanhoe," 1:24000 topographic map, 1950, 1969.

Weber, C.F. "Map of Tulare County, California." San Francisco: C.F. Weber, 1914.

\*Required Information DPR523L (1/95)

State of California	- The Resources Agency
DEPARTMENT OF	PARKS AND RECREATION

# **LOCATION MAP**

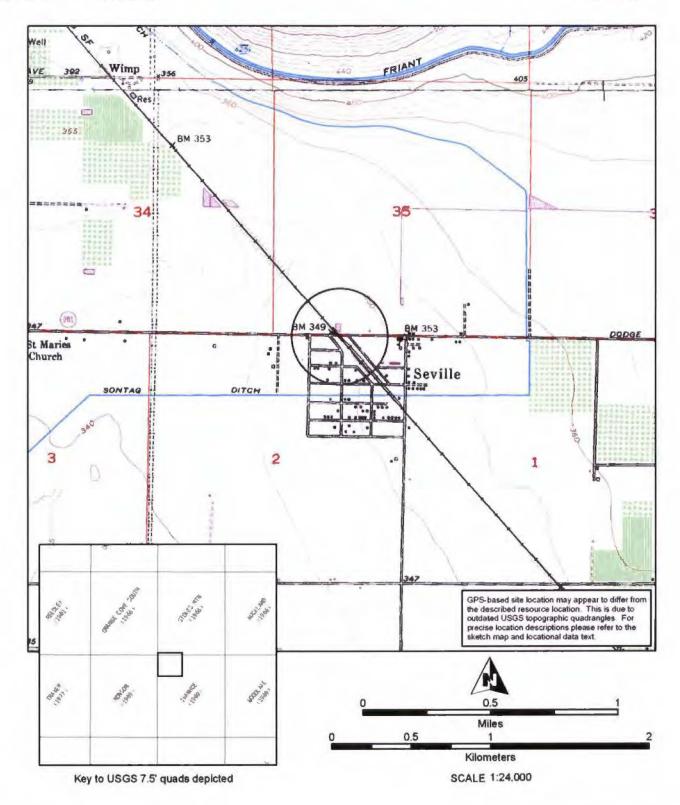
Primary #	P-54-004632	
HRI#		
Trinomial _	CA-TUL-2885H	

Page 4 of 5

\*Resource Name or #: JTU-204

\*Map Name: Ivanhoe (1969)

\*Year: 1969



# SKETCH MAP

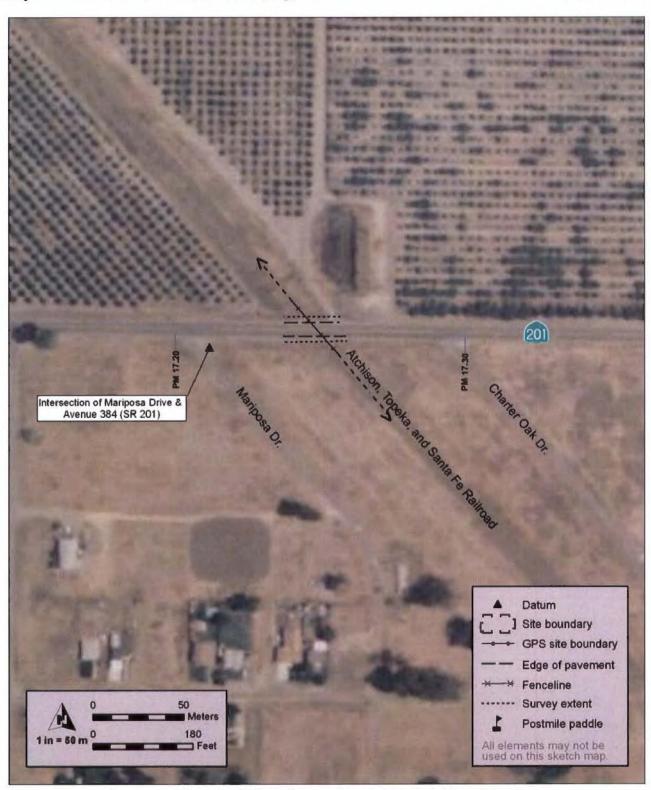
Page 5 of 5

\*Resource Name or #: JTU-204

\*Drawn By:

Far Western and JRP Historical Consulting, LLC

\*Date: 06/05/2009



Sketch map is based on 2009 GPS data collected within the highway right-of-way.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

# PRIMARY RECORD

Primary # P-54-004875 HRI#

Trinomial (A-TUL-3027 H NRHP Status Code

Other Listings Review Code

Reviewer

Date

Page 1 of 6

\*Resource Name or #: PL-09

P1. Other Identifier: Wutchumna Ditch

\*P2. Location: 
Not for Publication 
Unrestricted

\*a. County: Tulare

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad: Exeter Date: 1950 (photrevised 1969) T 18S; 25E R; NE 1/4 of SE 1/4 of Sec 22; M.D. B.M.

c. Address: None

City:

Zip:

c. Address. None

d. UTM: Zone: 11S; 298638 mE/ 4024773 mN (Garmin GPSmap 60CSx G.P.S. NAD 83)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 350 feet amsl From Highway 198 in Visalia, take the Lovers Lane exit. Proceed along Lovers Lane for approximately 1 mile to Houston Ave. Turn right on Houston Ave/Highway 216, proceed for approximately 1 mile to a slight north (left) bend in the road. Proceed another 600 feet to where the Big Creek electrical line passes over Houston Ave (the land is currently being prepared for home construction). Follow the transmission line north for approximately 0.3 miles to the ditch.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The resource is a segment of an irrigation ditch that runs roughly NE-SW, originating at the Cottonwood Ditch approximately 6
miles to the northeast. A short segment of the ditch south of the St. Johns River (adjacent to the segment recorded here) has been
partially destroyed in preparation for an impending construction project. The segment recorded here is 380 feet long and
terminates at the northeast end, where the construction preparation begins.

Local soil is a light brown silty sand. Local geology is Holocene Alluvium. Local vegetation consists of grasses and a few walnut trees, as well as the occasional forb or tumbleweed. Slope is negligible, and resource exposure is 100%. The area surrounding the resource has been disturbed by construction preparation and the installation of the Big Creek Transmission Line towers. In addition, the 1969 revision of the Exeter USGS 7.5' topographic map shows that this area had previously been used as an orchard.

\*P3b. Resource Attributes: (List attributes and codes) HP20 (canal)

\*P4. Resources Present: □Building □Structure ☑Object □Site □District □Element of District □Other (Isolates, etc.)

P5b. Description of Photo: (View

P5b. Description of Photo: (View, date, accession #) Facing east, looking towards where ditch has been destroyed, tape measure extended to 1 yard.

\*P6. Date Constructed/Age and Sources: ⊠Historic □Both

\*P7. Owner and Address: Wutchumna Water Company, 598 S. Valencia Blvd. Woodlake, CA 93286

\*P8. Recorded by: (Name, affiliation, and address)
R. Ottenhoff, L. MacDonald, P. Paramoure, M. Armstrong. Pacific Legacy, Inc. 1525 Seabright ave, Santa Cruz, CA 95062.

\*P9. Date Recorded: 11-29-2007 \*P10. Survey Type: (Describe) Pedestrian Survey utilizing 15meter transects.

\*P11. Report Citation: (Cite survey report and other sources, or enter

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

"none.") Matthews, R., J. Burnnett. (1965) Geologic Map of California, Olaf P. Jenkins Edition, Fresno Sheet, California Division of Mines and Geology. Pacific Legacy, Inc. (2007) Cultural Resources Inventory of the Southern California Edison Company Cross Valley Transmission Project, Tulare County, California. Submitted to Southern California Edison Company, Rosemead, CA. \*Attachments: □NONE ☑Location Map ☑Sketch Map □Continuation Sheet ☑Building, Structure, and Object Record □Archaeological Record □District Record ☑Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record ☑Photograph Record □ Other (List):

DPR 523A (1/95)

'Required information

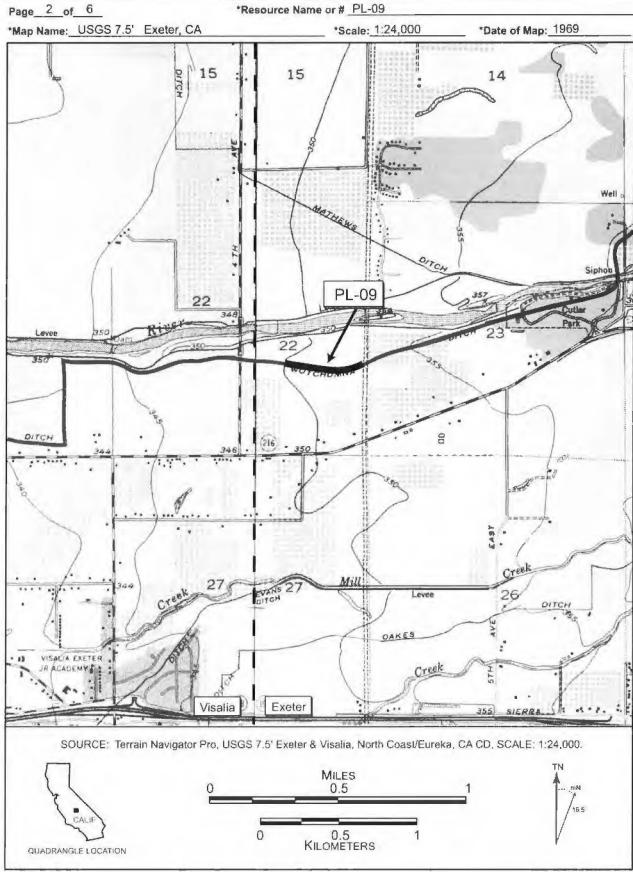
State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #: P-54-004875

HR! #:

Trinomial: CA-TUL-3027H



State of California - The Resour DEPARTMENT OF PARKS AND	rces Agency
SKETCH MAP	Trinomial: CA-TUL-3027H
2 . 6	*Resource Name or # (Assigned by recorder) PL-9
age 3 of 6  Drawn By: M. Armstrong	*Date of Map: 11/29/2007
Drawn by. W. Armenong	Jacon Map.
	117
	↑   ii
	1000 Feet to St. Johns River
	600 Feet to Large Drainage Pit from Datum
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	Cross Section of Drainage
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	-Transmission Tower
	-Transmission Tower -Pump
	-Transmission Tower  -Pump  -Transmission  -Transmission
$\nabla$	-Transmission Tower  -Pump -Transmission -Transmission Line

\*Required Information

DPR 523K (1/95)

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary # P-54-004875 HRI #

## BUILDING, STRUCTURE, AND OBJECT RECORD

\*NRHP Status Code: 7 Resource Name or #: PL-09

Page 4 of 6

B1. Historic Name: Wutchumna Ditch
B2. Common Name: Wutchumna Ditch

B3. Original Use: Irrigation B4. Present Use: Not in use

\*B5. Architectural Style: Irrigation Ditch

\*86. Construction History: (Construction date, alterations, and date of alterations) Unknown

\*B7. Moved? ⊠No UYes (Unknown Date: Orig

Original Location:

\*B8. Related Features: None

89a. Architect: Unknown

b, Builder: Unknown

\*B10. Significance: Theme: Agriculture

Area: Tulare County, California

Period of Significance: Unknown

Property Type: Ditch

Applicable Criteria: C (embody distinctive characteristics of type or period)
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Without a better knowledge of when and why this ditch was constructed, it is not possible to address its significance. However, irrigation ditches such as this one represent the material remains of collective efforts during the late 19<sup>th</sup> century to bring water to both towns and fields, and were important to the development of both agriculture and urban life in California.

B11. Additional Resource Attributes: (List attributes and codes) None

\*B12. References: None

B13. Remarks: None

\*B14. Evaluator:

Resource Documentation:

M. Armstrong, L. MacDonald, R. Ottenhoff, P. Paramoure.

Pacific Legacy, Inc. 1525 Seabright Ave, Santa Cruz, CA 95062.

\*Date of Evaluation: Not evaluated, recorded on

11-29-2007

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

# LINEAR FEATURE RECORD

Primary # P-54-004875
HRI #
Trinomial (A-706-3027H)

Page 5 of 6

\*Resource Name or #: PL-09

L1. Historic and/or Common Name: Wutchumna Ditch

L2a. Portion Described: Entire Resource ☑ Segment Point Observation Designation:

Location of point or segment: (Provide UTM coordinates, legal description, and any other useful locational data.
 Show the area that has been field inspected on a Location Map.)

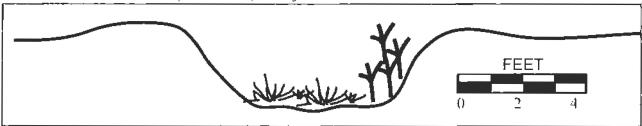
The recorded segment of the ditch falls south of the St. Johns River. The segment runs from UTM zone 11S 298691

mE/4024793 mN to 298600 mE/4024764 mN.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This ditch was constructed by the excavation of soil from the center of the ditch, and the soil had likely been piled into berms on either side of the ditch, but the berms are now gone, possibly having been removed when the surrounding land was graded. There is currently a small rivulet indentation running along the bottom of the ditch where small amounts of water continue to run after rain.

L4e. Sketch of Cross-Section (include scale) Facing West



- L4. Dimensions: (In feet for historic features and meters for prehistoric features)
  - a Top Width 10 feet
  - b Bottom Width 5 feet
  - c Height or Depth 3 feet
  - d. Length of Segment 380 feet
- L5. Associated Resources: None
- **Setting:** (Describe natural features, landscape characteristics, slope, etc., as appropriate.): The resource is located on flat land on the flood plain on the south side of the St. John's River. Local soil is a light brown silty sand. This location has previously been an orchard, but is currently a flat, empty field.
- L7. Integrity Considerations:

There is currently a small rivulet indentation running along the bottom of the ditch where small amounts of water continue to run after rain. Aside from the rivulet in the bottom and the removal of the berms, the ditch appears to have been subject to a fair amount of erosion

- L8a. Photo, Map, or Drawing: See sketch map
- L8b. Description of Photo, Map, or Drawing (View, scale, etc.)
- L9. Remarks: None
- L10. Form Prepared by: (Name, affiliation, and address) P. Paramoure, R. Ottenhoff, L. MacDonald, M. Armstrong. Pacific Legacy, Inc. 1525 Seabright Ave. Santa Cruz, CA 95062
- L11. Date: 11-29-2007

State of California – The Resources Agency DEPARTMENT OF PARKS AND RECREATION

# PHOTOGRAPHIC RECORD

Page 6 of 6

Resource Name:

PL-09

Year: 2007

Camera Format: Film Type and Speed: Digital, 5 megapixel NA, 400 speed

Lens Size: NA

Negatives Kept at: Pacific Legacy, Inc.

Mo.	Day	Time	Exp./Frame	Subject/Description	View Toward	Accession #
11	29	3:11	111	Interior of ditch, tape measure extended to 3 feet	NW	
11	29	3:11	112	Interior of ditch, tape measure extended to 3 feet	E	
11	29	3:12	113	Berm next to ditch, tape measure extended to 3 feet	N	
						_

Appendix B: DPR Form

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State of California – The Resources Agency DEPARTMENT OF PARKS AND RECREATION PRIMARY RECORD	Primary # HRI # Trinomial NRHP Status C	CAL-TUL-3027H	
Other Listings	Reviewer		Doto
Review Code Page 1 of 4	Reviewei	Resource Name or	Date #: P-54-004875 UPDATE
P1. Other Identifier: Wutchumna Canal; Wutchumna Ditch P2. Location: ■ Not for Publication □ Unrestricted a. County: Tulare b. USGS 7.5' Quad: Woodlake Date: 1983 T17S; R26E; c. Address:N/A d. UTM: Zone 11S, 311388 mE / 4030679 mN M.D.B.M		Mutahumna Ditah Jac	ated on open valley flats just
*P3a. Description: This resource is a short segment of the late r south of the City of Woodlake. The recorded segment measures situated at an elevation range of roughly 421 ft. amsl. The ditch is	approximately 105	-ft (WSW-ENE) by 70-	
	HP20. Canal/Aque		, , , , , , , , , , , , , , , , , , , ,
*P4. Resources Present: ☐ Building ☐ Structure ☐ Object P5a. Photograph or Drawing (Photograph required for buildings, structures, S SW W 270 270 270 270 270 270 270 270 270 270	and objects.)  NW 300 330	P5b. Description of	trict  Other (Isolates, etc.)  Photo: (view, date, accession#) verview of Wutchumna Ditch, oking WSE
\$245 W (1) \$ 55 24 12 14, 115 55 W 15	110 = 42010		
			cted/Age and Source: rehistoric
		*P7. Owner and A	ddress:
		n/a	a
		M. AS 20 Ca	(Name, affiliation, and address)  . Silva  BM Affiliates, Inc.  034 Corte Del Nogal  arlsbad, CA 92011
The state of the s	3 C&B Woodlake Se	*P9. Date Recorde	ed: 12/2/2022
*P11. Report Citation: (cite survey report and sources, or enter "none.")	the Woodlake Sew	er Improvements Projo	

State of California – The Resources Agency
DEPARTMENT OF PARKS AND
LINEAR FEATURE RECORD SHEET

Primary #	P-54-004875	
HRI # <u> </u>	CAL-TUL-3027H	

Page	2	of	1	
Page		OI .	4	

Resource Name or #: P-54-004875 UPDATE

- L1. Historic and/or Common Name: Wutchumna Canal; Wutchumna Ditch
- L2a. Portion Described: ☐ Entire Resource Segment ☐ Point Observation Designation: Wutchumna Ditch
  - b. Location of point or segment: Zone 11S, 311388 mE / 4030679 mN M.D.B.M
- L3. Description: One 380-ft long segment of Wutchumna Ditch (Canal) was previously recorded by Pacific Legacy in 2007. The segment is located east of the City of Visalia, approximately 9.5-miles southwest of the current segment. Based on a picture available in the site record, the ditch appears to be a hand dug earthen ditch which is unimproved.

The segment of the Wutchumna Ditch recorded here is approximately 60-ft wide at the top of the channel. The canal was carrying water at the time of the survey so no accurate measurements of bottom width or depth could be made. The canal has been channelized and its walls lined with riprap consisting of fractured concrete slabs, brick segments, and other materials.

Construction on the Wutchumna Ditch was begun in 1872 by the newly formed Wutchumna Water Company. The ditch carries water from the Kaweah River into Bravo lake, and then west into the valley by way of an upper and lower division all the way to a point 4-miles south of Goshen. The previously recorded segment of the ditch is part of the lower division, which was constructed in 1873 or 1874, and established a connection between St. Johns River and Visalia Creek (Grunsky 1898). The segment of the Wutchumna Ditch which intersects the APE is part of the main canal as it empties out of Bravo Lake.

- **L4. Dimensions:** (In feet for historic features and meters for prehistoric features)
  - a. Top Width: ~70-ft (N-S)
  - b. Bottom Width: ~5-ft
  - c. Height or Depth: ~6-ft
  - d. Length of Segment: ~105-ft (WSW-ENE)
- L5. Associated Resources: Bravo lake
- L6. Setting: Traverses through residential tract development, agricultural fields, and open flats just south of the City of Woodlake.
- L7. Integrity Considerations: N/A
- L8a. Photograph, Map or Drawing: See Sketch Map
- L8b. Description of Photo, Map, or Drawing: See Sketch Map
- L9. Remarks:

#### References:

Grunsky, Carl Ewald

1898 Irrigation Near Fresno, California. Irrigation Papers No. 18. Government Printing Office, Washington.

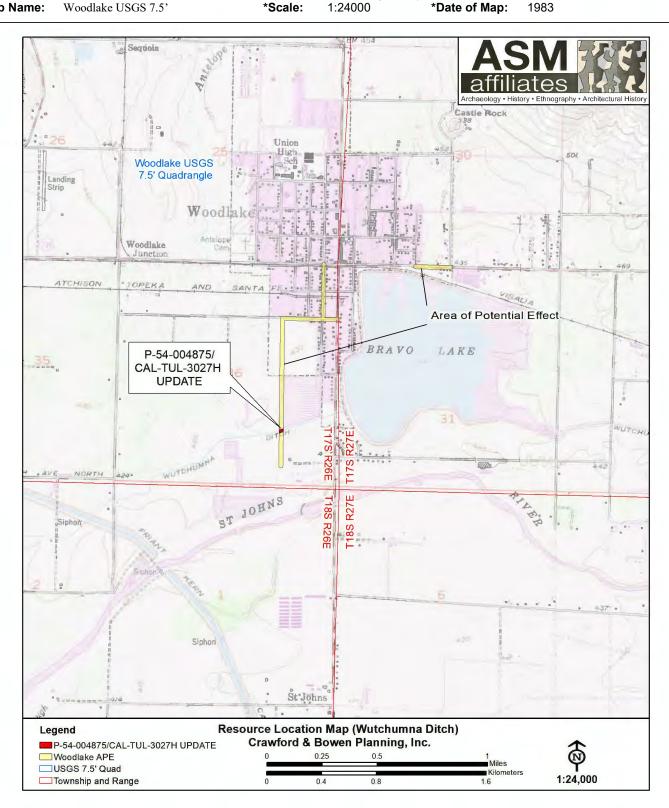
L10. Form Prepared by: R. Azpitarte, ASM Affiliates Inc., 20424 W. Valley Blvd., Suite A, Tehachapi CA, 93561

Primary #	P-54-004875	
HRI #		
Trinomial	CAL-TUL-3027H	

Page 3 of 4 \*Map Name:

\*Resource Name or # (Assigned by recorder) P-54-004875 UPDATE

\*Scale: 1:24000 \*Date of Map: 1983

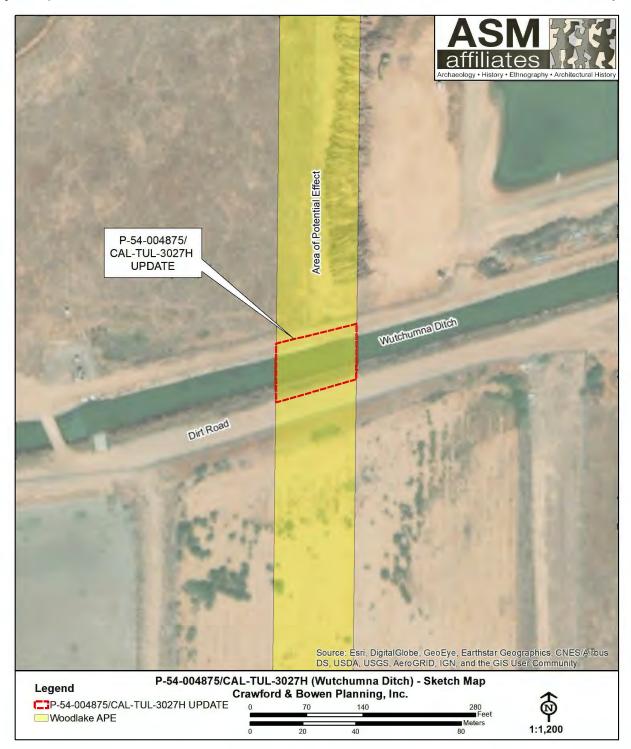


State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION

**SKETCH MAP** 

Primary # \_\_\_\_\_ P-54-004875\_\_\_\_\_\_ HRI # \_\_\_\_\_\_ Trinomial \_\_\_\_CAL-TUL-3027H\_\_\_\_\_

Page 4 of 4 Drawn by: R. Azpitarte \*Resource Name or #: P-54-004875 UPDATE Date of map: 2022



# City of Woodlake Sewer Improvements Project

Final CEQA Initial Study Mitigated Negative Declaration



Prepared for: City of Woodlake 350 North Valencia Boulevard Woodlake, CA 93286

Prepared by: Stantec Consulting Services Inc. 101 Providence Mine Road, Suite 202, Nevada City, CA 95959

# Sign-off Sheet

This document entitled City of Woodlake Sewer Improvements Project was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of the City of Woodlake (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Preparation Led by

Kate Gross Gray, Environmental Scientist

Reviewed by

Bernadette Bezy, Senior Environmental Compliance Specialist



Project Area January 19, 2018

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Project Area January 19, 2018

# 1.0 PROJECT AREA

# 1.1 PROJECT LOCATION

The City of Woodlake is located in the northeast corner of Tulare County, approximately 75 miles north of Bakersfield California, near the base of the Sierra Nevada Mountain Range in the San Joaquin Valley. Location maps are included in Figure 1.1-1 Project Vicinity and Figure 1.1-2 Project Location.

# 2.0 PROJECT DESCRIPTION

## 2.1 PROJECT SUMMARY

The City of Woodlake (City) Sewer Improvements (Project) is located in the City of Woodlake, CA. Woodlake is located in the northeast corner of Tulare County approximately 75 miles north of Bakersfield, CA near the base of the Sierra Nevada Mountain Range in the San Joaquin Valley. The City currently has a population of approximately 7,600 (US Census July 2016). The City provides sanitary sewer service within the City Limits and to the unincorporated community east of the City known as Wells Tract.

In January of 2017 the City completed a sewer system master plan that assessed deficiencies in the collection system and prioritized sewer system improvements. The master plan identified several projects to address capacity constraints in the system. The City is seeking grant funding from the California State Water Resources Control Board Division of Financial Assistance (DFA) to construct the Project. The proposed Project consists of specific pipe upgrades to address capacity and condition deficiencies through a combination of repair and replacement projects throughout the City's collection system. Some of the projects are those identified specifically in the City's Sewer Master Plan, others are pipelines that have been identified using CCTV inspection, or city maintenance records, or are otherwise known to require repair or replacement due to age or condition. The location of the Project is shown in Figure 1.1-1 Project Vicinity and Figure 1.1-2 Project Location.

The proposed Project as shown in Figure 1.1-2 will implement capacity improvements, as well as repair and replacement of aging sewer system assets. The capacity improvements will be accomplished through upsizing existing lines, either through excavation and replacement with larger diameter lines or utilizing pipe bursting methods. In one instance, installation of a new, parallel trunk line will route flow that would otherwise exceed the capacity of an existing trunk sewer located in Valencia Street. The capacity improvements were identified through assessment of computer model simulations, physical investigation, and routine O&M activities. These improvements are summarized in Table 1.1-1. In addition to the capacity improvements the City plans to repair or replace aging infrastructure that is close to the end of it useful life. The



Project Description January 19, 2018

repair and replacement pipelines that will be included in the proposed project are identified in Figure 1.1-2 with specific shading to differentiate that work from capacity related improvements. A summary of the pipe segments included in the repair and replacement category are summarized in Table 1.1-2.

Table 1.1-1 Sewer Improvements

US MH	DS MH	Length (feet)	Existing Diameter (in)	New Diameter (in)	Street
WN1-02	WN1-11	305	6	10	West Wutchumna Ave
WN1-11	WN1-20	322	8	10	West Wutchumna Ave
NV4-01	NV4-03	204	6	8	West Sierra Ave
EN1-23	EN1-24	389	6	8	North Castle Rock Road
EN1-24	EN2-09	401	6	8	North Castle Rock Road
EN4-09	EN5-14	447	10	12	East Naranjo Blvd
EN5-14	EN6-08	521	10	12	East Naranjo Blvd
EN5-12	EN5-13	320	8	10	alley
EN5-13	EN5-14	337	8	10	alley
EN6-03	EN6-04	286	6	8	North Magnolia Street
EN6-04	EN6-05	310	6	8	North Magnolia Street
EN6-05	EN6-06	357	6	8	North Magnolia Street
EN6-06	EN6-07	254	8	10	North Magnolia Street
EN6-07	EN6-08	399	8	10	North Magnolia Street
CV1-14	CV1-13	335	6	8	alley
CV1-15	CV1-16	278	6	8	alley
CO10	CV1-21	513	6	8	South Magnolia Street
CO34	CV2-11	114	6	8	South Magnolia Street
CV2-12	CV2-13	404	6	8	South Magnolia Street
CV2-13	CV2-14	323	6	8	South Magnolia Street
CV2-14	CV2-08	359	8	10	Laguna Street
NV4-02	NV4-01	556	6	8	alley
SV1-18	SV1-17	499	8	10	Riverside Ave
SV1-17	SV1-15	408	8	10	Riverside Ave
SV1-15	SV1-10	442	8	10	Riverside Ave
WN2-12	WN3-05	567	12	15	West Naranjo Blvd.



Project Description January 19, 2018

WN3-05	WN3-11	351	12	15	West Naranjo Blvd.
WN3-11	WN4-07	350	12	15	West Naranjo Blvd.
WN4-07	WN4-13	350	12	15	West Naranjo Blvd.
WN4-13	NV4-10	373	12	15	West Naranjo Blvd.
CO5	CV2-04	398	6	10	South Elm Street
CV2-04	CV2-05	419	6	10	South Elm Street
CV2-05	CV2-06	422	6	10	South Elm Street
CO6	CV1-12	452	6	10	South Elm Street
CV1-10	CV1-11	516	6	10	South Elm Street
CO5	CV2-04	398	6	10	South Elm Street
SV1-05	SV1-06	407	15	18	South Valencia Blvd
CV2-06	SV1-05	2119	New line	10	City Corp Yard

Table 2.1-2 Repair and Replacement Pipelines

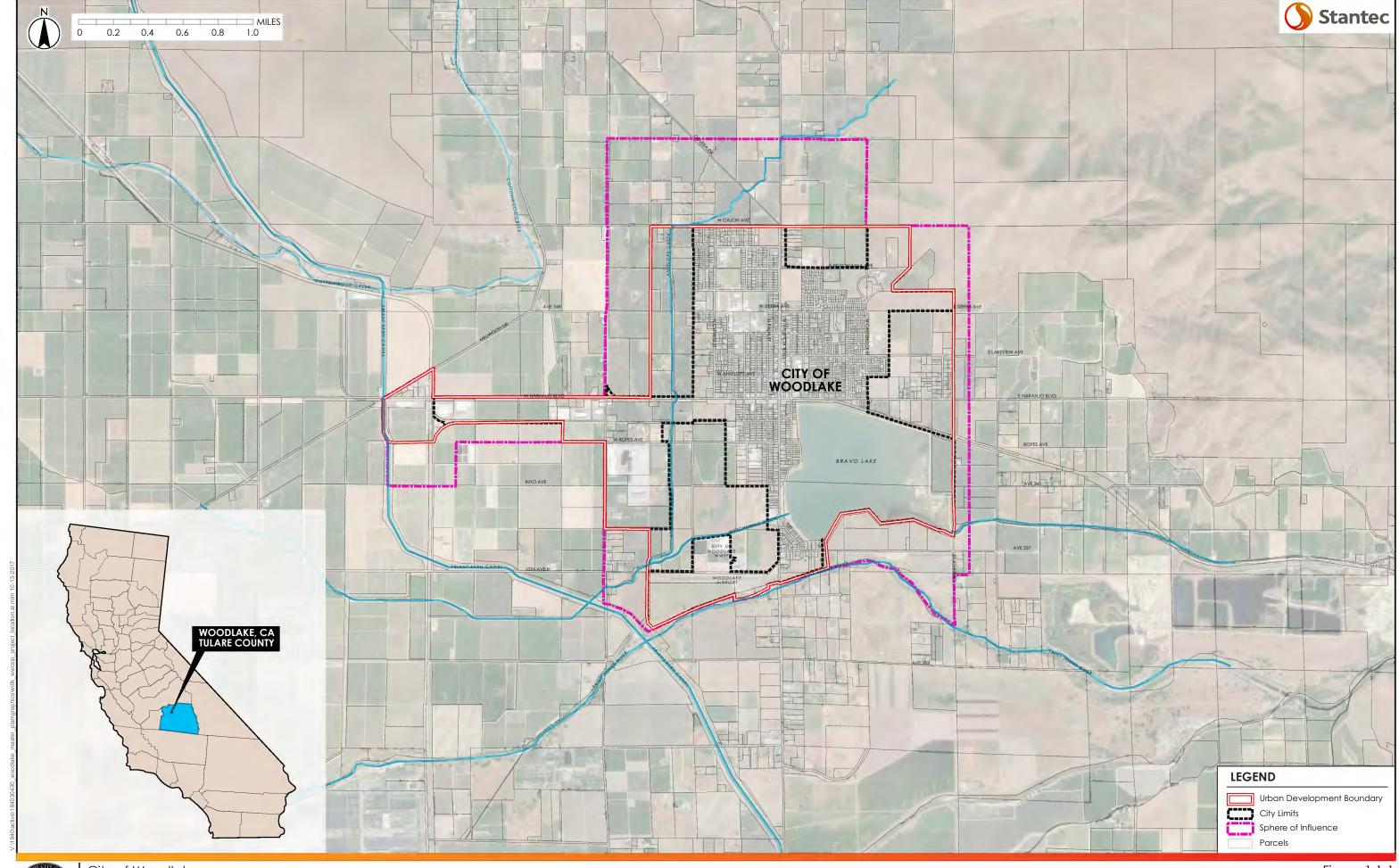
US MH	DS MH	Length (feet)	Existing Diameter (in)	Installation Year	Street
EN3-07	EN3-08	495	6	1919-1950	West Wutchumna Ave
EN3-08	EN3-09	155	6	1919-1950	West Wutchumna Ave
EN3-09	EN3-10	339	6	1919-1950	West Sierra Ave
EN3-10	EN2-01	251	6	1919-1950	North Castle Rock Road
CV2-06	CV2-09	377	8	1919-1950	North Castle Rock Road
EN1-20	EN1-21	262	8	1972	East Naranjo Blvd
EN1-21	EN1-22	250	8	1972	East Naranjo Blvd
EN5-04	EN5-05	346	8	1919-1950	East Naranjo Blvd
EN5-05	EN5-06	303	8	1919-1950	alley
EN5-06	EN5-12	170	8	1919-1950	alley
WN2-05	WN2-06	328	10	1919-1950	North Magnolia Street
WN2-06	WN2-07	322	10	1919-1950	North Magnolia Street
WN2-08	WN2-09	311	10	1919-1950	North Magnolia Street
WN2-09	WN2-10	338	10	1919-1950	North Magnolia Street

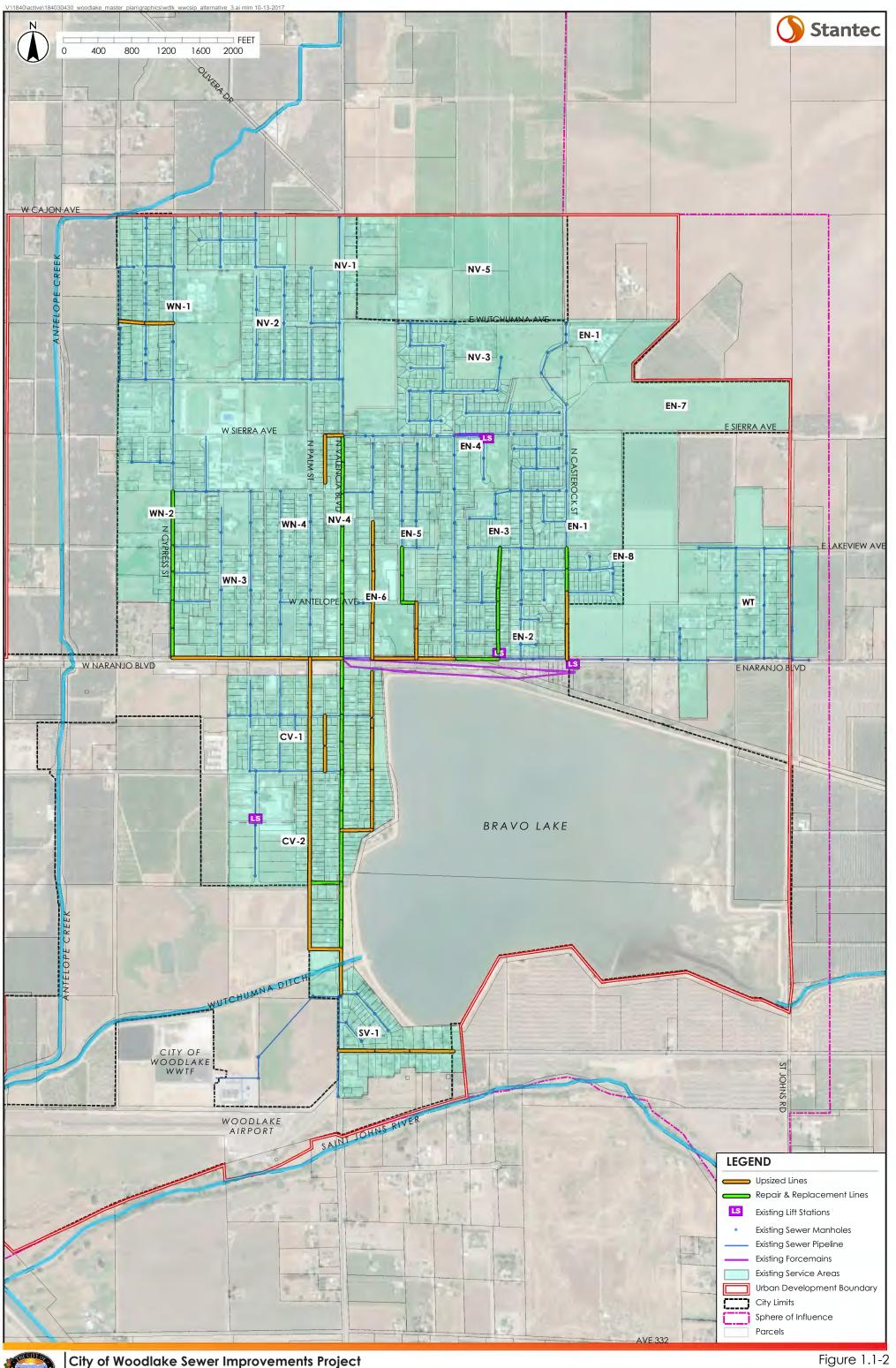


Project Description January 19, 2018

WN2-10	WN2-11	328	10	1919-1950	North Magnolia Street
WN2-11	WN2-12	333	10	1919-1950	alley
EN2-02	EN4-09	516	10	1919-1950	alley
NV4-03	NV4-04	336	12	1919-1950	South Magnolia Street
NV4-08	NV4-09	396	12	1919-1950	South Magnolia Street
NV4-09	NV4-10	382	12	1919-1950	South Magnolia Street
NV4-07	NV4-08	389	12	1919-1950	South Magnolia Street
NV4-06	NV4-07	402	12	1919-1950	Laguna Street
NV4-05	NV4-06	389	12	1919-1950	alley
NV4-04	NV4-05	336	12	1919-1950	West Naranjo Blvd.
CV1-17	CV1-18	340	15	1919-1950	West Naranjo Blvd.
CV1-18	CV1-19	321	15	1919-1950	West Naranjo Blvd.
CV1-19	CV1-20	327	15	1919-1950	West Naranjo Blvd.
CV1-20	CV2-07	486	15	1919-1950	West Naranjo Blvd.
CV2-08	CV2-09	616	15	1919-1950	South Elm Street
CV2-09	SV1-04	454	15	1919-1950	South Elm Street
SV1-04	SV1-05	448	15	1919-1950	South Elm Street
NV4-10	CV1-17	332	15	1919-1950	South Elm Street
SV1-05	SV1-06	407	15	1919-1950	South Elm Street
CV2-07	CV2-08	217	15	1919-1950	South Elm Street







**Project Location** 

Project Description January 19, 2018

# 2.2 PROJECT PURPOSE AND NEED

The City has identified deficiencies in their wastewater collection system. Improving the City's collection system will have multiple benefits for the City and its residents. Completing improvements that address ongoing maintenance issues within the collection system will reduce the City's maintenance costs and will reduce the inconvenience caused to residents and businesses when blockages occur. Addressing the capacity constraints within the system will prevent the chances of future sewer overflows that can be a hazard to public safety, the environment, existing infrastructure and potentially damage private property.

The City's overall life-cycle goal for the collection system is to target an upper service life of 75 years for collection system infrastructure components with a maximum age of 100 years. If continued deterioration of collection system infrastructure is not addressed it may cause the surrounding pipe soil to be washed into the pipe which, in turn, can lead to pipe blockages, voids, sewer collapses and sinkholes. Voids and sinkholes can cause serious damage to nearby infrastructure such as water mains, storm drains, and gas lines as well as structures, such as roadways which sit atop the sewer lines. Such damage is not only costly, but also poses a potential risk to the public.

There are no known problems with the City's wastewater collection system from a regulatory perspective. The most concerning problem associated with most wastewater collection systems from a regulatory perspective is the occurrence of spillage of sewage from the collection system. Spills result from 1) partial blockage of a sewer pipe which reduces the hydraulic capacity of the pipe, and 2) flows which exceed the hydraulic capacity of a pipe even if in perfect condition. Causes of partial blockages include:

- Root intrusion (i.e., roots seeking water and nutrients/fertilizer from the wastewater in the pipe)
- Debris dumped or flushed into a sewer
- Buildup of cooking fats, oils, and grease as it congeals in sewers
- Deterioration and/or breakage of pipe material over time
- Vandalism

The primary causes of sewer flow exceeding the design capacity of any pipe in the sewer system are inflow of surface water (stream flow, precipitation, snow melt, etc.) and infiltration of shallow groundwater resulting from stream flow, precipitation, snow melt, etc. Inflow impacts pipes and pipe joints, leaking manholes, private sewer pipes serving homes and businesses (aka service laterals), etc.



Project Description January 19, 2018

### 2.3 PROJECT OBJECTIVES

The objectives of this project are:

- 1. Improve the capacity of the system for the existing users
- 2. Address ongoing maintenance issues within the system
- 3. Prevent future maintenance issues due to aging infrastructure
- 4. Replace aging infrastructure which has exceeded its useful life

### 2.4 CURRENT LAND USE TRENDS

Land uses within the City are established by the City's General Plan. The General Plan identifies growth within the current City Limits as well as two major areas for future growth: the Urban Development Boundary (UDB) and the Sphere of Influence (SOI) boundary. The land uses and developable areas within the City Limits are shown in Figure 1.1-3. Table 2.1-1 summarizes the acreages of the various land use types which fall within the City's existing sewer service area.

Table 2.2-1 Land Uses within City Limits

	City Limits		
	Developed	Vacant	Total
Agricultural	2	36	38
Commercial	31	8	39
Very Low density res	16	13	29
Low Density Res	326	50	376
Medium Density	8	56	64
High Density Res	45	7	52
Industrial	104	164	268
Professional office	13	3	16
Public	171	54	225
Urban Reserve	29	92	121
Water	350	-	350
Totals	1,095	483	1,577



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## 2.5 EXISTING FACILITIES

## 2.5.1 Wastewater Collection System

The City's existing wastewater collection system covers an area of approximately 1,000 acres and provides service to over 2,000 residential, commercial, and industrial users. The wastewater generated by these users is collected and conveyed to the City's wastewater treatment plant (WWTP) by a network of sewer pipes, force mains, and pump stations. The City owns, operates, and maintains this network of over 20 miles of pipelines which range in size from 6 to 18 inches in diameter.

The Project is located in the San Joaquin Valley in Tulare County. The terrain is relatively flat, sloping slightly to the southwest at an elevation of approximately 450 feet above sea level. The City's existing collection system generally follows the natural slope, flowing from north to south. A network of smaller sewer pipelines and lift stations route flow from throughout the City to a main trunk line along Valencia Blvd (Hwy 245), which discharges to the City's WWTP. The main trunk line runs from north to south from Cajon Ave to Hermosa Ave, then west to the WWTP. The majority of the main trunk is 15 inches in diameter and was installed prior to 1950. The City operates four lift stations, each with a pair of constant speed pumps.

# 2.6 CONSTRUCTION ACTIVITIES AND ESTIMATED CONSTRUCTION SCHEDULE

Construction activities for the proposed project are summarized in Table 2.1-2. Construction activities for excavation and replacement or installation of new pipeline for the proposed project would be completed in the following sequence:

- Site preparation and staging
- Trenching
- Pipe installation or repair and testing, manhole replacement
- Pavement restoration

Trenching activities would include the use of a pavement saw, rubber-tired, or tracked backhoe. Crews would saw cut the pavement along the length of the pipeline route at a 2.5-foot to 4-foot width, typically. These sections would be excavated to approximately 10-feet deep. For pipe replacement, the existing pipe would be cut and removed, the new pipe would be laid alongside the excavated trench for placement. Spoils from the pavement demolition would be stored alongside the excavation before being loaded into a dump truck, hauled off site, and properly disposed. For pipe repair, the material around the pipe would be excavated, the pipe would be repaired in place, and the trench would be backfilled with the original material. Following installation, the new pipe would be tested. Disturbed areas caused by the trench excavation would be restored to the original condition. The trench would be patched with pavement per City of Woodlake standards.



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Manholes requiring replacement due to condition deficiencies (significant corrosion, differential settlement, structural failure, etc.) would be excavated and demolished using excavating equipment and industrial hand tools. All demolished material will be removed from the site and properly disposed. It is most likely manholes would be replaced with pre-cast concrete structures of similar size and configuration.

In addition to excavation and replacement or installation of new pipes or manholes, the project may include different forms of trenchless construction. These include cast-in-place, or fold and form rehabilitation of existing pipelines, slip lining of existing pipes, or pipe bursting where these methods are deemed cost effective and applicable. Specific methods to be applied in specific locations will be determined during development of the design (construction documents). If manholes with condition deficiencies are to be repaired they may also be repaired and rehabilitated using similar materials and methods as the cast-in-place type pipeline rehabilitation described above. Epoxy coating systems are possible options for rehabilitation of structures as well.

Hours of construction would be from 7 a.m. to 7 p.m. on weekdays and possibly weekends. Construction would reduce traffic to a single lane. This allows for emergency vehicle ingress and egress, but it can cause minimal delays for residents.

Primary staging areas would be established to store construction materials and equipment when not in use. Existing public rights-of-way may be used as staging areas. Otherwise, the contractor would arrange for staging areas off site under agreements with individual property owners along the pipeline alignment and in previously disturbed areas, as well as the City of Woodlake corp yard. Construction would last approximately six to nine months and is tentatively planned to take place within the next two years once the DFA financial assistance process is complete, funding has been secured and construction documents prepared.



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Table 2.2-2 Project Overview and Schedule for the City of Woodlake Sewer Improvements Project

Project Component	Specific Activities	Location	Area of Impact	Estimated Construction Schedule
Site preparation	Site preparation within City rights-of- ways, public utility, City land and private land.  Staging of equipment in designated staging areas	Prior to construction on all Project components	Staging will occur at approved, previously disturbed locations.	One month, immediately prior to each repair or replacement activity, for the duration of the repair/replacement process (six to nine months)
Pipeline Installation or Repair	<ul> <li>Open trench and pipe installation</li> <li>Trenchless methods for installing the pipeline were applicable</li> <li>Manhole replacement.</li> <li>Traffic control</li> <li>Pipeline testing</li> <li>Backfill and road or shoulder restoration.</li> </ul>	Within existing service area	Approximately 16,210 feet for sewer improvements, 12,010 for repair.	Six to nine months, total, shorter durations at any given replacement or repair site. Target completion by 2020, contingent upon funding, planning, design, and permitting



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## 2.7 CEQA PROCESS

The California Environmental Quality Act (CEQA) is the state environmental law that requires public agencies identify, disclose, and consider the potential environmental impacts that may result from their approval and resultant implementation of a proposed project, such as the City of Woodlake Sewer Improvements Project. The intent of CEQA is to foster good planning and to consider environmental issues during the planning process. The approval of the proposed Project is considered a public agency discretionary action, and therefore the proposed Project is subject to compliance with CEQA.

CEQA Guideline (Section 21067) defines the Lead Agency as "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment". Therefore, the City of Woodlake is the Lead Agency under CEQA for the preparation of this Initial Study/Mitigated Negative Declaration (IS/MND) of impacts.

This Draft IS/MND was prepared for the City of Woodlake by Stantec Consulting Services Inc., an environmental consultant. Prior to public review, this Draft IS/MND was extensively reviewed and evaluated by the City of Woodlake staff and, as such, this Draft IS/MND reflects the independent judgment and analysis of the City as required by CEQA.

The public and other local state resource agencies will be given the opportunity to review and comment on this document during the 30-day public review period. Comments received during the 30-day review period will be considered by the City of Woodlake prior to the approval of the CEQA disclosure document, and prior to project approval.

## 2.8 ENVIRONMENTAL PERMITTING

The proposed Project will trigger proof of compliance with Federal and State permitting requirements, due to the federal Environmental Protection Agency (EPA) (through the State Revolving Fund [SRF]) and United States Department of Agriculture (USDA) Rural Development discretionary decisions for funding. Therefore, due to the need for state and federal discretionary actions, the proposed Project will trigger the need for a demonstration of compliance with:

- National Historic Preservation Act Section 106 Compliance (triggered by federal funding and potential to affect historic properties or inadvertently affect buried historic or prehistoric resources)
- **Storm Water Pollution Prevention Plan** (triggered by construction activities impacting an area greater than 1 acre).
- California Department of Fish and Wildlife Section 1600 et seq Streambed Alteration
   Agreement (triggered by any crossing or undercrossing of waters of the State including
   small drainages with a defined bed and bank);



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> Additionally, the federal funding triggers the need for due diligence documentation for the EPA and USDA to verify that the following permits and clearances are not required:

- **Federal Endangered Species Act Section 7** (triggered by federal funding; however, listed species impacts area avoided, therefore due diligence documentation of no adverse effect on listed species is required)
- Clean Water Act Section 401 and 404 (verification that no dredge or fill placement or adverse water quality impacts are possible within in potential waters of the US)

## 2.9 SCOPE OF THIS STUDY

As the Lead Agency under CEQA, the City of Woodlake is responsible for compliance with the environmental review process prescribed by the CEQA guidelines. This study focuses on the environmental issues identified as possibly significant in the CEQA checklist and by CEQA guidelines. A complete description of the proposed Project is included in the previous sections of this document. All areas of concern relevant to the proposed Project are analyzed in Section 3.0.

Biological and cultural resources surveys were conducted by a Stantec wildlife biologist, botanist/wetland scientist on September 28, 2017, and archaeologist on October 2, 2017.

## 2.10 ENVIRONMENTAL CHECKLIST FORM AND ANALYSIS

## 1. Project Title:

City of Woodlake Sewer Improvements Project

## 2. Lead agency name and address:

City of Woodlake, Public Works Department 350 N Valencia Avenue Woodlake, CA 93286

## 3. Contact person and phone number:

Contact: Jason Waters Phone: (559) 564-8055

#### 4. Project location:

The proposed Project is located in the City of Woodlake (City) in the northeast corner of Tulare County

## 5. Project sponsor's name and address:

City of Woodlake, Public Works Department



350 N Valencia Avenue Woodlake, CA 93286 Phone: (559) 564-8055

## 6. General plan designation and zoning:

Land Use Designations:

- o Residential
- o Public
- o Industrial
- Commercial
- o Churches
- o Agriculture
- o Right-of-way

## Zoning:

- o Neighborhood Commercial (CN)
- o Central Commercial (CC)
- Service Commercial (CS)
- o Light Manufacturing (ML)
- Heavy Manufacturing (MH)
- o Rural residential (RA)
- o Very Low- High Density Residential (R10, R, R2, R3)
- Planned Development (PRD)
- Resource Conservation (RSC)
- Urban Reserve (UR)

## 7. Description of Project:

Refer to the Project Description (Section 1.0 above).

## 8. Surrounding Land Uses and Setting:

Refer to Project Description (Section 1.0 above)



# 3.0 ENVIRONMENTAL IMPACTS

The following sections summarize: (1) the environmental setting; (2) impacts; and (3) proposed mitigation measures associated with the proposed Project. Additional topics such as the methodology and/or regulatory setting were also included where applicable. In all cases the proposed Project activities described in the Project Description were analyzed for potential impacts. In each section, all proposed Project activities are referred to either explicitly by name, or implicitly as "the proposed Project".

## 3.1 **AESTHETICS**

This section identifies and evaluates issues related to visual resources in the proposed Project area. The Environmental Setting discussion describes the current setting of the proposed Project site and area. The purpose of this information is to establish the existing environmental context against which the reader can then understand the environmental changes caused by proposed Project actions. The environmental setting information is intended to be directly or indirectly relevant to the subsequent discussion of impacts. For example, the setting identifies groups of people who have views of the proposed Project site because the proposed Project could change their views and experiences. The environmental changes associated with the proposed Project are discussed in the Impact Analysis.

# 3.1.1 Regulatory Setting

There are no Federal or local regulations regarding Aesthetic resources that are related to the proposed Project.

## 3.1.1.1 State Regulations

The State of California Department of Transportation (DOT) administers State scenic route designations within Tulare County. Tulare County has also designated scenic corridors along certain routes within the County. State scenic route designations include:

- State Route 190 (Eligible State Scenic Highway- Not Officially Designated)
- State Route 198 (Eligible State Scenic Highway- Not Officially Designated)

# 3.1.2 Environmental Setting

This section describes the visual resources setting of the proposed Project and the appearance of the proposed Project after construction, and analyzes the potential effects of the proposed Project on visual resources in terms of changes to the viewshed. Aesthetic resources are those natural resources, landforms, vegetation, and manmade structures in the regional and local environment that generate sensory reactions and evaluations by viewers. Potential viewers in



the Project area include: residents, recreationists, local business owners and shoppers, parents, teachers, and students of Woodlake Union High School and Castle Rock Elementary School, and roadway users on local roads.

As described in the Project Description, the proposed Project is located within the City of Woodlake which is in the north-western portion of Tulare County. The City of Woodlake and the surrounding area consists of generally flat to gently sloping topography. Additionally, Bravo Lake covers much of the south-eastern portion of the City limits. Elevations in the City and the surrounding area range from 440 to 450 feet above mean sea level (amsl).

The Project area within the City limits is characterized by paved roads, houses, and a few local parks. The surrounding area consists of agricultural lands. A mix of rural/agricultural, developed and natural landscapes characterizes the region of the proposed project area. The Project area is zoned for multiple uses such as:

- Neighborhood Commercial (CN)
- Central Commercial (CC)
- Service Commercial (CS)
- Light Manufacturing (ML)
- Heavy Manufacturing (MH)

- Rural residential (RA)
- Very Low- High Density Residential (R10, R, R2, R3)
- Planned Development (PRD)
- Resource Conservation (RSC)
- Urban Reserve (UR)

The Project area north and east of the City is generally located in rural agricultural lands and turns more undeveloped and natural as it approaches the City of Elderwood (to the north) and the City of Citro (to the east). State Route 245 runs in a north-south direction through the City of Woodlake and State Route 216 runs in a west-east direction through the City. A portion of the proposed project work would occur along these major roadways. The City's WWTP is located in the southern most portion of the City limits adjacent to the Woodlake Airport. The City's WWTP visual characteristics are typical of a public services facility with a control building, tanks, ponds, and associated wastewater treatment appurtenances. This facility would remain unchanged under the proposed Project. Areas outside of the City limits consist mostly of two lane roads surrounded by a mixture of agriculture, industrial, and undeveloped areas.

## 3.1.3 Impact Analysis

This section analyzes the potential impacts of the proposed Project to the baseline conditions described above.



I.	AESTHETICS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			$\boxtimes$	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

## a) Would the Project have a substantial adverse effect on a scenic vista?

Finding: Less than significant

A scenic vista is generally considered a view that has remarkable or unique scenery or resources that are indigenous to a specific area. While the proposed Project site does contain scenic resources, such as the existing mature residential landscapes including trees and is set against the backdrop of the existing rural land uses, it is not considered to provide a scenic vista. In addition, no scenic vistas have been identified in the proposed Project areas, based on a review of the Woodlake General Plan (Woodlake General Plan 2008). The Project area consists generally of low density residential development and agricultural lands.

The proposed Project is within a low density, agricultural community. Once constructed the wastewater system repair and replacement pipes would be almost entirely subsurface, except for the associated apparatuses. Therefore, impacts would be less than significant.

b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?

Finding: No impact

There are no officially designated scenic highways in the City of Woodlake (California DOT 2011). As a result, no portion of the proposed Project would be visible from a scenic highway. The proposed Project would not affect aesthetic resources within the proximity of a state scenic highway. Therefore, no impact would occur.



# c) Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

Finding: Less than significant

As discussed under impact "a" above, the proposed Project is within an area with relatively low density housing and is surrounded by agricultural lands. The proposed upsizing and replacement of the pipelines within the City limits have the potential to have a low impact on the visual character of the area during construction activities. The proposed Project would not require extensive removal of surrounding trees, as the facilities have been sited in and along existing roads and rights-of-way to minimize and avoid tree disturbance. The existing visual character of the City is considered to be moderate as it consists of low density residential structures, some commercial use structures, a few local schools, and a network of local roads. The majority of the proposed Project pipeline would not be visible after completion on the construction activities and restoration of the area. Therefore, the proposed Project would not have a significant impact to the existing visual character or quality.

# d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Finding: Less than significant

No additional permanent lighting is involved with the construction of the proposed Project. Construction activities would occur during daytime and would not introduce a new source of nighttime light in the proposed Project area. Normal operation of the proposed project would not involve the use of new lighting or glare because the pipeline would be constructed underground.

## 3.1.4 Mitigation

No mitigation is required.



## 3.2 AGRICULTURE AND FORESTRY RESOURCES

The agricultural resources section discusses the potential impacts of the proposed Project to agricultural resources within the proposed Project site and surrounding area.

## 3.2.1 Regulatory Setting

## 3.2.1.1 Federal Regulations

## 3.2.1.1.1 Farmland Protection Act (FPPA)

The Farmland Protection Policy Act (FPPA) of 1981 [Sections 1539-1549 P.L. 97-98, Dec 22, 1981], required the Secretary of Agriculture to establish and carry out a program to "minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to the extent practicable, will be compatible with state, unit of local government, and private programs and policies to protect farmland." [7 USC 4201-4209 & USC 658]

## 3.2.1.2 State Regulations

## 3.2.1.2.1 Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) is a non-regulatory program of the California Department of Conservation that inventories the state's important farmlands and tracks the conversion of farmland to other land uses. The FMMP publishes reports of mapped farmland and conversions every two years. The FMMP categorizes farmland on the basis of its soil quality, the availability of irrigation water, current use, and slope, among other criteria. The following are the categories of farmland identified in the FMMP (CDC 2017).

- Prime farmland: Farmland with the best combination of physical and chemical features
  able to sustain long-term agricultural production. This land has the soil quality, growing
  season, and moisture supply needed to produce sustained high yields. Land must have
  been used for irrigated agricultural production at some time during the four years prior to
  the mapping date.
- Farmland of statewide importance: Farmland similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Unique farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.



- Farmland of local importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing land: Land on which the existing vegetation is suited to the grazing of livestock.
   This category was developed in cooperation with the California Cattlemen's Association,
   University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

The FMMP considers all but grazing land to be important farmland.

## 3.2.1.2.2 Williamson Act

The California Land Conservation Act (Williamson Act) of 1965 is the state's principal policy for the "preservation of a maximum amount of the limited supply of agricultural land in the state" (Cal. Government Code Section 51220(a)). The purpose of the Williamson Act is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act enables private landowners to contract with counties and cities to voluntarily restrict their land to agricultural and compatible open-space uses. In return for this guarantee by landowners the government jurisdiction assesses taxes based on the agricultural value of the land rather than the market value, which typically results in a substantial reduction in property taxes.

## 3.2.1.3 Local Regulations

#### 3.2.1.3.1 Woodlake General Plan 2008 to 2028

**Goal 1**. Preserve and protect agricultural lands as a means for providing open space and for the managed production of resources.

**Policy A.** The City shall strive to ensure that new development is designed in a manner that uses land efficiently and reduces the need to expand the urban area outward onto prime agricultural lands.

**Goal 3.** Promote infill and moderately increase overall residential densities in the City of Woodlake to reduce the rate of urbanization of surrounding agricultural lands.

**Goal 4.** Establish and maintain "hard edges" around Woodlake that define where urbanization stops and agricultural open space begins.

## 3.2.2 Environmental Setting

A wide variety of agricultural products are grown and produced in Tulare County, which contributes to the richness of the local and statewide agrarian tradition. Many fruit crops such as oranges, grapes, tangerines, and lemons; nut crops, such as pistachios, almonds, and walnuts;



livestock, such as dairy and meat, are part of the Tulare agricultural industry. Dairy production (i.e. milk) is the County's leading farm commodity (Tulare County 2017).

Evaluation of the 2015/2016 Williamson Act map for Tulare County (CDC 2015) indicates that there are no lands with Williamson Act contracts in the proposed Project area. Additionally, according to the Farmland Mapping and Monitoring Program (FMMP), the Project area has no important farmland (CDC 2017). However, there are Williamson Act lands and important farmlands nearby to the Project area.

The Tulare County General Plan land use designation for the Project area is currently Neighborhood Commercial (CN), Central Commercial (CC), Service Commercial (CS), Light Manufacturing (ML), Heavy Manufacturing (MH), Rural residential (RA), Very Low- High Density Residential (R10, R, R2, R3), Planned Development (PRD), Resource Conservation (RSC), and Urban Reserve (UR) (Woodlake General Plan 2008). The proposed Project area is not currently used as agricultural lands.

## 3.2.1 Impact Analysis

This section analyzes the potential impacts of the proposed Project to the baseline conditions described above.

II.	AGRICULTURE RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
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))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
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?				$\boxtimes$



a) Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

Finding: No Impact

The proposed Project activities would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The proposed Project area is classified by the Farmland Mapping and Monitoring Program as urban and built-up land (CDC 2017). The upsized line and the repair and replacement lines are on land not currently used as agricultural lands and the proposed use of the property is consistent with designated land uses and is consistent with the zoning classifications. Since the proposed Project would not convert Farmland as designated by the Farmland Mapping and Monitoring Program to non-agricultural use, there would be no impact.

b) Would the Project conflict with existing zoning for agricultural use or a Williamson Act contract?

Finding: No Impact

The proposed Project area is currently zoned Neighborhood Commercial (CN), Central Commercial (CC), Service Commercial (CS), Light Manufacturing (ML), Heavy Manufacturing (MH), Rural residential (RA), Very Low- High Density Residential (R10, R, R2, R3), Planned Development (PRD), Resource Conservation (RSC), and Urban Reserve (UR) (Woodlake General Plan 2008). The proposed lines would not convert any zoned or land use designated as agricultural land.

The proposed Project area is not registered under the Williamson Act based on a review of the most recent Williamson Act lands geographic information system map published (CDC 2015).

The proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, therefore, there would be 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))?

Finding: No Impact



Public Resources Code (PRC) Section 12220(g) defines forest land as "... land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." Additionally, timberland is defined by PRC Section 4526 as land "... which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products."

The proposed Project area currently consists of residential housing, disturbed areas, and paved roads and other rights-of-way. The proposed Project area does not support 10 percent native tree cover. Therefore, no forest land or timberland activity could be supported on the proposed Project area or in the vicinity of the proposed Project area. These conditions preclude the possibility of changes to forest land or timberland zoning resulting from the proposed Project. Since the proposed Project area is not located on land zoned as forest or timber land and would not conflict with existing zoning for forestry or timberland resources, there would be no impacts to forestry or timberland resources.

d) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No Impact

The proposed Project is not located on forest land and consequently would not result in a significant conversion of forestland to non-forestland uses. Therefore, no impacts would occur.

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?

Finding: No Impact

The proposed Project area is currently zoned Neighborhood Commercial (CN), Central Commercial (CC), Service Commercial (CS), Light Manufacturing (ML), Heavy Manufacturing (MH), Rural residential (RA), Very Low- High Density Residential (R10, R, R2, R3), Planned Development (PRD), Resource Conservation (RSC), and Urban Reserve (UR) (Woodlake General Plan 2008). The proposed Project area is classified by the FMMP as urban and built-up (CDC 2017). As discussed in the population and housing section the proposed Project is designed to accommodate existing residents and planned growth within the community but would not place pressure on agricultural uses in the vicinity to convert to nonagricultural uses. The proposed Project would not cause a change in land use that would create conflict between two types of uses which could lead to abandonment of agricultural uses. Since the proposed Project would not involve any other changes in the existing environment that would result in conversion of farmland or forestland to non-agricultural or non-forest use, there would be no impacts by changes to the existing environment which could result in conversion of farmland.



# 3.2.2 Mitigation

No mitigation required.



## 3.3 AIR QUALITY

In order to assess air quality impacts from the proposed Project, Stantec completed an air quality impacts assessment which is detailed below.

## 3.3.1 Regulatory Setting

The proposed Project is located in the San Joaquin Valley Air Basin (SJVAB). The SJVAB encompasses eight counties; San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the western portion of Kern. Regulatory oversight authority for air quality occurs at the local level with the San Joaquin Valley Air Pollution Control District (SJVAPCD), at the state level with the California Air Resources Board (CARB), and at the federal level with the US Environmental Protection Agency (EPA), Region IX.

The EPA has established National Ambient Air Quality Standards (NAAQS) pursuant to the Clean Air Act. The NAAQS include both primary and secondary standards for several "criteria pollutants". The primary standards are designed to protect human health with an adequate margin of safety. The secondary standards are designed to protect property and ecosystems from the effects of air pollution.

NAAQS have been established for particulate matter less than 10 microns in diameter (PM<sub>10</sub>), particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), carbon monoxide (CO), and ozone (O<sub>3</sub>). The CARB has established California Ambient Air Quality Standards (CAAQS), which in some cases are more stringent than the NAAQS. Table 3.3-1 presents both the NAAQS and CAAQS.

Table 3.3-1 National and California Ambient Air Quality Standards

Dolladoud	Averaging	California	National	Standards (2)
Pollutant	Time	Standards (1,3)	Primary (3,4)	Secondary (3,5)
Ozone	1-hour	0.09 ppm	N/A	N/A
	1-11001	(180 ug/m³)	N/A	N/A
	0 hour	0.07 ppm	0.075 ppm	0.075 ppm
	8-hour	(137 ug/m³)	(147 ug/m³)	(147 ug/m³)
Carbon	8-hour	9 ppm	9 ppm	N/A
monoxide		(10 mg/m <sup>3</sup> )	(10 mg/m <sup>3</sup> )	N/A
	1-hour	20 ppm	35 ppm	N/A
		(23 mg/m³)	(40 mg/m <sup>3</sup> )	N/A
Nitrogen	Annual	0.03 ppm	0.053 ppm	0.053 ppm
dioxide	Average	(57 mg/m³)	(100 ug/m³)	(100 ug/m³)
	1-hour	0.18 ppm	N/A	N/A
		(339 mg/m³)	N/A	N/A



	Averaging	California	National	Standards (2)
Pollutant	Time	Standards (1,3)	Primary (3,4)	Secondary (3,5)
Sulfur dioxide	24-hour	0.04 ppm	N/A	N/A
		(105 mg/m³)	N/A	N/A
	3-hour	N/A	N/A	0.5 ppm
		N/A	N/A	1,300 ug/m <sup>3</sup>
	1-hour	0.25 ppm	75 ppb	N/A
		(655 ug/m³)	(196 ug/m³)	N/A
PM10	Annual	20 ug/m <sup>3</sup>	N/A	N/A
	24-hour	50 ug/m <sup>3</sup>	150 ug/m³	150 ug/m <sup>3</sup>
PM2.5	Annual	12 ug/m³	12 ug/m³	15 ug/m³
	24-hour	N/A	35 ug/m <sup>3</sup>	35 ug/m <sup>3</sup>
Sulfates	24-hour	25 ug/m³	N/A	N/A
Lead <sup>(6, 7)</sup>	30-day	1.5 ug/m³	N/A	N/A
	Quarterly	N/A	1.5 ug/m <sup>3</sup>	1.5 ug/m³
	Rolling 3-Month Average <sup>(7)</sup>	N/A	0.15 ug/m <sup>3</sup>	0.15 ug/m³
Hydrogen	1-hour	0.03 ppm	N/A	N/A
Sulfide		(42 ug/m³)	N/A	N/A
Vinyl	24-hour	0.010 ppm	N/A	N/A
Chloride <sup>(6)</sup>		(26 ug/m³)	N/A	N/A
Visibility	1 observation	Extinction coefficient of 0.23 per kilometer; visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	N/A	N/A

#### Notes:

ppm = parts per million

ppb = parts per billion

ug/m³ = micrograms per cubic meter

mg/m³ = milligrams per cubic meter

- 1. California standards for ozone, carbon monoxide, sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter PM 10 and PM 2.5 and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.
- 2. National standards, other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean, are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \, \mu g/m^3$  is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.



D. Harbarak	Averaging	California	National St	andards <sup>(2)</sup>
Pollutant	Time	Standards <sup>(1,3)</sup>	Primary (3,4)	Secondary (3,5)

- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 250C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 250C and a reference pressure of 760 torr; ppm in this table refer to parts per million by volume (ppmv), or micromoles of pollutant per mole of gas.
- 4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 6. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 7. National lead standard, rolling three-month average: final rule signed October 15, 2008.

Source: CARB 2016a

The EPA and CARB determine the air quality attainment status of designated areas by comparing local ambient air quality measurements from the state or local ambient air monitoring stations with the NAAQS and CAAQS. These attainment designations are determined on a pollutant-by-pollutant basis. The EPA and CARB have designated the SJVAQMD as non-attainment for ozone and PM. Some of these designations have an associated classification (see Table 3.3-2). Pollutants that are in non-attainment status can be categorized as moderate, severe, and extreme, based on the concentration level of the pollutants.

Table 3.3-2 Federal and State Attainment Status for San Joaquin Valley Air Basin

Ambient Air Quality Standard	Averaging Time	State	Federal
Ozone	1-Hour	Nonattainment	-
Ozone	8-Hour	Nonattainment	Nonattainment
Carbon Monoxide	1-Hour	Attainment/Unclassified	Attainment/Unclassified
Carbon Monoxide	8-Hour	Attainment/Unclassified	Attainment/Unclassified
PM10	24-Hour	Nonattainment	Attainment
1 74(10	Annual	Nonattainment	-
PM <sub>2.5</sub>	24-Hour	-	Nonattainment
1 1/1/2,5	Annual	Nonattainment	Nonattainment
Nitrogen Dioxide	1-Hour	Attainment	Attainment/Unclassified
Thirogen bloode	Annual	Attainment	Attainment/Unclassified



Ambient Air Quality Standard	Averaging Time	State	Federal
	1-Hour	Attainment	Attainment/Unclassified
0.15 - 50 - 1.1	3-Hour	-	Attainment/Unclassified
Sulfur Dioxide	24-Hour	Attainment	-
	Annual	-	-
	30-Day	Attainment	-
Lead	Quarterly	-	Unclassified
Sulfates	24-Hour	Attainment	-
Hydrogen Sulfide	1-Hour	Unclassified	-
Visibility Reducing Particles	8-Hour	Unclassified	-
Vinyl Chloride	24-Hour	Attainment	
Source: CARB 2017, SJVAPCE			

According to CARB, the "Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). The SIP, which is reviewed and approved by EPA, must demonstrate how the NAAQS would be achieved. Failing to submit a plan or secure approval can lead to denial of federal funding and permits. In cases where the SIP fails to demonstrate achievement of the standards, EPA is directed to prepare a federal implementation plan.

## 3.3.1.1 San Joaquin Valley Air Pollution Control District—Air Quality Plans

As required by the federal CAA and the California CAA, 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. Jurisdictions of nonattainment areas also are required to prepare an Air Quality management plan (AQMP) that includes strategies for achieving attainment. The SJVAPCD has approved AQMPs demonstrating how the Air Basin will reach attainment with the federal 1-hour and 8-hour ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> and California CO standards.

The SJVAPCD's most recent AQMP for ozone attainment is the 2016 Plan for the 2008 Eight-Hour Ozone Standard, which was adopted by the SJVAPCD in June 2016. The purpose of this plan is to achieve attainment with the federal eight-hour ozone ambient air quality standards in the SJVAB by 2031 (SJVAPCD 2016a).



The 2007 Ozone Plan, approved by CARB on June 14, 2007, demonstrates how the Air Basin would meet the federal 8-hour ozone standard. The 2007 Ozone Plan includes a comprehensive list of regulatory and incentive based measures to reduce emissions of ozone and particulate matter precursors throughout the Air Basin. Additionally, this plan calls for major advancements in pollution control technologies for mobile and stationary sources of air pollution, and an increase in state and federal funding for incentive-based measures to create adequate reductions in emissions to bring the entire Air Basin into attainment with the federal 8-hour ozone standard. The 2016 Plan for the 2008 8-Hour Ozone Standard was adopted in Jun 2016 and ensures the attainment of the 75 parts per billion 8-hour ozone standards (SJVAPCD 2007).

In June 2007, the SJVAPCD Board adopted the 2007  $PM_{10}$  Maintenance Plan and Request for Redesignation. This plan demonstrates how  $PM_{10}$  attainment in the SJVAB will be maintained in the future. Effective November 12, 2008, EPA redesignated the SJVAB to attainment for the  $PM_{10}$  NAAQS and approved the 2007  $PM_{10}$  Maintenance Plan. In April 2008, The SJVAPCD Board adopted the 2008  $PM_{2.5}$  Plan and approved amendments to Chapter 6 of the 2008  $PM_{2.5}$  Plan on June 17, 2010. This plan was designed to addresses EPA's annual  $PM_{2.5}$  standard of 15  $\mu$ g/m³, which was established by EPA in 1997. In December of 2012, the SJVAPCD adopted the 2012  $PM_{2.5}$  Plan, which addresses EPA's 24-hour  $PM_{2.5}$  standard of 35  $\mu$ g/m³, which was established by EPA in 2006. In April of 215, the SVAPCD adopted the 2015 Plan for the 1997  $PM_{2.5}$  Standard and adopted the 2016 Moderate Area Plan for the 2012  $PM_{2.5}$  Standard in September of 2016. Currently, the 2017 PM Plans are being developed to create an attainment strategy for the multiple  $PM_{2.5}$  standards (SJVAPCD 2014a).

#### **SJVAPCD Rules and Regulations**

The SJVAPCD implements the attainment plans above through Rules (i.e., binding regulations) adopted to achieve the required reductions in subject criteria pollutants. Rules that apply to the proposed Project include, but are not limited to:

**Rule 4102 – Nuisance.** The purpose of this rule is to protect the health and safety of the public, and applies to any source operation that emits or may emit air contaminants or other materials. SJVAPCD

**Regulation VIII – Fugitive PM**<sub>10</sub> **Prohibitions.** Rule 8011-8081 are designed to reduce PM<sub>10</sub> emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and trackout, etc.

**SJVAPCD Rule 4601 – Architectural Coatings.** The purpose of this rule is to limit Volatile Organic Compounds (VOC) emissions from architectural coatings.

**SJVAPCD Rule 4641 – Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations.** The purpose of this rule is to limit VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations.



**SJVAPCD Rule 9510 – Indirect Source Review.** This rule reduces the impact of NOX and  $PM_{10}$  emissions from growth have on the SJVAB. The rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through on-site mitigation, off-site SJVAPCD-administered projects, or a combination of the two.

## 3.3.1.2 Local Regulations

#### 3.3.1.2.1 Woodlake General Plan 2008 to 2028

**Goal 1.** Participate in regional planning efforts to meet air quality goals by working to improve air quality for the entire planning area.

**Goal 2**. Consider traffic flow in the planning of residential, commercial, and industrial developments.

**Goal 3.** Maintain adequate roadway levels of service (LOS) to avoid congestion which contributes to the air pollution problem.

## 3.3.2 Environmental Setting

The proposed Project is located in Tulare County within the SJVAPCD. As indicated in the Regulatory Setting subsection above, the SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Activities that tend to increase mobile activity include increases in population, increases in general traffic activity (including automobiles, trucks, aircraft, and rail), urban sprawl (which will increase commuter driving distances), and general local land management practices as they pertain to modes of commuter transportation. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The San Joaquin Valley topography and meteorology provide ideal conditions for trapping air pollution and producing harmful levels of air pollutants, including ozone and particulate matter. Low precipitation levels, cloudless days, high temperatures, and light winds during the summer in the SJVAB are conducive to high ozone levels resulting from the photochemical reaction of nitrogen oxides (NOx) and VOCs. Inversion layers in the atmosphere during the winter can trap emissions of directly emitted PM2.5 (particulate matter that is 2.5 microns or less in diameter) and PM2.5 precursors (such as NOx and sulfur dioxide (SO2)) within the SJV for several days, accumulating to unhealthy levels. The region also houses the State's major arteries for goods and people movement, I-5 to the west and CA SR 99 through the Central Valley (Valley), thereby attracting a large volume of vehicular traffic. Another compounding factor is the region's historically high rate of population growth compared to other regions of California.



Increased population typically results in an even greater increase in vehicle activity and more consumer product use, leading to increased emissions of air pollution, including NO<sub>x</sub>. In fact, mobile sources account for about 80% of the Valley's total NO<sub>x</sub> emissions inventory. Since NO<sub>x</sub> is a significant precursor for both ozone and PM<sub>2.5</sub>, reducing NO<sub>x</sub> from mobile sources is critical for progressing the Valley towards attainment of ozone and PM<sub>2.5</sub> standards. The geography of mountainous areas to the east, west and south, in combination with long summers and relatively short winters, contributes to local climate episodes that prevent the dispersion of pollutants. Transport, as affected by wind flows and inversions, also plays a role in the creation of air pollution.

The Mediterranean climate of Tulare County is characterized by cool, wet winters and hot, dry summers. During the summer months, the regional climate is driven by a high-pressure cell centered over the northeastern Pacific Ocean that dominates the summer climate of the West Coast. The persistence of this high-pressure cell generally results in negligible precipitation during the summer. During the summer, meteorological conditions are typically stable with a steady northwesterly wind flow causing hot, dry conditions in the California central valley and up into the foothills. Summertime maximum temperatures often exceed 100 degrees Fahrenheit in the Valley. In the winter, the Pacific high-pressure cell weakens and shifts to the south, resulting in wind flows offshore, the absence of upwelling, and an increase in the occurrence of storms. Winter-time high pressure events can often last many weeks with surface temperatures often lowering into the thirties degree Fahrenheit. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet.

## 3.3.3 Impact Analysis

#### 3.3.3.1 Methods

Project specific air quality impacts were analyzed using the California Emission Estimator Model (CalEEMod) software, version 2016.3.1. The model was run using the following assumptions/project details:

 Construction activities are estimated to begin during the construction season (approximately May through December) of 2019

The SJVAPCD established thresholds of significance for impacts from project construction and operation on criteria pollutants in the SJVAPCD's GAMAQI (SJVAPCD 2015). Short-term emissions are mainly related to the construction of a project and are recognized to be limited in duration. Long-term emissions are related to activities that would occur over the life-time of a project, during the operational phase.

The SJVAPCD annual mass thresholds of significance for criteria air pollutant emissions are as follows:



NOX = 10 tons/year

SOX = 27 tons/year

VOCs = 10 tons/year

•  $PM_{10} = 15 \text{ tons/year}$ 

• CO = 100 tons/year

•  $PM_{2.5} = 15 \text{ tons/year}$ 

Consistent with the procedures recommended by the SJVAPCD, the environmental effects from the construction phase of the proposed project are analyzed separately from the operations phase.

The proposed Project would result in emissions of criteria air pollutants during the construction phase from mobile and portable equipment exhaust conventional construction equipment (i.e., dozers, backhoes, graders, etc.), other small portable equipment (i.e., pumps, compressors, generators, welders), and on-road vehicles. In addition,  $PM_{10}$  and  $PM_{2.5}$  emissions would be generated during site grading and pipeline repair and installation and other activities such as vehicle travel on unpaved surfaces.

The results of the CalEEMod simulation are enumerated in Table 3.3-3 and form the basis for the impact assessment in this section. All predicted maximum daily unmitigated Project emissions estimates are below the SJVAPCD significance thresholds.

Table 3.3-3 CalEEMod Predicted Maximum Daily Unmitigated Project Emissions Estimates

	VOC/ROG (tons)			PM <sub>10</sub> (tons)		
Project Unmitigated Construction Emissions	0.28	2.60	2.01	0.26	0.18	0.004
SJVAPCD Threshold of Significance (per year)	10	10	100	15	15	27



III.	AIR QUALITY: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Violate any air quality standard or contribute to an existing or Projected air quality violation?		$\boxtimes$		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		$\boxtimes$		
d)	Expose sensitive receptors to substantial pollutant concentrations?		$\boxtimes$		
e)	Create objectionable odors affecting a substantial number of people?				

# a) & b) Would the Project conflict with or obstruct implementation of the applicable air quality plan? Would the Project violate any air quality standard or contribute to an existing or projected air quality violation?

Finding: Less than significant with mitigation incorporated

As discussed above, the SJVAPCD is in non-attainment for state and federal ozone and  $PM_{2.5}$  and state  $PM_{10}$ . In order to attain state and federal air quality standards, the SJVAPCD has established ozone,  $PM_{2.5}$  and  $PM_{10}$  air quality plans to reduce pollutant emissions within the basin.

In order to assess the proposed project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation, localized criteria pollutant emissions were analyzed since these are the pollutants with established ambient air quality standards. Potential localized impacts would include exceedances of state or federal standards for PM and ozone. Particulate matter emissions, primarily PM<sub>10</sub>, are of concern during construction because of potential fugitive dust emissions during earth-disturbing activities. Ozone emissions are generated from increased hauling and the use of off-road heavy-duty diesel equipment used for site grading and paving during construction.

Air quality modeling was performed using project-specific details in order to determine whether the proposed project would result in criteria air pollutant emissions in excess of the applicable thresholds of significance. Presented in Table 3.3-3, the proposed project's construction-related emissions have been estimated using the CalEEMod version 2016.3.1 software. The results of the



construction emissions estimations were compared to the standards of significance required by the SJVAPCD in order to determine the associated level of impact. The following discussions provide project-specific emissions evaluations for construction in a summary format; however, all CalEEMod modeling outputs are also included in Appendix A.

During construction of the proposed Project, various types of equipment and vehicles would temporarily operate on the proposed Project site. Construction exhaust emissions would be generated from construction equipment, earth movement activities, construction workers' commutes, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM<sub>10</sub> emissions.

Because the SJVAPCD is in non-attainment for federal and state ozone, and PM<sub>2.5</sub>, and state PM<sub>10</sub> and in accordance with SJVAPCD regulation VIII, Mitigation Measure AIR-1: Dust Emissions and Control Plan would be implemented to reduce the potential for project emissions to obstruct the implementation of an air quality plan or substantially contribute to an existing air quality violation.

Operational activities would be similar to existing conditions. Any potential impacts to air quality from the operations of the City's WWTP have been assessed within the City of Woodlake General Plan as well as prior to construction of the treatment plant and no further analysis is required.

Overall, development of the proposed Project would not violate any air quality standards or contribute to an existing air quality violation (i.e., the region's non-attainment status for ozone or PM) during construction.

Because the proposed Project would not result in emissions in excess of applicable thresholds of significance during construction or operation, the proposed Project would not violate any air quality standards, contribute to an existing air quality violation, or be considered to conflict with or obstruct implementation of an applicable air quality plan. Additionally, Mitigation Measure AIR-1, which includes the implementation of a fugitive dust control plan, would be incorporated to ensure that PM emissions are kept to a minimum. Therefore, impacts would be considered less than significant with mitigation incorporated.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Finding: Less than significant with mitigation incorporated

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of



the project being assessed. Air pollution is largely a cumulative impact. The non-attainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant. Future attainment of standards is a function of successful implementation of SJVAPCD attainment plans. Consequently, the SJVAPCD approach to cumulative thresholds of significance is relevant to whether a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing cumulative impacts related to air quality conditions. According to the SJVAPCD GAMAQI, if a project's emissions would be less than SJVAPCD thresholds, the project would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact. However, exceedance of the project-level thresholds would not necessarily constitute a significant cumulative impact.

As discussed above, the proposed Project would be less than the SJVAPCD recommended thresholds. In addition, the proposed Project would implement Mitigation Measure AIR-1 and would be required to comply with all applicable SJVAPCD rules and regulations. Therefore, the proposed Project's individual emissions would not be expected to result in a cumulatively considerable contribution to a significant cumulative impact, and impacts would be considered less than significant with mitigation incorporated.

#### d) Would the Project expose sensitive receptors to substantial pollutant concentrations?

## Finding: Less than significant with mitigation incorporated

The proposed Project involves the construction of a localized wastewater collection system improvements and does not include the addition of new sensitive receptors. Existing sensitive receptors include residences along the existing collection system alignments. The major pollutants of concern include localized CO emissions and Toxic Air Contaminants (TAC) emissions, both which are addressed in further detail below.

#### Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed Project would not substantially increase traffic volumes on streets near the proposed Project site during construction or operation; therefore, the proposed Project would not be expected to increase local CO concentrations. Background localized CO concentrations are low due to the rural setting of the proposed Project area. Project-generated vehicle trips during maintenance activities would result in the generation of CO emissions; however, maintenance activities would only occur periodically and would not represent a significant increase in localized CO emissions. Vehicle trips generated during the construction and operational phases of the proposed Project would not have the potential to change the level of service along the local roadways. Additionally, all project-specific emission estimates are below the SJVAPCD thresholds of significance. Therefore, impact would be considered less than significant.



#### **Toxic Air Contaminants**

The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road, heavy-duty diesel equipment used for site grading, paving, and other construction activities result in the generation of DPM. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed Project. In addition, only portions of the site would be disturbed at a time, with operation of construction equipment regulated by federal, state, and local regulations, including SJVAPCD rules and regulations, and occurring intermittently throughout the course of a day. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

Additionally, the CARB has adopted regulations to control emissions from portable equipment as a component of the state's air quality plans. All applicable portable engines and off-road construction equipment must be registered with CARB's portable engine and off-road equipment programs and would align with the requirements set forth in the attainment plans. Additionally, Mitigation Measure AIR-1 would be implemented to reduce impact from fugitive dust emissions during construction activities.

Overall, the proposed Project would not expose any existing sensitive receptors to any new permanent or substantial pollutant concentrations, including localized CO or TAC emissions. Therefore, exposure of sensitive receptors to substantial pollutant concentrations would not occur and a less than significant impact with mitigation incorporated would occur.

## e) Would the Project create objectionable odors affecting a substantial number of people?

#### Finding: Less than significant

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. According to the CARB's Handbook, some of the most common sources of odor complaints received by local air districts are sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. The proposed project includes piping wastewater to an existing and currently operational wastewater treatment plant. Conditions at the City's WWTP would not significantly change from the current operation and it is not anticipated that odors would increase at the City's WWTF due to the proposed Project.



Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and associated diesel emissions would be regulated per federal, state, and local regulation, including compliance with all applicable SJVAPCD rules and regulations, which would help to control construction-related odorous emissions. Therefore, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

Overall, odors at the existing WWTF would not significantly change and odors during construction activities would be minimal and temporary. Therefore, the potential impacts are considered less than significant.

## 3.3.4 Mitigation

## Mitigation Measure AIR-1: Dust and Emissions Control Plan

The City shall require that the selected contractor prepare and implement a Project Dust and Emissions Control Plan that is approved by the SJVAPCD prior to construction. The following shall be conducted throughout the construction period to limit and control dust and air emissions:

- Apply water to unpaved surfaces and areas
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb the soil.
- Keep bulk materials sufficiently wet when handling
- Store and handle materials in a three-sided structure
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions



- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site
- Prevent trackout by installing a trackout control device
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately
- Monitor dust-generating activities and implement appropriate measures for maximum dust control

#### Mitigation Measure AIR-1 Implementation

**Responsible Party:** The City shall require the contractor to prepare and implement a Construction Emissions and Dust Control Plan. The City shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction by the contractor.

**Timing:** An Emission and Dust Control Plan must be prepared and approved by the SJVAPCD and the City prior to construction and implementation during all phases of grading and activities that generate dust.

**Monitoring and Reporting Program:** During construction, regular inspections shall be performed by a City representative and reports shall be kept on file for inspection by the SJVAPCD or other interested parties.

**Standards for Success:** Visible emissions and dust are kept to the lowest practicable level during construction periods. The goal is to minimize dust and emissions during construction and to the extent feasible, complaints from the public.



## 3.4 BIOLOGICAL RESOURCES

The Biological Resources section discusses the potential impacts of the proposed Project to biological resources, including plant and wildlife species, and their related habitat(s). The regulatory setting describes applicable laws and regulations administered by the federal, state, and local governing bodies that protect biological resources; the environmental setting provides general information of the biological communities and resources of the proposed Project site; and the impact analysis evaluates the potential impacts of the proposed Project on those biological resources.

## 3.4.1 Regulatory Setting

## 3.4.1.1 Federal Regulations

#### 3.4.1.1.1 Endangered Species Act of 1973

The Federal Endangered Species Act (ESA) was passed by Congress in 1973 to protect and recover imperiled species and the habitat upon which they depend. The ESA is administered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA), which includes the National Marine Fisheries Service (NMFS). Under the ESA, protected species are either listed as "endangered", in danger of extinction throughout all or a significant region of the species range; or as "threatened", likely to become endangered within the foreseeable future (USFWS 1973). The Federal ESA prohibits "take" without explicit permissions or permits. "'Take' is to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill" an endangered or threatened species.

The Federal ESA also designates "candidate" species as those plants and animals that the USFWS or NMFS has sufficient data on their biological status to propose them to be listed under the ESA (USFWS 1973). The Federal ESA mandates the protection of federally listed species and the habitats which they depend (BLM 2010) (50 Code of Federal Regulations [CFR] 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species).

Consultation with the USFWS would be necessary if a proposed action of a project has the potential to affect federally listed species as well as suitable habitat for those species. This consultation would proceed under Section 7 of the Federal ESA if a federal action is part of the proposed action, or proceed through Section 10 of the ESA if no such nexus were available (USFWS 1973). In the case of the proposed Project, federal funding from the U.S. Environmental Protection Agency (EPA) triggers proof of Federal ESA compliance under Section 7.



# 3.4.1.1.2 Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) (16 USC C Section 703-711) and the Bald and Golden Eagle Protection Act (BAGEPA) (16 USC Section 668) protect specific species of birds and prohibits "take" (i.e. harm or harassment). The MBTA protects migrant bird species from "take" through setting hunting limits and seasons, and protecting occupied nests and eggs (USFWS 1918). BAGEPA prohibits the take or commerce of any part of the bald or golden eagle (USFWS 1940). The USFWS administers both Acts and reviews actions that may affect species protected under each Act.

#### 3.4.1.1.3 Clean Water Act-Section 404

The USACE and the EPA regulate the discharge of dredge or fill material into waters of the U.S. under Section 404 of the CWA. Waters of the U.S. include wetlands, lakes, rivers, streams, and their tributaries. Wetlands are defined, for regulatory purposes, as areas inundated or saturated by surface, or ground water; 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 solid conditions (33 CFR 328.3, 40 CFR 230.3) (EPA 2014). If a project discharges any fill materials into water of the U.S., including wetlands, then a permit must be obtained from the USACE.

#### 3.4.1.1.4 Clean Water Act Section 401

The EPA regulates surface water quality in waters of the U.S. under Section 401 of the Clean Water Act (CWA). CWA Section 401 Water Quality Certification provides states and authorized tribes with an effective tool to help protect the physical, chemical, and biological integrity of water quality, by providing them an opportunity to address the aquatic resource impacts of federally issues permits and licenses (EPA 2008). CWA 401 states that no federal permit or license can be issued if a proposed action may result in a discharge to waters of U.S., unless the EPA/Tribe/State certifies that the discharge is consistent with standards and other water quality goals, or waives certification (EPA 2010a). CWA 401 compliance is required for any project that entails a federal action with construction that could have an impact to surface water quality.

## 3.4.1.2 State Regulations

#### 3.4.1.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) has jurisdiction over plant and wildlife species listed as threatened or endangered under Section 2080 of the California Department of Fish and Game (CDFG) Code. The California Endangered Species Act (CESA) prohibits "take" of state-listed threatened or endangered species. The CESA differs from the federal ESA in that it does not include habitat destruction in its definition of "take". CDFW defines "take" as- to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CDFW may authorize "take" under the CESA through Section 2081 agreements, or incidental take permit



process. If the results of a biological survey indicate that a state-listed species would be affected by a proposed project, then CDFW would issue an Agreement under Section 2081 of the CDFG Code and would establish a Memorandum of Understanding for the protection of state-listed species (CDFW 2014a).

The State of California designates Species of Special Concern (SSC) as wildlife and plant species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational and/or educational values. These species do not have the same legal protection as listed species, but may be added to official lists in the future (CDFW 2015a). In the 1960's California also created a designation to provide additional protection to rare species. This designation remains today and is referred to as "Fully Protected" species, and those listed "may not be taken or possessed at any time" (CDFW 2015a).

In the 1970's, California created a designation to provide additional protection to rare species (i.e., the Native Plant Protection Act below). These species do not carry formal legal status and/or designation, but may be officially listed in the future.

## 3.4.1.2.1.1 The Native Plant Protection Act: CDFG Code, Section 1900 et seg.

The Native Plant Protection Act (NPPA) was enacted in 1977 and is administered by CDFW, CDFG Code, Section 1900 et seq. The NPPA prohibits "take" of endangered, threatened, or rare plant species native to California, with the exception of special criteria identified in the CDFG Code. A "native plant" means a plant growing in a wild uncultivated state which is normally found native to the plant life of the state. Under the CDFG Code, species become endangered, threatened, or rare when the plants' prospects of survival and reproduction are in immediate jeopardy for one or more causes (LCC 2014a). "Rare" species can be defined as species that are: broadly disturbed but never abundant where found, narrowly disturbed or clumped yet abundant where found, and/or narrowly disturbed or clumped and not abundant where found. If potential impacts are identified for a proposed project activity, then consultation with CDFW, permitting, and/or other mitigation may be required. Endangered, threatened, and/or rare species can be identified through the California Native Plant Society's (CNPS) California Rare Plant Ranks (CRPR) (CNPS 2015a).

# 3.4.1.2.1.2 Nesting Migratory Bird and Raptors: CDFG Code, Sections 3503, 3503.5, and 3800

Nesting migratory birds and raptors are protected under CDFG Code, Sections 3503, 3503.5 and 3800; which prohibit the "take", possession, or destruction of birds, their nests, or eggs. Implementation of "take" provisions require that, project-related disturbance, within active nesting territories, be reduced or eliminated during critical phases of the nesting cycle (approximately February 15 – August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g. killing or abandonment of eggs or young), or the loss of habitat upon which birds are dependent, is considered "taking", and is potentially punishable by fines



and/or imprisonment (LCC 2014a). Such taking would also violate federal law protecting migratory birds under the MBTA.

## 3.4.1.2.1.3 California Environmental Quality Act: CDFG Code, Section 15380

The California Environmental Quality Act (CEQA) provides protection for federal and/or state listed species, as well as species not listed federally or by the state that may be considered rare, threated, or endangered. If the species can be shown to meet specific criteria for listing outlined in CEQA Guidelines Section 15380 (b). Species that meet these criteria can include "candidate species", species "proposed for listing", "species of special concern". Plants appearing on CNPS CRPR are considered to meet CEQA's Section 15380 criteria. Impacts to these species would therefore be considered "significant" requiring mitigation (CDFW 2014b).

Section 15380 was included to address a potential situation in which a public agency is to review a project that may have a significant effect on, for example a "candidate species", which has not yet been listed by the USFWS or CDFW. Therefore, CEQA enables an agency to protect a species from significant project impacts until the respective government agencies have had an opportunity to list the species as protected, if warranted (CDFW 2014b).

## 3.4.1.2.1.4 Lake and Streambed Alteration Agreement: CDFG Code, Section 1600-1616

To protect, manage, and conserve rivers, streams, lakes, wetlands, etc., CDFW has jurisdictional authority, under CDFG Code Sections 1600-1616, to regulate all work under the jurisdiction of the State of California. Such work includes those actions that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. In practice, CDFW marks its jurisdictional limit at the top of the stream or lake bank, or the outer edge of the riparian vegetation (where present), and extends its jurisdiction to the edge of the 100-year floodplain (CDFW 2014c).

## 3.4.1.2.1.5 Porter-Cologne Water Quality Control Act: CDFG Code, Section 1601-1607

The Porter-Cologne Water Quality Act, CDFG Code Section 1601-1607, is administered by the California State Water Resources Control Board. This act and associated codes pertain to projects with potential impacts to water quality or waterways (State Board 2014).

## 3.4.1.3 Local Regulations

#### 3.4.1.3.1.1 Woodlake General Plan 2008 to 2028

**Policy 1:** Explore establishing the banks of local waterways as an open space resource.

a. The Planning Department shall review development that is adjacent to a watercourse to determine if the watercourse and adjacent lands should be dedicated for open space.



**Policy 2:** The City shall review any attempts to pipe local waterways. This policy recognizes the value of local waterways as historical sources of groundwater recharge and wildlife habitat.

**a.** The City shall remain vigilant in monitoring activities of local canal and irrigation districts and shall forward comments regarding lining or piping canals.

Policy 3: Protect areas that may serve as habitat from impacts of development.

**a.** Where warranted, the City Planner shall require a biotic assessment for projects that may impact habitat areas.

**Policy 4:** Investigate the expansion of the recreational trail around Bravo Lake and new trails along the St. Johns River, Wutchumna Canal, and Antelope Creek.

**a.** Where new development is proposed adjacent to these water courses right-of-way along the water course should be dedicated for trail and open space purposes.

**Goal 4:** Establish policies to reduce the impact of urbanization on agricultural lands, while allowing the City to grow.

**Policy 1:** Preserve and protect agricultural lands as a means for providing open space and for the managed production of resources.

**a.** The City shall strive to ensure that new development is designed in a manner that uses land efficiently and reduces the need to expand the urban area outward onto prime agricultural lands.

**Policy 2:** Establish and maintain "hard edges" around Woodlake that define where urbanization stops and agricultural open space begins.

**Goal 5:** Protect air and water quality from negative impacts.

**Policy 3:** Allow for adequate groundwater recharge by developing storm ponding and retention basins where feasible. In some areas, these ponds or basins can be incorporated into a recreational area or used as wildlife habitat area.

**Goal 7:** Minimize the impact of new development on biotic resources in the planning area.

## 3.4.2 Environmental Setting

The City of Woodlake is located in the northwest corner of Tulare County, approximately 41 miles southeast of Fresno, California, and 20 miles north of Tulare, California, near the base of the Sierra Nevada Mountain Range in the San Joaquin Valley. The area is primarily a developed community surrounded by agricultural lands. It is located in the western portion of Tulare County, and is in Township 17 South, Range 27 East, and Sections 25, 30, 26, and 31. It is also defined by



W. Wutchumna Ave. in the north, Mulberry St. in the west, Riverside Ave. to the south, and N. Castle Rock Road to the east (Figure 1.1-2). The City of Woodlake is at an elevation of approximately 440 feet (134 meters) above mean sea level, and the area's climate can be described as "Mediterranean" with cool winter rainy seasons, and hot dry summers. The San Joaquin Valley is drained by the San Joaquin River and lies in the southern portion of the Great Valley geomorphic province, which is a trough in which sediments have been deposited almost continuously since the Jurassic. These non-marine sediments are generally at least a few thousand feet thick (California Geological Survey 2002). Soils in this area consist of sandy loams and loamy sands with large amounts of clay. These soils have extremely variable infiltration rates and permeabilities (from very low to very high), depending on the location (USDA NRCS 2014).

The Woodlake service area is contained within the Upper Kaweah Watershed. The City is located east of Antelope Creek, north of Saint Johns River, and north and west of Bravo Lake (which outlets at Wutchumna Canal). The proposed Project upsized and repair and replacement lines will be located in paved roadways and the associated roadway shoulders and will include boring below Wutchumna Canal. The biological communities in and around the Project area are therefore, described below.

## 3.4.2.1 Biological Communities

The CDFW and the CNPS have developed a standard classification system for floristically describing vegetation communities/ habitats statewide, further translating to the National Vegetation Classification (NVC). The CDFW and CNPS system has been compiled in A Manual for California Vegetation, 2nd Edition (Sawyer et al. 2009), and has been accepted and adopted by state and federal agencies. The Manual of California Vegetation (MCV) classifications assist in defining vegetation based on quantitative based rules to distinguish between vegetation community types, local variation, ecological land classification /composition, species rarity and significance, and historical and current land management practices.

The MCV defines vegetation communities by dominant and/or co-dominant species present as: 1A) alliance- a broad unit of vegetation with discernable and related characteristics; 1B) provisional alliance- a temporary vegetation community and/or candidate alliance; and/or 2) association- a basic secondary unit of classification, not as broad as an alliance, with uniform composition and conditions. The MCV classifications replace lists of vegetation types developed for the California Natural Diversity Database (CNDDB). The biological community in the proposed Project area has been classified using MCV standards (Sawyer et al. 2009).

## 3.4.2.1.1 Non-Native Annual Grassland Herbaceous Alliance

Native grasslands within the proposed Project area have been degraded due to encroachment from non-native species and development; thus, decreasing biodiversity and habitat suitability. The dominant biological community of the proposed Project consists primarily of a Non-Native Annual Grassland Herbaceous Alliance. Species cover is dominated by brome grass (bromus



sp.), dove weed (Croton setigerus), and Bermuda grass (Cynodon dactylon), telegraph weed (Heterotheca grandiflora), morning glory (Ipomeoea pupurea), purple nightshade (Soanum xanti), silver leaf nightshade (Solanum elaeagnifolium), and puncture vine (Tribulus terrestris). Anthropogenic factors have led to the establishment of many non-native or invasive, plant species, particularly in the disturbed and ruderal areas.

#### 3.4.2.1.2 Rural Residential / Disturbed Lands / Ruderal

Rural residential / disturbed lands/ ruderal cover types typically include disturbed lands, rural residential, and industrial areas. Generally, developed lands in this region include commercial, residential, vacant lots, and remnant native habitats that occur between developed areas. Ornamental planting habitats can occur throughout rural residential / disturbed lands/ ruderal cover type of the proposed Project area. These areas also include non-native species such as annual grasses. Ornamental planting habitats consist largely of introduced woody trees, shrubs, and herbaceous species used in general residential, business and roadside landscaping.

#### 3.4.2.2 Wildlife Habitat

Wildlife inhabit both disturbed and intact habitats. For example, Non-native grasslands, agricultural lands and ruderal areas often provide habitat for reptiles and rodents and thus are also often good foraging habitat for raptors.

Riparian willow thickets, wetlands, and waterways (e.g. Bravo Lake) are considered to be high value habitat for wildlife including birds, mammals, reptiles, amphibians, and invertebrates alike. Riparian habitats additionally provide water, thermal cover, and diverse nesting and feeding opportunities. Wildlife species use these habitats during all stages of their life cycles from breeding, feeding, nesting, and/or migration.

Wildlife species observed within the proposed Project area during biological surveys are listed in the results section of this analysis.

# 3.4.2.2.1 Designated Critical Habitat and Sensitive Habitats

Designated Critical Habitat (DCH) is part of the federal ESA and is designated by the USFWS. DCH is considered a specific geographic area of habitat (i.e., natural home or environment) that is essential to the conservation and survival of federally threatened and endangered species. There is no DCH or Designated Sensitive Habitat within the proposed Project area, for context designated areas within five miles of the proposed Project area are discussed below.

#### 3.4.2.2.2 San Joaquin Orcutt grass and Hoover's spurge Designated Critical Habitat

Designated Critical Habitat for the San Joaquin Orcutt grass (Orcuttia inaequalis) and Hoover's spurge (Chamaesyce hooveri) exists approximately one and a half miles north of the proposed Project site (Figure 3.4-1, CDFW 2017). This area of San Joaquin Orcutt grass critical habitat is located in the San Joaquin Valley Unit 6 (subunit D). This same area also includes the designated



critical habitat for Hoover's spurge and is located in the Hoover Unit 7 (subunit D) (USFWS 2017). At the time of designated critical habitat in 2006, this unit was known to support the San Joaquin Orcutt grass and Hoover's spurge and the associated habitats this species needs to survive. This habitat includes vernal pools, and soils underlying these specific vernal pools are acidic and vary in texture from clay to sandy loam (USFWS 2006).

The proposed Project will not have an impact on this sensitive habitat area designated by the USFWS due to the distance from the proposed Project as well as the hydrological separation.

# 3.4.3 Methodology

A combination of desktop research/analysis and field studies were performed to determine the presence or absence of special status plant and wildlife species that may be impacted by proposed Project activities.

# 3.4.3.1 Desktop Analysis

Special status plant and animal species that are either known to occur or have the potential to occur within the proposed Project region (e.g., in USGS 7.5' Quads for Stokes Mountain, Auckland, Shadequarter Mountain, Ivanhoe, Woodlake, Kaweah, Exeter, Rocky Hill, and Chickencoop Canyon; and/or Tulare County; and within five miles of the proposed Project) were compiled based on background research data from the CDFW CNDDB, CNPS online inventory, Calflora, and USFWS List of Federal Endangered and Threatened Species. See Figure 3.4-1 and Table 3.4-1 below.

Prior to visiting the proposed Project area, desktop research and analysis, including the use geographic information systems (GIS) data to evaluate regional and local habitats and to further identify the biological resources that are known to occur or have the potential occur within the proposed Project area. For the purpose of this analysis, the following resources were used to identify special status plant species, wildlife species, and associated habitats that occur or have the potential to occur within the proposed Project region:

- A CDFW CNDDB records search of special status species observations in the proposed Project area and in the five miles surrounding the proposed Project area (Figure 3.4-1, CDFW 2015b);
- The CNPS online Inventory of Rare and Endangered Plants of California for Stokes Mountain, Auckland, Shadequarter Mountain, Ivanhoe, Woodlake, Kaweah, Exeter, Rocky Hill, and Chickencoop Canyon. U.S. Geological Survey (USGS) 7.5' Quadrangles (Quad) (CNPS 2017);
- U.S. Fish and Wildlife Service IPac (Information for Planning and Conservation) online database search for potential endangered, threatened, and proposed species that may be affected by projects within five miles or the proposed project activities (USFWS 2017a)



- The USFWS Critical Habitat data for federally threatened and endangered species (Figure 3.4-1, USFWS 2017);
- Calflora online database for Nevada County (Calflora 2017). Calflora was used as a secondary tool for the purpose of assessing any and/or all other rare plant species that have the potential to occur within the proposed Project's County;
- A Manual of California Vegetation, Second Edition, was used to assesses and classify vegetation communities and associated habitat within the proposed Project area (Sawyer et al. 2009);
- The National Wetland Inventory (NWI) was used to identify potential wetlands, potential
  waters of the U.S., and associated habitats, that may occur within the proposed Project
  area (USFWS 2017); and

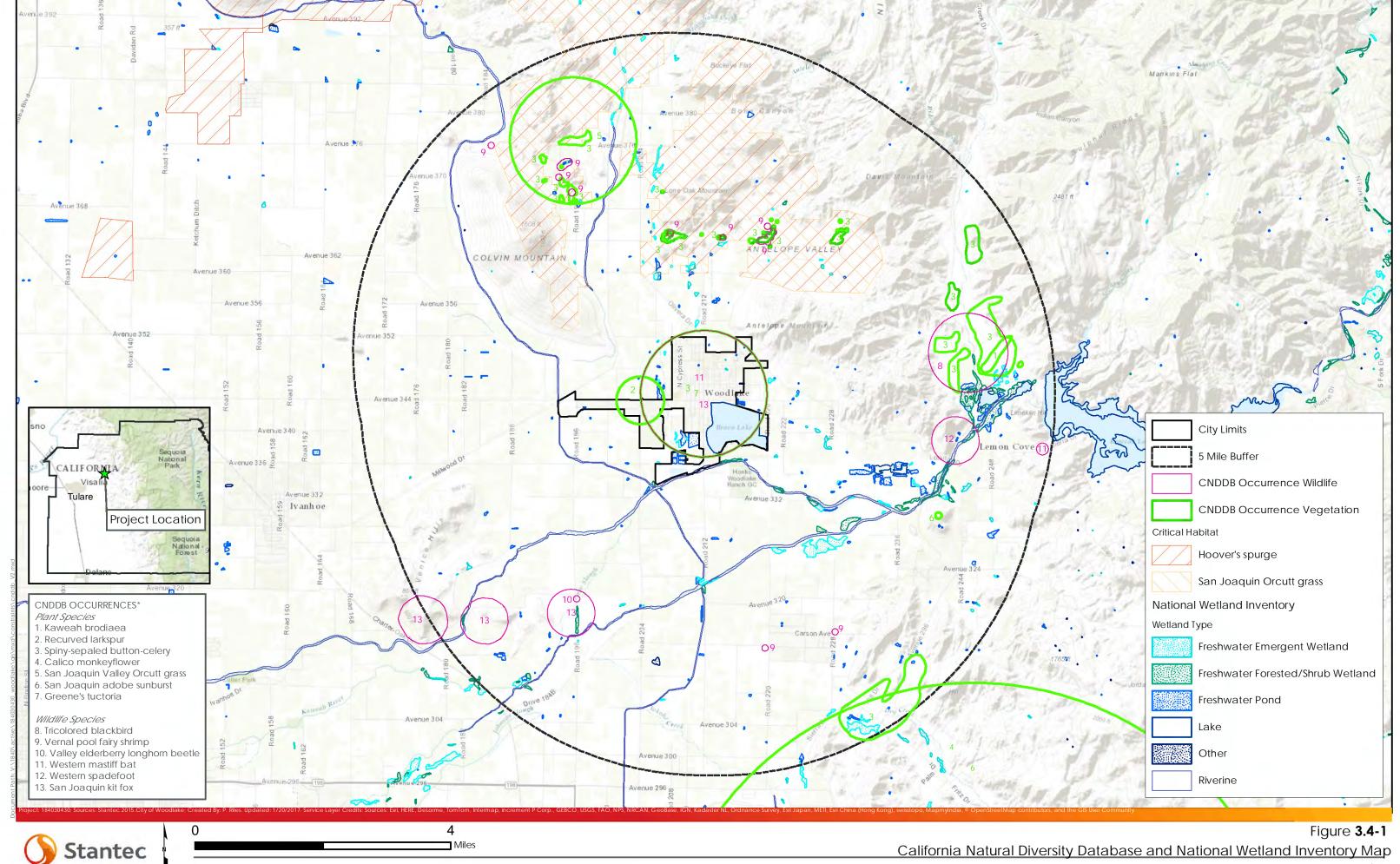
Endangered, threatened, rare, and/or special status species that were identified during the initial research and desktop analysis are compiled in Table 3.4-1 of the Results section of this analysis. For the purpose of this IS/MND, special status species are defined by the following parameters:

- Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species);
- Species that are listed or proposed for listing by California as threatened or endangered under the CESA (14 CCR 670.5);
- Plants listed as rare under the California Native Plant Protection Act of 1977 (CDFG Code 1900 et seq.);
- Plants considered by the CNPS to be Rank 1- a) "plants presumed extirpated in California and either rare or extinct elsewhere, or b) "rare, threatened, or endangered in California and elsewhere" (CNPS 2017a)
- Plants considered by CNPS to be a Rank 2- a) Plants presumed extirpated in California, but common elsewhere, or b) "rare, threatened, or endangered in California and common elsewhere" (CNPS 2017a);
- Plants considered by CNPS to be a Rank 3- "plants about which more information is needed" and cannot be yet be excluded from review (CNPS 2017a);
- Plants considered by CNPS to be a Rank 4- "plants with limited distribution" (CNPS 2017a);
- Animal Species of Special Concern to CDFW; and



•	Plant and animal species that are designated as "special animals" or "those of greatest
	conservation need", by CDFW through the CNDDB.





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Conclusions in Table 3.4-1 regarding the habitat suitability and the potential for special status species occurrence were based on the background research, database searches, and local habitat suitability. For each special status species known to occur in the proposed Project area and region, the "potential for occurrence" within the proposed Project site has been evaluated and is defined as follows:

- **Very Low to Nil:** The proposed Project site and/or immediate area do not support suitable habitat for a particular species. The proposed Project is outside the species known range.
- **Low Potential:** The proposed Project site and/or immediate area provides limited habitat for a particular species. In addition, the known range for a particular species may be outside the immediate proposed Project area.
- **Moderate Potential:** The proposed Project site and/or immediate area provides suitable habitat for a particular species, and habitat for the species may be impacted.
- **High Potential:** The proposed Project site and/or immediate area provides ideal habitat conditions for a particular species and/or known populations occur in the immediate area and within the potential area of impact.
- Known Occurrence: Recorded historically or observed on site during biological surveys for this proposed Project.
- **Present:** Observed on the proposed Project site during biological surveys for the proposed Project.

Species with a moderate potential, high potential, known occurrence, or are present in the proposed Project site are further described in the species accounts below Table 3.4-1, and are discussed in the Impact Analysis section below. In addition, wildlife species known to be high profile, species of special public interest or concern, or species that according to the CNDDB, were observed within five miles of the proposed Project are also discussed.



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Table 3.4-1 Special Status Plant and Wildlife Species and Their Potential to Occur in the Proposed City of Woodlake Sewer Improvements Project, City of Woodlake, California

common name		Listing statu	S	Geographic distribution/			
Scientific name	Federal State CNPS		Floristic province	Preferred habitat	Identification period	Level of potential for occurrence within proposed Project area	
Plants							
American manna grass Glyceria grandis	-	\$3	2B.3	45-6,500 feet (15-1,980 meters)	bogs; fens; meadows; seeps; marshes; swamps; along the margins of streams and lakes	June-August	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
calico monkeyflower Diplacus pictus	-	S2	1B.2	325-4,690 feet (100-1,430 meters)	Broadleaf upland forest; cismontane woodland; granitic, disturbed areas	March-May	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
Greene's tuctoria Tuctoria greenei	Е	R, S1	1B.1	98-3,510 feet(30-1,070 meters)	Vernal pools	May-September	Very Low to Nil. Limited to no habitat in the proposed Project area. Historic occurrences within two miles of the Project area. However, the habitat has subsequently been determined eliminated and the species locally extirpated.
Hoover's spurge Euphorbia hooveri	-	\$1	1B.2	80-820 feet (25-250 meters)	Vernal pools	July-October	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area, though there is critical habitat for this species within two miles of the proposed Project area.
Kaweah brodiaea Brodiaea insignis	-	E, \$1	1B.2	490-4,600 feet (150-1,400 meters)	Cismontane woodland; meadows and seeps; valley and foothill grassland; granitic or clay soils	April-June	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
lesser saltscale Atriplex minuscula	-	S2	1B.1	49-656 feet (15-200 meters)	Chenopod scrub; playa; valley and foothill grassland; alkaline and sandy soils	May-October	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
recurved larkspur Delphinium recurvatum	-	\$3	1B.2	10-2,592 feet (3-790 meters)	Valley and foothill grassland; chenopod scrub; cismontane woodland; alkaline soils	March-June	Very Low to Nil. Limited to no habitat in the proposed Project area. Historic occurrences within two miles of the Project area. However, the habitat has subsequently been determined eliminated and the species presumed locally extirpated.
San Joaquin adobe sunburst Pseudobahia peirsonii	Т	E, \$1	1B.1	295-2625 feet (90-800 meters)	Cismontane woodland; valley and foothill grassland; adobe clay soils	February-April	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
San Joaquin Valley Orcutt grass Orcuttia inaequalis	Т	E, \$1	1B.1	33-2,478 feet (10-755 meters)	Vernal pools	April-September	Very Low to Nil. Limited to no habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area and species presumed locally extirpated, though there is critical habitat for this species within two miles of the proposed Project area.
spiny-sepaled button-celery Eryngium spinosepalum	-	S2	1B.2	262-2,034 feet (80-620 meters)	Valley and foothill grassland; vernal pools	April-June	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. Known occurrences of specimens collected in 1936, estimated within two miles of the proposed Project area.
vernal barley Hordeum intercedens	-	\$3, \$4	3.2	15-3,280 feet (5-1,000 meters)	Coastal dunes; coastal scrub; valley and foothill grassland; saline flats and depressions; vernal pools	March-June	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.



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common name		Listing status		Geographic distribution/ Floristic province	Preferred habitat		
Scientific name	Federal	State CNPS				Identification period	Level of potential for occurrence within proposed Project area
Winter's sunflower Helianthus winteri	-	\$1,\$2	1B.2	410-1,510 feet (125-460 meters)	Cismontane woodland; valley and foothill grassland; roadsides; granitic and rocky soils; openings on steep southfacing slopes	Year-round	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
Invertebrates							
Conservancy fairy shrimp Branchinecta conservatio	E, X	-	N/A	Six disjoint populations in Tehama, Butte, Jepson, Solano, Sacramento, Glenn, Merced, and Ventura Counties	Highly turbid water of vernal pools	Winter/Spring	<b>Very Low to Nil.</b> No suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
Crotch bumble bee Bombus crotchii	-	\$1,\$2	N/A	Central Valley and adjacent foothills, southwestern California. Historically common in the Central Valley of California.	Open grassland; scrub habitats. Usually nests underground.	Spring-Summer	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. Known occurrences estimated within two miles of the proposed Project area, from specimens collected in 1955.
Tulare cuckoo wasp Chrysis tularensis	-	\$1, \$2	N/A	Foothills of the San Joaquin Valley	Foothill grassland; shrubland; chaparral	March-June	Low. Limited to no suitable habitat in the proposed Project area. Known occurrences estimated within two miles the proposed Project area, from specimens collected in 1962.
vernal pool fairy shrimp Branchinecta lynchi	T, X	-	N/A	Scattered throughout Central Valley, Coast Range, and Southern California	Vernal pools	December-May	Very Low to Nil. No suitable habitat in the proposed Project area. Known occurrences approximately two miles north of the proposed Project area in isolated vernal pools.
vernal pool tadpole shrimp Lepidurus packardi	E, X	-	N/A	California Central Valley	Vernal pools containing clear to highly turbid water	Winter/Spring	Very Low to Nil. No suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
Fish							
Delta smelt Hypomesus transpacificus	Т	Е	N/A	From Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, Yolo Counties	Estuaries, river channels, tidally influenced backwaters. Shallow, fresh or slightly brackish water upstream of mixing zone (spawning)	March-June (spawning)	Very Low to Nil. No suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area and no critical habitat within five miles of the proposed Project area.
Reptiles and Amphibians							
blunt-nosed leopard lizard Gambelia sila	Е	E, FP	N/A	Southern San Joaquin Valley	Inhabits sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief	Spring-Fall	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
California red-legged frog Rana draytonii	Т	SSC	N/A	Coastal Range of California, foothill range of Sierra Nevada mountains	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.
California tiger salamander Ambystoma californiense	Т	Т	N/A	Isolated populations: Gray Lodge NWR, Sonoma County, and Santa Barbara County.	Grassland, oak savanna, edges of mixed woodland and coniferous forest	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.



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common name		Listing status	5	Geographic distribution/				
Scientific name	Federal State CN		CNPS	Floristic province	Preferred habitat	Identification period	Level of potential for occurrence within proposed Project area	
giant garter snake Thamnophis gigas	T T N/A		N/A	Found from sea level to 400 feet (122 meters) in from Glenn County to the southern edge of San Francisco Bay Delta, and from Merced County to northern Fresno County.	Highly aquatic, found in marshes, sloughs, irrigation ditches, canals, rice fields, slow-moving creeks with nearby vegetation	March-October	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
Birds								
bald eagle Haliaeetus leucocephalus	D	E, FP	N/A	North America including all continuous U.S.	Near lakes or streams	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
burrowing owl Athene cunicularia	-	SSC, S3	N/A	Eastern California, Central Valley	Open, dry annual or perennial grasslands, deserts, and scrublands with by lowgrowing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
California condor Gymnogyps californianus	E	E, FP, \$1	N/A	Southern California north of the Los Angeles basin, central California coast, Grand Canyon in Arizona, and mountains of Baja California	Coastal scrub and woodland, oak woodland, valley and foothill grassland. Nests in cavities in rocky outcrops, cliffs, or redwood snags.	Year-round	Low. Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area, though there is designated critical habitat just over five miles southeast of the proposed Project area.	
golden eagle Aquila chrysaetos	-	FP, \$3	N/A	Throughout California, except center of Central Valley	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.	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
mountain plover Charadrius montanus	-	\$2\$3	N/A	Central Valley, San Joaquin foothills, southwestern California	Short grasslands, agricultural fields, foothills, valleys	September- March (Wintering)	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
tricolored blackbird Agelaius tricolor	-	CE, \$1\$2	N/A	Highly colonial species, most numerous in Central Valley and Coastal Range	Freshwater marshes, swamps, wetlands. Requires nearby open water.	Year-round	<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.	
nesting raptors and other migratory birds	МВТА	-	N/A	Migrants and resident species	Tree, shrub, ground, and riparian vegetation (breeding)	February 15-August 31	Moderate: Potential suitable habitat in proposed Project area.	
Mammals								
San Joaquin kit fox Vulpes macrotis mutica	Е	Т	N/A	San Joaquin Valley floor and surrounding foothills of the coastal ranges, Sierra Nevada, and Tehachapi mountains	Inhabits annual grasslands or grassy open stages with scattered shrubby vegetation	Year-round	Moderate. Limited suitable habitat around the proposed Project area. Known occurrence estimated to be within two miles of the proposed Project area, from an observation of one individual in 1990.	



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common name	Listing status		Geographic distribution/	Preferred habitat	Identification period	Level of potential for occurrence within proposed Project area		
Scientific name	Federal	State	CNPS	Floristic province	Preferred habitat	ideniiiicalion period	Level of potential for occurrence within proposed Project area	
Tipton kangaroo rat  Dipodomys nitratoides nitratoides	E E N/A Scattered areas in Kern and Tulare Counties. Historically, the southern San Joaquin Cover 0 to 300 feet in Year-round		<b>Low.</b> Limited to no suitable habitat in the proposed Project area. No known occurrences within two miles of the proposed Project area.					
Western mastiff bat  Eumops perotis californicus	-	\$3,\$4	N/A	Central Valley, Coastal Range, southern and eastern California	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Year-round	Moderate. Limited suitable habitat in the proposed Project area. Known occurrence estimated to be within two miles of the proposed Project area, from two specimens collected in 1990.	

Federal (plants and wildlife)	State (plants and wildlife)	State (plants)	California Native Plant Society
<b>E</b> = Endangered under the federal Endangered Species Act	<b>E</b> = Endangered under the California Endangered Species Act	\$1 = Critically Imperiled	1A = Plants presumed extirpated in CA and either rare or extinct elsewhere
T = Threatened under the federal Endangered Species Act	T = Threatened under the California Endangered Species Act	<b>\$2</b> = Imperiled	1B = Plants rare, threatened, or endangered in California and elsewhere
C = Candidate for listing under the federal Endangered Species Act	R = Rare under the California Native Plant Protection Act	\$3 = Vulnerable	2A = Plants presumed extirpated in CA but more common elsewhere
<b>D</b> = Delisted under the federal Endangered Species Act	<b>CE</b> = Candidate for listing as endangered under the California Endangered Species Act	<b>\$4</b> = Apparently Secure	<b>2B</b> = Plants rare, threatened, or endangered in California but more common elsewhere
PD = Proposed for delisting	SSC = Species of Special Concern	<b>\$5</b> = Secure	3 = Plants about which more information is needed - a review list
MBTA = Protected under the Migratory Bird Treaty Act	FP = Fully protected	<b>0.1</b> = Seriously threatened in California	4 = Plants of limited distribution - a watch list
X = Designated Critical Habitat	SH = State historical site	<b>0.2</b> = Fairly threatened in California	
UR = Under review	- = No listing	<b>0.3</b> = Not very threatened in California	
- = No listing			



Sources: Calflora 2017, CDFW 2017a, CDFW 2017b, CNPS 2017a, CNPS 2017b, USFWS 2017a

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# 3.4.3.2 Field Surveys

Reconnaissance-level baseline pedestrian biological field surveys were conducted on foot, where accessible, by Stantec biologists along the proposed Project alignment on September 28, 2017. The Project Area was surveyed on foot where accessible and permitted, while inaccessible areas were surveyed with binoculars from the closest vantage points. Global Positioning System (GPS) coordinates of any sensitive status wildlife and plant species, in addition to any water features, were photographed (Appendix B) and recorded.

Field surveys were performed to assess the extent of biological resources, evaluate ecological habitat(s), assess for special status species previously identified in the desktop research/analysis or with a potential to occur in the area, and to record wildlife and plant species observed within the Biological Study Area (BSA). A list of the plant and wildlife species observed during the field surveys are compiled in Table 3.4-2 below.

Table 3.4-2 Plant and Wildlife Species Observed During Baseline Biological Surveys in the proposed Project Area, City of Woodlake, California, September 28, 2017.

Scientific Name	Common Name	Native/Non-Native	Status
Plants			
Bromus sp.	Brome grass	Non-Native	None
Croton setigerus	Dove weed	Native	None
Cynodon dactylon	Bermuda grass	Non-Native	None
Heterotheca grandiflora	Telegraph weed	Native	None
Ipomoea pupurea	Morning Glory	Non-Native	None
Soanum xanti	Purple nightshade	Native	None
Solanum elaeagnifolium	Silver leaf nightshade	Non-Native	None
Tribulus terrestris	Puncture Vine	Non-Native Invasive	None
Birds			
Aphelocoma californica	California Scrub Jay	-	MBTA
Artemisiospiza belli	Bell's sparrow	-	MBTA
Columba livia	Rock Pigeon	-	MBTA
Corvus corax	Common Raven	-	MBTA
Euphagus cyanocephalus	Brewers Blackbird	-	MBTA
Quiscalus mexicanus	Great-tailed grackle	-	МВТА
Zenaida macroura	Mourning Dove	-	MBTA



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# 3.4.3.3 Special Status Plants

A species site suitability analysis evaluating the potential to occur within and near the proposed Project area was completed for all plant species that were identified through background research prior to field surveys. This analysis weighed proposed Project site ecological characteristics and suitability with individual species suitability requisites; including vegetation community type, habitat availability, elevation, soils, and known occurrences in the proposed Project region documented by Calflora, CDFW, CNPS, and USFWS. Within Table 3.4-1, a level for "potential of occurrence" within the proposed Project area was evaluated and applied to each special status species identified during background research.

Of the 12 plant species identified in the background research, nine have a low chance of potentially occurring in the proposed Project area. No special status species were identified as having a moderate or high potential to occur within the proposed Project region.

Typical blooming (phenological) periods for all vegetation species, including those listed as special status (Table 3.4-1) within the proposed Project region, include early-bloom (January to March), mid-bloom (April to June), and late-bloom (July to September). Baseline botanical surveys were conducted on September 28, 2017, during the end of late-bloom period for the proposed Project region. Only species that typically bloom during the late-bloom period were generally detectable; however, habitat assessments were conducted to determine the potential for all special status species to occur within the proposed Project area (see Table 3.4-1). The overall composite of species observed within the proposed Project area during baseline botanical surveys can be referenced in Table 3.4-2.

No special status plant species were observed during baseline botanical surveys conducted on September 28, 2017.

#### 3.4.3.4 Special Status Wildlife

Nineteen special status wildlife species were identified through background research as having the potential to occur in the proposed Project region or have been known to occur within five miles of the proposed Project site (Table 3.4-1, CDFW 2017a, CDFW 2017b, USFWS 2017a). Nesting raptors and other migratory birds were also considered special status due to their protection under the MBTA and CDFG Code. The proposed Project site was surveyed and evaluated to determine habitat suitability for each wildlife species, and then each species was given a level of potential occurrence within the proposed Project site. Based on desktop analysis, habitat assessment, and field surveys, the Western mastiff bat (Eumops perotis californicus), San Joaquin kit fox (Vulpes macrotis mutica), and nesting raptors and other nesting migratory birds protected under the MBTA were the only wildlife species identified as having a moderate potential to occur within the proposed Project site. No special status wildlife species were observed during field surveys. Those species with a moderate potential to occur in the proposed Project site are discussed below.



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**San Joaquin kit fox** (Vulpes macrotis mutica)

Federal Status: Endangered; State Status: Threatened

The San Joaquin kit fox is the larger of the two subspecies of the smallest wild canids in North America. The San Joaquin kit fox stands approximately 12 inches tall, has large close-set ears, and weighs an average of five pounds. It has a slender body and long bushy tail with a black tip. The coloration of the San Joaquin kit fox varies by location and season, ranging from buff/tan to yellowish-gray (USFWS 2010). San Joaquin kit fox are primarily nocturnal; their main prey items are nocturnal rodents and leporids. The young are born in large natal dens and generally disperse at an age of four to five months old, typically around August or September. Yearling females have been known to pup, but most do not mate until they are two years old (USFWS 2010). San Joaquin kit foxes establish extensive home ranges that vary in size from 1,071 acres to 5,782 acres, depending on location (USFWS 2010a).

San Joaquin kit fox are adapted to occupy arid lands and are found in desert-like habitats that are characterized by sparse shrub cover, sparse ground cover, and short vegetative structure (USFWS 2010a). They typically avoid dense shrublands, which have been found to impair their predator detection and avoidance abilities (Nelson 2005). San Joaquin kit fox are rarely found in areas with slopes greater than 5 percent. Rugged, hilly terrain negatively influences their ability to detect and avoid predators, leading to higher mortality rates than areas with slopes less than 5 percent. Agricultural lands do not provide suitable habitat for the species (USFWS 2010). San Joaquin kit fox utilize subsurface dens which may extend to a depth of six feet below ground for shelter and rearing young, these dens are primarily excavated in open, level areas with sandy soils. They are absent or scarce in areas with shallow soils due to high water tables, hard pan and proximity to bedrock or in areas with saturated soils or soils that may be subjected to periodic flooding (USFWS 2010).

There were no observations of San Joaquin kit fox, their dens, or scat during the field surveys performed of the proposed Project site, however there are known occurrences within two miles of the proposed Project site according to CNDDB (CDFW 2017b).

**Western mastiff bat** (Eumops perotis californicus)

Federal Status: Not Listed; State Status: Species of Special Concern

The western mastiff bat, an insectivorous bat of the Molossidae, or free-tailed bat family, is the largest native bat in the U.S. This species is nocturnal and non-migratory, and occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral vegetation communities. Individuals or small colonies will roost in crevices in cliff faces, high buildings, trees, and tunnels, commonly with other large bat species. Western mastiff bats go into daily torpor December through February, but resume foraging activities nightly if temperatures permit (CDFG 1990). Suitable habitat exists for daytime roosts in the proposed Project area, and two western mastiff bats specimens were collected in 1990



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within two miles of the proposed Project area. Therefore, there is a moderate potential for the western mastiff bats to occur in the proposed Project area. However, neither sign, roosts, nor individuals were observed during the field surveys on September 28, 2017.

# Nesting raptors and other migratory bird species

Federal Status: Protected under MBTA; State Status: Protected under DFG Code Sections 3503, 3503.5, and 3800

The proposed Project site may possess potential suitable nesting habitats for various bird species protected under the MBTA such as tree, shrub, agricultural, grasslands as well as human built structures. Potential suitable habitat exists for cavity-nesting species such as the northern flicker (Colaptes auratus) and the western bluebird (Sialia mexicana); tree-nesting species such as American robin (Turdus migratorius); and ground-nesting species such as the spotted towhee (Pipilo maculatus). Raptors that may potentially nest within the proposed Project area include red-tailed hawk (Buteo jamaicensis), Swainson's hawk (Accipiter swainsonii), and barn owl (Tyto alba). Therefore, there is a moderate potential for nesting raptors and other migratory bird species to occur within the proposed Project site. No nesting raptors or other migratory birds were observed during the September 2017 site visit; however, the site visit was conducted outside of typical nesting season (approximately February 15 – August 31). A few bird species protected under the MBTA (non-nesting) were observed during the September 2017 site visit (Table 3.4-2).

# Wetlands, Waters of the U.S., and Waters of the State

During field surveys completed on September 28, 2017, wetland features and associated habitat and site suitability, were assessed for the proposed Project area by Stantec biologists.

According to a National Hydrology Database (NHD) desktop analysis and the field surveys completed, there is no vernal pool habitat located in proximity to the proposed Project Area, nor are there any known occurrences of special-status vernal pool species. A review of the USGS NHD and CDFW wetland database showed more than 20 hydrological units and 6 different types of wetland habitat within or adjacent to the Project Area.

However, based on this review, there are only two mapped wetland features (Freshwater Ponds) immediately adjacent to the proposed Project Area. These two mapped wetland features were also identified during the biological survey conducted on September 28, 2017 along with five other distinctly man-made water features that fell within or immediately adjacent to the proposed Project Area.

One of the features, just north of Bravo Lake, consisted of a small natural depression within an agricultural field. However, the small depression has been recently tilled with no vegetation present. The feature is likely a result of agricultural runoff. Another feature, just west of Bravo Lake and north of Wutchumna Canal consisted of a large water storage basin potentially associated



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with stormwater runoff and water treatment. Due to the timing of surveys, full description of wetland characteristics could not be made. It is unlikely to be considered jurisdictional, due to the man-made construction wholly within uplands and water storage/storm water collection uses of the site, as well as the lack of connectivity.

The remaining five man-made water features observed within the proposed Project Area all appear to be associated with Woodlake City storm water drainage system and/or irrigation canals, including the aesthetic cobble stone stream feature that runs through the City park just east of Magnolia street. All the observed drainage features either currently contain water, or have water flow periodically, such as during significant rain events.

The NHD desktop analysis concluded that there are multiple NHD flowlines and water bodies present in proximity to the proposed Project Area. However, only a single NHD flowline and waterbody is within the proposed Project Area, the Wutchumna Canal. This waterbody is the only one within the proposed Project area that could potentially be a Waters of the US (WOUS). The Wutchumna canal, an outlet for Bravo Lake, is approximately eleven feet wide and has a constant flow of water.

# 3.4.4 Impact Analysis

The following discussion evaluates the potential impacts to biological resources from the proposed Project.

IV. BIOLOGICAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any 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 or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by				



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IV. BIOLOGICAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
Section 404 of the Clean Water Act (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?				

a) Would the proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any 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?

Finding: Less than significant with mitigation incorporated

# **Special Status Plant Species**

All special status plant species have a low potential to occur within the proposed Project area. On September 28, 2017, no special-status plants were observed within the proposed Project area. Impacts such as ground disturbance or dust to special-status species would be considered a potential significant impact. Implementation of Mitigation Measures BIO-1: Pre-Construction Contractor Environmental Awareness Training, would reduce this impact to a less than significant level by training the contractor to identify special-status species during construction activities



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and stop work accordingly, if necessary to consult. Therefore, the impact would be less than significant with mitigation incorporated.

### **Special Status Wildlife Species**

San Joaquin kit fox

The San Joaquin kit fox is listed as a federally endangered and state threatened species. If a project causes disturbance of occupied habitats, it may result in direct mortality or take of the kit fox, and may impact individuals while they are in or out of their dens. Indirect impacts include the degradation to habitat or habitat corridors, disturbance from Project activities, increased human presences, or disturbance to their dens (where they reside primarily during the daytime).

The closest known occurrence of San Joaquin kit fox is in the City of Woodlake from 1990 (Figure 3.4-1, CDFW 2017b). No critical habitat rules have been published for the San Joaquin Kit fox (USFWS 2017c).

No suitable habitat for San Joaquin kit fox were observed in the proposed Project area or footprint during field surveys conducted on September 28, 2017. However, a known occurrence of a kit fox was observed in the city in 1990 and the kit foxes are known to use man-made structures, such as culverts and pipes as dens (CDFW 1995). Specifically, the upsized and repair and replacement lines are located in developed and paved areas that lack San Joaquin kit fox specific upland habitat. The only area where excavation may occur in relatively undisturbed areas is adjacent to Wutchumna Canal, which was surveyed and lacks proximity to viable habitat.

Therefore, it is highly unlikely that San Joaquin kit fox or their habitat would occur within or be affected by the proposed Project. With the implementation of Mitigation Measure BIO-1, impacts would be reduced to a less than significant level.

#### Western mastiff bat

The western mastiff bat is not listed under the Federal ESA, however it is listed as a state species of special concern. If a project causes disturbance of occupied habitats, it may result in direct mortality or take of the western mastiff bat, and may impact individuals while they are in or out of their roosting sites. Indirect impacts include the degradation to habitat, noise disturbance, disturbance from Project activities, or increased human presence.

The closest known occurrence of the western mastiff bat is within two miles of the City of Woodlake from 1990 (Figure 3.4-1, CDFW 2017b). Because it is not listed, there is no critical habitat designated for the western mastiff bat.

No suitable habitat for western mastiff bats were observed in the proposed Project area or footprint during field surveys conducted on September 28, 2017. However, a known occurrence of a western mastiff bat was observed within two miles of the proposed Project. The upsized and



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repair and replacement lines are located in developed and paved areas that lack western mastiff bat specific habitat. The only area where excavation may occur in relatively undisturbed areas is across Wutchumna Canal, which was surveyed and lacks proximity to viable habitat.

Therefore, it is highly unlikely that western mastiff bat or their habitat would occur within or be affected by the proposed Project. With the implementation of Mitigation Measure BIO-1, impacts would be reduced to a less than significant level.

Nesting raptors and other migratory birds

There is a moderate potential for nesting raptors and other migratory birds protected under the MBTA to occur within the proposed Project area. Construction activities during the nesting season (approximately February 15 through August 31) could disturb or cause nest abandonment and subsequent loss of eggs or developing young at active nests. Disturbance resulting in nest abandonment or loss of eggs would be considered a substantial adverse effect, and violates the MBTA. Implementation of Mitigation Measures BIO-1: Pre-Construction Contractor Environmental Awareness Training and BIO-2: Avoid Disturbance of Nesting Raptors and Migratory Bird, would reduce this impact to a less than significant level.

Based on the information above, the proposed Project would have a less-than-significant impact with the application of mitigation on species protected in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The operations of the proposed Project will have a less than significant impact on federally and non-federally listed special status species. The implementation of Mitigation Measures BIO-1: Pre-Construction Contractor Environmental Awareness Training and BIO-2: Avoid Disturbance of Nesting Raptors and Migratory Birds, would reduce the impact to special status species to a less than significant level. Therefore, the impact would be less than significant with mitigation incorporated.

b) Would the Project have a substantial adverse effect on any riparian habitat, sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

#### Finding: Less than significant

The proposed Project area is approximately one and a half miles south of the San Joaquin Orcutt grass and Hoover's spurge Critical Habitat Units, Unit 6D and 7D, respectively (USFWS 2017c). Based on field surveys completed on September 28, 2017, the proposed Project area does not contain suitable San Joaquin Orcutt grass or Hoover's spurge habitat, nor were any San Joaquin Orcutt grass or Hoover's spurge observed during the field surveys.

Therefore, as described above, the majority of the proposed Project are located in either paved or developed lands and are significantly buffered from any potential sensitive habitats.



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Additionally, site surveys did not detect any other riparian habitat or other critical communities, identified by regional plans, policies or regulations, in the proposed Project area.

The operation of the proposed Project will have a less-than-significant impact on any riparian habitat, sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW and USFWS. Impacts from proposed Project activities would be a less than significant level.

c) Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

# Finding: Less than significant with mitigation incorporated

A wetland delineation analysis, analysis of wetland features, associated habitats and site suitability were performed for the proposed Project area prior to field surveys completed on September 28, 2017 by Stantec. To minimize the potential impacts to wetlands and wetland habitat, these areas were avoided during the preliminary design phase. Through this process, the impact to federally protected wetland features has been minimized.

One of the upsized lines does cross the Wutchumna Canal, as noted above. This line will be crossed by using horizontal directional drilling (HDD), or similar, which entails installing the pipe underneath Wutchumna Canal, a potential Waters of the U.S. It is not anticipated that Water of the U.S. would be impacted by the project; however, the City will apply Mitigation Measure BIO-3 to reduce any potential unforeseen impacts to Waters of the U.S. This mitigation measure requires no net loss of wetlands or waters of the U.S. and proper permissions from the U.S. Army Corps of Engineers.

Therefore, the proposed Project activities would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or by other means. During operation, under no circumstances, is the discharge of untreated sewage to a water of the U.S. planned or permissible. Rather, the sewage would be properly conveyed to the City of Woodlake WWTF, treated and discharged in accordance with the Facility WDR Permit.

With the implementation of Mitigation Measures BIO-3, impacts from proposed construction activities would be reduced to a less than significant level.

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?

Finding: Less than significant



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Wildlife movement corridors are important habitats that allow wildlife to travel, migrate, or disperse between significant habitats (Harris and Gallagher 1989). Wildlife movement corridors have been recognized by federal agencies such as the USFWS and the state of California as important habitats worthy of conservation. In general, movement corridors are comprised of areas of undisturbed land cover that connects larger, contiguous habitats. The proposed Project area is located within the City boundaries, and is adjacent to abundant agricultural land. Bravo Lake and surrounding unnamed tributaries are located adjacent to the proposed Project and provide potential water sources for native wildlife species.

Construction activities could cause temporary disturbance to common wildlife movements; however, the extent of the disturbance is limited as wildlife could move around the area. As a result, the proposed Project construction and operation is expected to have a less than significant impact on species movements. Thus, the potential impacts to native resident or migratory wildlife species are considered less than significant with no mitigation necessary.

e/f) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation, policies or ordinances? 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?

# Finding: Less than significant with mitigation incorporated

Based on field surveys completed on September 28, 2017, the proposed Project site would not have a substantial adverse effect on natural communities. The proposed Project was designed to primarily be installed in paved roadways and their associated compacted shoulder area. Therefore, it avoids and minimizes potential impacts to present natural habitats such as wetlands. In-road portions of the proposed Project will avoid and minimize impacts, such as tree-trimming, to the extent feasible. The proposed Project construction and operation does not conflict with the City of Woodlake General Plan (City of Woodlake 2008), other habitat or community conservation plan(s), or any other approved local, regional, or state habitat conservation plan(s), and potential impacts are minimal with mitigation incorporated.

The application of Mitigation Measure HAZ-1: Avoid/Minimize Potential Impact from Construction Material release, discussed in Section 3.8 would mitigate any potential significant impacts of release of pollutants in flood waters, flowing river, stream, creek, or reservoir waters (Goal 5, Policy 3). The proposed Project was designed to primarily follow paved roadways and therefore does not impact agricultural land (Goal 4). The project design, also complies with the General Plan Goal 7 to minimize the impact of new development on biotic resources in the planning area. Additionally, the proposed Project does not entail the removal of trees.

The proposed Project site is not within a proposed or adopted habitat conservation plan or natural community conservation plan area and thus does not have a potential for conflict.



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Therefore, with the application of Mitigation Measures HAZ-1, the proposed project would have a less than significant potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation, policies or ordinances.

# 3.4.5 Mitigation

#### Mitigation Measure BIO-1: Pre-Construction Contractor Environmental Awareness Training

Prior to construction, a qualified biologist shall conduct one Environmental Awareness Training for construction personnel. Environmental Awareness Training shall be given to construction personnel to brief them on how to recognize special status plant species, wildlife species, and sensitive habitats that could occur in the proposed Project area (i.e., special status avian identification and habitat, wetland habitats, riparian habitats, relevant Best Management Practices (BMPs), work area limits, mitigation, and regulations). Environmental Awareness Training reference pamphlets shall also be provided to keep onsite for use by an environmentally trained foreman for training new Project personnel in the absence of the biologist. If special status species are encountered in the work area, construction shall cease and the City and qualified biologist shall be notified for guidance before any construction activities are resumed. Depending on the listing of the observed species and its persistence in the area, the County shall notify the USFWS and/or CDFW for guidance.

# Mitigation Measure BIO-1 Implementation

**Responsible Party:** The City of Woodlake shall ensure that a qualified biologist conducts one preconstruction Environmental Awareness Training.

**Timing:** Prior to the initiation of construction.

**Monitoring and Reporting Program:** The training shall be conducted by a qualified biologist and the environmental training reference pamphlets shall be kept on the construction site.

**Standards for Success:** Construction personnel are trained in the key characteristics for identifying and avoiding impacts to special status species and sensitive habitats.

# Mitigation Measure BIO-2: Avoid Disturbance of Nesting Special Status and Non-Special Status Raptors and other Migratory Birds

The City of Woodlake will implement one of the following measures, depending on the specific construction timeframe, to avoid disturbing nesting raptors and other migratory birds.

1. If construction activities are scheduled to occur <u>during</u> the nesting season (approximately February 15 through August 31), a qualified wildlife biologist shall be retained to conduct a pre-construction nesting survey within the appropriate habitat.



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- a. Surveys shall be conducted within the proposed Project site and all potential nesting habitat within 250 feet of this area;
- b. The surveys should be conducted within one week before initiation of construction activities at any time between February 15 and August 31. If no active nests are detected, then no additional mitigation is required; or
- c. If surveys indicate that migratory bird nests are found in any areas that would be directly affected by construction activities, a no-disturbance buffer shall be established around the site to avoid disturbance or destruction of the nest site until after the breeding season or after a wildlife biologist determines that the young have fledged (typically late June to mid-July). The extent of these buffers shall be determined by a qualified biologist and shall depend on the special status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.
- 2. If construction activities begin outside the breeding season (approximately September 1 through February 14) then construction may proceed until it is determined that an active migratory bird nest would be subject to abandonment as a result of construction activities. Optimally, all necessary vegetation removal should be conducted before the breeding season so that nesting birds would not be present in the construction area during construction activities. If any bird nests are in the Project site under pre-existing construction conditions, then it is assumed that they are habituated (or will habituate) to the construction activities. Under this scenario, the pre-construction survey described previously should still be conducted on or after February 15 to identify any active nests in the vicinity. Active sites should be monitored by a qualified biologist periodically until after the breeding season or after the young have fledged (typically late June to mid-July). If active nests are identified on or immediately adjacent to the Project site, then all non-essential construction activities (e.g., equipment storage and meetings) should be avoided in the immediate vicinity of the nest site, but the remainder of construction activities may proceed.

# Mitigation Measure BIO-2 Implementation:

Responsible Party: City of Woodlake

**Timing:** One nesting survey shall be conducted by a qualified biologist within one week of initiating the Project, should the Project occur between February 15 and August 31.

**Monitoring and Reporting Program:** The survey shall be conducted by a qualified biologist and a brief survey report shall be documented and kept on file with the City.



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**Standards for Success:** All raptors and migratory bird nests shall not be disturbed during the Project construction activities.

# Mitigation Measure BIO-3: Compensation for Direct Impacts to Wetlands

If avoidance of the wetlands is not practicable for various engineering or other site constraints, the City of Woodlake shall apply for and obtain a CWA Section 404 Nationwide Permit and comply with the current Corps compensation schedule for any loss of low biological value wetlands. Through the permitting process, the City shall work with the agencies to ensure that the local and federal "no net loss" of wetlands is properly upheld.

#### Mitigation Measure BIO-3 Implementation:

**Responsible Party:** The City of Woodlake is responsible for applying for all permits and approvals needed to fill any wetlands or waters of the U.S.

**Timing:** Permits shall be obtained prior to construction.

**Monitoring and Reporting Program:** The City of Woodlake shall ensure that all permits be obtained prior to construction and the appropriate fees paid to comply with the Corps current compensatory mitigation schedule. The City shall prepare a brief letter report on the compliance with this mitigation measure for the agencies and the City's files.

**Standards for Success:** No net loss of wetlands from the proposed Project.



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# 3.5 CULTURAL AND TRIBAL RESOURCES

This section describes the existing cultural, Tribal cultural, and paleontological resources in the Project area, the different methods used to identify cultural, Tribal cultural, and paleontological resources, and analyzes potential impacts associated with the Project. Based on the impact analysis, the Project would result in less than significant impacts to cultural, Tribal Cultural, and paleontological resources with mitigation incorporated.

# 3.5.1 Regulatory Setting

# 3.5.1.1 Federal Regulations

#### 3.5.1.1.1 National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires federal agencies, or those they fund or permit, to consider the effects of their actions on historic properties. Historic properties are defined by the Advisory Council on Historic Preservation (ACHP) regulations (36 Code of Federal Regulations [CFR] Part 800) for implementing Section 106 as follows:

Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria (36 CFR Part 800.16[]).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. For projects involving a federal agency, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR Part 60.4, as follows:

- The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association and:
  - That are associated with events that have made a significant contribution to the broad patterns of our history; or
  - That are associated with the lives of persons significant in our past; or
  - That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or that possess high artistic values



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or that represent a significant and distinguishable entity whose components may lack individual distinction; or

 That have yielded, or may be likely to yield, information important in prehistory or history.

If a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP. Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

# 3.5.1.1.2 Paleontological Resource Federal Regulations

Federal protection for significant paleontological resources would apply if specific projects involve federally owned or managed lands, a federal license, permit, approval or funding and/or crosses federal lands. The proposed Project involves federal funding. The following are federal regulations with respect to paleontological resources potentially within the Project area:

Antiquities Act of 1906. Federal legislative protection for paleontological resources stems from the Antiquities Act of 1906 (PL 59-209; 16 United States Code 431 et seq.; 34 Stat. 225), which recommends and regulates protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands and is recognized for regulation of the collecting of vertebrate fossils on land managed by the Bureau of Land Management (BLM), National Park Service, Forest Service, Department of Energy and other federal agencies.

NHPA of 1966 (NHPA; 16 USC 470). The NHPA only applies to paleontological resources that are found in culturally related contexts and are then thus considered cultural resources.

National Environmental Policy Act (NEPA) of 1969. NEPA (United States Code, section 4321 et seq.; 40 Code of Federal Regulations, section 1502.25), as amended, directs Federal agencies to "Preserve important historic, cultural, and natural aspects of our national heritage (Section 101(b) (4)).

Paleontological Resources Preservation Act of 2009. The Paleontological Resources Preservation Act (PRPA), is part of the Omnibus Public Land Management Act of 2009 (Public Law 111-011 Subtitle D). This act directs the Secretary of the Interior or the Secretary of Agriculture to manage and protect paleontological resources on federal land, and develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources. It prohibits the removal of paleontological resources from federal land without a permit issued under this Act, establishes penalties for violation of this act, and establishes a program to increase public awareness about such resources.

# 3.5.1.2 State Regulations

# 3.5.1.2.1 California Environmental Quality Act



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The California Environmental Quality Act (CEQA) requires public agencies to evaluate the implications of their project(s) on the environment and includes significant historical resources as part of the environment. According to CEQA, a project that causes a substantial adverse change in the significance of an historical resource has a significant effect on the environment (California Code of Regulations [CCR] 14 Section 15064.5; California Public Resources Code [PRC] Section 21098.1). CEQA defines a substantial adverse change as follows:

 Physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CCR 14 Section 15064.5[b][1]).

CEQA guidelines state that the significance of an historical resource is materially impaired when a project results in the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the [CRHR]; or
- Demolishes or materially alters in an adverse manner those physical characteristics that
  account for its inclusion in a local register of historical resources pursuant to PRC Section
  5020.1 (k) or its identification in an historical resources survey meeting the requirements of
  PRC Section 5024.1 (g), unless the public agency reviewing the effects of the project
  establishes by a preponderance of evidence that the resource is not historically or
  culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA (CCR 14 Section 15064.5[b][2]).

# 3.5.1.2.2 California Register of Historical Resources: PRC Section 5024

The term historical resource includes, but is not limited to any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]). Historical resources may be designated as such through three different processes:

- 1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]).
- 2. A local survey conducted pursuant to PRC Section 5024.1(g).
- 3. The property is listed in or eligible for listing in the [NRHP] (PRC Section 5024.1[d][1]).



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The process for identifying historical resources is typically accomplished by applying the criteria for listing in the CRHR, which states that a historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

It is associated with events that have made a significant contribution to the broad patterns of:

- 1. California's history and cultural heritage.
- 2. It is associated with the lives of persons important in our past.
- 3. 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.
- 4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

# **Unique Archeological Resources**

The PRC also requires the lead agency to determine whether or not the project will have a significant effect on unique archaeological resources (PRC Section 21083.2[a]).

The PRC defines a unique archaeological resource as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
  - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
  - Has a special and particular quality such as being the oldest of its type or the best available example of its type.
  - Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2).



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In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of historical resource. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR.

#### **Discovery of Human Remains**

Section 7050.5 of the California Health and Safety Code (CHSC) states the following in regard to the discovery of human remains.

- 1. Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [California PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (I) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].
- 2. 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 human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the [PRC]. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.
- 3. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the [Native American Heritage Commission (NAHC)] (CHSC Section 7050.5).

Of particular note to cultural resources is subsection (c), requiring the coroner to contact the NAHC within 24 hours if discovered human remains are determined to be Native American in origin. After notification, NAHC will follow the procedures outlined in PRC Section 5097.98, which include notification of most likely descendants (MLDs), if possible, and recommendations for treatment of the remains. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).



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# 3.5.1.2.3 Paleontological Resources State Regulations

The following are California state regulations with respect to paleontological resources potentially within the Project area.

California Environmental Quality Act. CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or a unique geological feature (CEQA Guidelines, Appendix G (V)c). If an impact is significant, the State CEQA Guidelines require that feasible measures which could minimize significant adverse impacts (State CEQA Guidelines § 15126.4) be implemented. State CEQA Guidelines § 15370 includes mitigation guidelines to avoid, minimize, rectify, reduce/eliminate or compensate for impacts to paleontological resources.

California PRC § 5097.5. The California PRC § 5097.5 states, in part, that no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any vertebrate paleontological site, including fossilized footprints, or any other paleontological feature, situated on public lands (lands owned by or under the jurisdiction of the state, city, county, district or public corporation), except with the express permission of the public agency having jurisdiction over such lands. Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical or paleontological material or sites located on public lands is a misdemeanor.

California Code of Regulations. Two sections of the California Code of Regulations (Title 14, Division 3, Chapter 1) is applicable to California Department of Parks and Recreation (DPR) administered lands. Specific to paleontological resources Section 4307 (Geological Features) states that no person shall destroy, disturb, mutilate, or remove paleontological features and Section 4309 (Special Permits) states that DPR may grant a permit to remove, treat, disturb or destroy paleontological materials.

### **Assembly Bill 52**

This bill changes sections of the PRC to add consideration of Native American culture within the CEQA. The goal of Assembly Bill 52 (AB 52) is to promote the involvement of California Native American Tribes in the decision-making process when it comes to identifying and developing mitigation for impacts to resources of importance to their culture. To reach this goal, the bill establishes a formal role for tribes in the CEQA process. CEQA lead agencies are required to consult with tribes about potential Tribal cultural resources in the project area, the potential significance of project impacts, the development of project alternatives, and the type of environmental document that should be prepared. AB 52 specifically states that a project that may cause a substantial adverse change in the significance of a Tribal cultural resource if a project that may have a significant effect on the environment (PRC Section 21084.2).



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# 3.5.1.3 Local Regulations

Tulare County does not have regulations that specifically address protection and mitigation for paleontological resources. However, the City of Woodlake recognizes the requirement to follow guidelines for the protection of unique paleontological resources as defined by State and Federal laws.

3.5.1.3.1 Woodlake General Plan 2008 to 2028

#### Historic and Cultural Resources

Goal 1. Take actions to promote Woodlake's historic identity and protect cultural resources.

**Policy 2.** Protect cultural resources that may be impacted by new development.

# 3.5.2 Environmental Setting

This environmental setting provides a brief overview of the natural environment and the prehistoric, ethnographic, and historic setting of the study area. This information is provided as context within which to interpret the cultural resources identified in the Project area.

#### 3.5.2.1 Natural Environment

Woodlake is a small agricultural community located at the base of the Southern Sierra Nevada foothills in the northwest portion of Tulare County at the western edge of the San Joaquin Valley. The San Joaquin Valley is bordered by the Diablo Range to the west, Tehachapi and San Emigdio mountains to the south, and the Sierra Nevada Mountain range to the east. The northern section of the valley is separated from Tulare Basin to the south by the Kings river fan on the east and the Los Gatos Creek fan on the west. The San Joaquin Valley is a structural trough that is underlain by thick deposits of quaternary alluvium eroded from the surrounding mountain fronts (Bartow 1991). Soils consist of San Joaquin loam, Porterville clay, and Seville clay (Bartow 1991).

The topography consists of flat terrain and elevation ranges from approximately 430 to 464 feet above mean sea level (amsl). Unlike the central Sierra Nevada to the north, granitic rocks dominate the eastern and western slopes of the Southern Sierra Nevada range. Granite formations are predominately isolated and discontinuous outcrops of pre-Cenozoic metasedimentary and metavolcanics materials including slate, quartzite, hornfels, chert, phyllite, mylonite, schist, gneiss, and marble (Jennings 1977).

Several rivers drain the western slope of the southern Sierra Nevada including the San Joaquin, Kings, Kaweah, and Kern rivers, which have built a nested series of alluvial fans (Hill 2006). Tulare Lake was once the largest body of water west of the Great Lakes; however, the lake is currently dry due to historic water diversions of the Kings river to divert the water for irrigation and development (Hill 2006).



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Bravo Lake is a natural water body located in the southwest portion of Woodlake. Currently, the lake is fed by the Wutchumna Ditch, Antelope Creek overflow ditch, and an unnamed storm water drain. Other nearby water bodies include St. John's river, which runs east-west along the southern boundary of the town, Kaweah River, located 1.7 miles south, and Lake Kaweah, located approximately 9 miles west.

The climate of south central California is sub-tropical or Mediterranean with hot, dry summers and mild winters (Hill 2006). Average temperatures range from 98°F during the summer months (June – July) and 58°F during the winter (December – January). Most rainfall occurs from November to April and the driest days of the year are experienced from June to August.

#### 3.5.2.2 Prehistoric Context

Native American groups have occupied the southern portion of the San Joaquin Valley for at least the last 12,000 years. Although few sites of that age have been identified thus far, the most notable of these is the Witt site (CA-KIN-32) on the western shore of Tulare Lake (Fenenga 1993). Many of the earliest sites have been significantly damaged by agricultural practices in the past century. Below is a general characterization of the Holocene prehistory of the San Joaquin Valley, utilizing the taxonomic system first proposed by Beardsley (1954a, 1954b) and detailed by Moratto (1984:181-183) and Meyer et al. (2010:147-163).

Archaeological evidence from the Early Horizon (8,000 to 4,000 [Before Present] B.P.) suggests that people were generally nomadic, and their subsistence was based on large game hunting and fishing. Common artifacts found at sites from this period include hand-molded baked clay net weights, Olivella and Haliotis shell beads, and heavy stemmed projectile points.

The Middle Horizon (4,000 to 1,500 B.P.) is characterized by a more diversified subsistence, with some evidence of an increasing emphasis on seed processing, along with hunting, fowling, and fishing. Artifacts from this period include *Haliotis* shell ornaments in varied geometric shapes, *Olivella* and *Haliotis* beads, distinctive spindle-shaped charmstones, cobble mortars, chiselended pestles, and large, heavy projectile points. Bone was extensively utilized for tools, such as awls, fish spear tips, saws, and pressure flakers (used in the manufacture of flaked-stone implements such as projectile points).

In the Later Horizon (1,500 B.P. to Historic Contact), evidence suggests that subsidence strategies were increasingly focused on the processing of plant foods, with less emphasis on hunting, fowling, and fishing. Artifacts include *Olivella* beads, *Haliotis* ornaments, stone beads and cylinders, clamshell disk beads, tubular smoking pipes of stone, arrow-shaft straighteners, small side-notched projectile points, flat-bottomed mortars, and carefully crafted cylindrical pestles.

# 3.5.2.3 Ethnographic Background

Woodlake sits at the border between the ethnographic Southern Valley Yokuts and the Foothill Yokut groups. Although linguistically related the differences lie in geographical territories and dialect (Kroeber 1925:474-475). There were at one time as many as 50 Yokut tribes although



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there did not appear to be any political unity or close alliances between the groups (Spier 1978:471) The ethnohistoric group that lived around the shoreline of Bravo Lake were the *Wutchumni*, a branch of the Foothill Yokut group that lived on the western slope of the Sierra Nevada range between the Fresno and Kern Rivers (Spier 1978:471). While Tribal boundaries can be somewhat vague, streams and drainages seemed to have formed boundaries though they did gather or share territories during certain seasons (Gayton 1948, 2:159; Spier 1978:472).

The Foothill Yokuts practiced a hunting-gathering economy with fishing only as a supplement (Spier 1978:472). The Foothill Yokuts had abundant food supplies including deer, quail, rabbits, pine nuts, wild oats, manzanita, and wild berries (Spier 1978:472). Salmon were caught by spear-fishing along the rivers during the fall and other fish caught using stone weirs or a basket trap (Spier 1978:473). Trade with other Tribes is evident in the obsidian from the eastern Sierras (Spier 1978:473). Although some pottery was used by the Central Foothill Yokuts (Spier 1978) the Foothill Yokuts relied on basketry and are known for finely made coiled and twined baskets made from locally available materials such as willow, milkweed, and hemp (Spier 1978). According to Kroeber:

"The Wukchamni, Wikchamni, or Wikchomi (plural Wukachmina or Wikatsmina...wintered on Kaweah River near Lemon Cove and Iron Bridge and frequented the adjacent hills in summer" (Kroeber 1925: 480).

The Foothill Yokuts were patrilineal and most identify more strongly with their Tribal name or home village rather than a generic Yokut designation (Spier 1978:472). They made structures that served different purposes: conical shaped "houses" with a diameter of 12-15 feet covered with tule mats, a flat-roof ramada that was about 10 x 15 feet and 7 feet high, two forms of a sweathouse, and a temporary, hemispherical shaped shade structure (Spier 1978). The houses were built according to individual choice and there was little organization to the placement of structures; although, family homes may have doors that faced each other (Spier 1978).

The Ghost Dance of 1870 made an impression on the northern Foothill Yokuts and then diffused to the Central Foothill groups who then passed it to the Southern Valley Yokuts and then the Chumash via Tejon Ranch (Spier 1978). Although small dances were held locally a major dance in Eshom Valley on the headwaters of the north fork of the Kaweah River in the fall of 1872 attracted participants from the Monache, the Central Valley Yokuts, and the Southern Valley Yokut groups (Spier 1978).

# 3.5.2.4 Historic Background

The Story of Bravo Lake as told by the Woodlake Chamber of Commerce (2017): Sometime around 1851 two Irishmen, John "Swamp" Asbil and Tom Fowler, confronted one another one morning on the shore of a lake and began their customary quarreling. Another man, T.H. Davis, Sr., a miner who started a cattle ranch in the area in 1853, tired of this squabbling pulled out his gun and demanded the two men settle the dispute with a fight. The fight, it is said, lasted until noon. Spectators stood by shouting, "Bravo! Bravo" until one man, Mr. Fowler, was proclaimed



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the winner since he could walk on his own to the lake to clean up. Henceforth the men became friends and the lake became known as Bravo Lake (Woodlake Chamber of Commerce 2017).

The town of Woodlake lies along the western foothills of the Sierra Nevada Range and south of Antelope Valley. The lake and rich soil attracted settlers to the area who clustered their developments near the lake. In 1863 Reverend Jonathon Blair founded a colony around the lake that he called "Stringtown" (Woodlake Chamber of Commerce 2017). Unfortunately, the early attempts at establishing a town were washed away during severe flooding from the Kaweah watershed in 1857, 1862, and 1868 as towns people moved to higher ground (Woodlake Chamber of Commerce 2017).

However, by the 1870s, the area became a significant ranching town when ranchers began buying up land for cattle and sheep (Woodlake Chamber of Commerce 2017). Irish cowboys would drive cattle between this area and Carson City, Nevada while the Portuguese sheepherders transported wool by wagon to Stockton (Woodlake Chamber of Commerce 2017). In 1880, the town was large enough to require a school so one was built from a converted sheep shelter on the Wutchumna ditch and named Lone Willow School. The first store was built in 1900 three miles east of the lake at Naranjo.

In 1912 Gilbert E. Stevenson purchased 13,000 acres of land and built a two-story commercial complex at the corner of Naranjo Blvd and Valencia Blvd. Stevenson, a land developer, came from Los Angeles where he was known for subdividing ten-acres of land at the corner of Hollywood and Vine in Los Angeles and for building the Miramar Hotel in Santa Monica (Woodlake Chamber of Commerce 2017). He envisioned a planned recreational community centered around Bravo lake and named the community "Woodlake". By 1913 the city had a newspaper, two schools, two churches, a bank, two retail stores, and a doctor's office (City of Woodlake 2017). Stevenson's generous investments in the community, including donating three miles of right-of-way, led to the construction of both the Visalia Electric and Santa Fe railroad lines through Woodlake, the construction of levees around natural Bravo Lake (at the time, called "Wood Lake"), and a bridge crossing St. John's River to the south. Mr. Stevenson was also responsible for the installation and construction of the cities original utility infrastructure (City of Woodlake 2017). Thanks to Stevenson, the town began to flourish.

Stevenson had big plans for the lake. He built levees around the lake, establishing a permanent water feature for the town. Islands were built in the lake for boat docks and picnics and planned a narrow-gauge railroad around the lake and a park along the outside of the levee (Woodlake City 2017). Sadly, Woodlake did not prosper as much as Stevenson had hoped and the Great Depression and a lawsuit with Wutchumna Water Company took a devastating toll. Mr. Stevenson died penniless in 1938. Three years after his death Woodlake was incorporated, with Bravo Lake outside of the city limits (Woodlake Chamber of Commerce 2017).

The Visalia Electric Railroad, imagined by John Hays Hammond, director of the Mt. Whitney Power Plant, was another contributor to the growth of Woodlake. Incorporated in 1904 by the Southern Pacific Railroad, 21-mles of track were in operation between Exeter and Lemon Grove



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by 1907 (Hobbs 2001). The track was extended in 1910 to Redbanks, the branch of the railroad that includes Woodlake (Hobbs 2001). The Visalia Electric Railroad originated with steam power but converted to electric in 1908 with the introduction of a Westinghouse 15-cycle 3300-volt alternating current plant. The electric overhead consisted of wooden poles spaced 120 to 150 feet apart that supported a single catenary (Hobbs 2001). In 1945 the railroad converted to diesel power and the electric overhead was dismantled. Operation continued into 1990 but in January 1996 the steel track was removed and remnants of the grade have been eradicated by grading (Hobbs 2001).

# 3.5.3 Impact Analysis

This section analyzes the project's potential to result in significant environmental impacts to cultural, Tribal Cultural, and paleontological resources. When an impact is determined to be significant, mitigation measures are identified that would reduce or avoid that impact, if feasible.

# 3.5.3.1 Methodology and Results

# 3.5.3.1.1 Records Search

Background research was conducted to identify previously recorded cultural resources within a half mile of the Project area.

A records search and literature review was conducted at the Southern San Joaquin Valley Information Center (SSJVIC), the repository for the California Historical Resources Information System (CHRIS) for Tulare county, located at California State University, Bakersfield, California on September 27, 2017. As an affiliate of the State of California Office of Historic Preservation, the SSJVIC is the official state repository of cultural resource records and reports for the region that includes Tulare County. Results of the records search can be found in Tables 3.5-1, 3.5-2, and 3.5-3 below.

As part of the records search, Stantec reviewed the following inventories for cultural resources in and/or adjacent to the Project area:

- California Inventory of Historic Resources (California Department of Parks and Recreation 1976);
- California Historical Landmarks (California Office of Historic Preservation 1996);
- California Points of Historical Interest (California Office of Historic Preservation 1992); and
- Directory of Properties in the Historic Property Data File (California Office of Historic Preservation 2004). The directory includes listings of the NRHP and the CRHR.

One previously recorded site, P-54-004034, was identified within the Project area. This resource was originally recorded by architectural historian Douglas Dodd in 1999 and updated by



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architectural historian Kelly Hobbs in 2000 and 2001. The site consists of a historic railroad grade that was constructed by the Visalia Electric Railway, an affiliate of the Southern Pacific Railroad. This railway was in operation from 1906-1990 and many features associated with it have been removed or built over. The railroad is no longer extant.

Table 3.5-1 Previously Recorded Cultural Resources within 1/2 Mile of Project Area

Trinomial	Primary No.	Quad (7.5")	Component	Description	Distance from Project Area
	P-54-	14		Bravo Lake	Approx. 300'
N/A	004033	Woodlake	Historic	reservoir	east
	P-54-			Railroad	Within Project
N/A	004034	Woodlake	Historic	grade	area

The record search also indicated that one historic property (the Wutchumna Ditch bridge) is within the project area. The Wutchumna Ditch Bridge was previously determined ineligible for the NRHP and is therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

Additionally, 10 historic properties were identified outside the Project area. One historic property that is outside the Project area has not been evaluated for the CRHR or NRHP. The other nine historic properties were previously determined ineligible for the NRHP and are therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

Table 3.5-2 Historic Properties Within the ½-mile Study Area

Property No.	Address/Name	Date of Construction	Туре	NRS Code	Location
				W 5 1	Adjacent to but
10/055		1050	Project	6Y: Determined	outside the
186955	191 Laguna Ave.	1959	Review	Ineligible	Project area.
180204/181269	176 Manzanillo St.	1960	Project Review	6Y: Determined Ineligible	Adjacent to but outside the Project area.
179109	244 Manzanillo St.	1942	Project Review	6Y: Determined Ineligible	Adjacent to but outside the Project area
146008	299 N. Palm St.	1939	Historic Residence	6Y: Determined Ineligible	Outside Project Area. 400' west of Project area.
	545 N. Valencia		Historic	6Y: Determined	Outside Project Area, 260' north
146932	Blvd.	1950	Residence	Ineligible	of Project area.
	310 Pomegranate		Project	6Y: Determined	Outside Project area. 375' northwest of
102814	St.	Unknown	Review	Ineligible	Project area.



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169985	369 S. Magnolia St.	1950	Project Review	6Y: Determined Ineligible	Adjacent to but outside the Project area.
183010	301 S. Palm St.	1947	Project Review	6Y: Determined Ineligible	Adjacent to but outside the Project area.
52148 Bridge No. 46- 135	SR 245/ Horton Cattlepass, Bridge #46-135	1927	Historic Survey	7R: Not Evaluated.	Outside Project area.
52147 Bridge No. 46 0075	SR 245/ Bridge #46-75	1927	Historic Survey	Bridge not eligible for NRHP. (Caltrans 2017)	Outside Project area. 800' south of Project area.
Bridge No. 46 0076	Wutchumna Ditch	1939	Historic Survey	Bridge not eligible for NRHP. (Caltrans 2017)	Within Project Area.

The record search indicates that 18 previous studies have been conducted within a half mile radius of the Project area. Five of these studies are located within or directly adjacent to the Project area and all resulted in negative findings. Four of the studies are within 300' of the Project area with, one with positive findings. Investigative report number TU-00409 noted a historic refuse scatter of 19th century ceramics, old glass, and iron fragments in the cut bank of the Visalia Electric Railroad bed however, no site record was created. All remaining studies located within a half mile radius of the Project area resulted in negative findings except report number TU-00297, that resulted in positive findings of a prehistoric campsite located on the north bank of St. Johns River (outside the project area).

Table 3.5-3 Previous Studies within the  $\frac{1}{2}$ -mile Study Area

Author(s)	Year	Report Title	Results In Project Area	Report Reference No.	Distance from Project Area
Alan Davis	1977	Resource Assessment, Record Search, and Literature Review	Positive	TU-00297	Within ½ mile
R. J. Cantwell	1978	Archaeological and Historical Survey Report: Hacienda Heights Subdivision of Woodlake	Negative	TU-00231	Within ½ mile
Denise O' Connor	1981	Archaeological Survey Report of 4B and 5 projects	Positive	TU-00409	Approx. 300' west
Gay Weinberger	1983	Archaeological Reconnaissance of Budget homes Subdivision	Negative	TU-00548	Within ½ mile
Gay Weinberger	1988	Archaeological Reconnaissance of Woodlake Garden Apartments	Negative	TU-00566	Within ½ mile
Gay Weinberger	1988	Cultural Resource Assessment of Griffin-McDonald Subdivision	Negative	TU-00575	Within ½ mile
Catherin Lewis Pruett	1993	Cultural Resources Record Search	Negative	TU-00741	Within ½ mile



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Ann S. Peak	1994	Cultural Resources Assessment of the Proposed Woodlake Valley Apartments I and II, Woodlake, Tulare County, California	   Negative	TU-00423	Approx. 200' south
James S. Kus and Claudia A. Mader	1995	Negative Archaeological Survey Report	Negative	TU-00015	Within Project area
James S. Kus and Claudia A. Mader	1996	Negative Archaeological Survey Report	Negative	TU-00014	Adjacent to Project area
James S. Kus and Claudia A. Mader	1996	Negative Archaeological Survey Report	Negative	TU-00016	Within ½ mile
James S. Kus	1997	Negative Archaeological Survey Report	Negative	TU-00008	Adjacent to Project area
Kevin Hovey	1999	Negative Archaeological Survey Report	Negative	TU-01013	Within Project area
James S. Kus	2003	Negative Archaeological Survey Report	Negative	TU-01156	Within ½ mile
James S. Kus	2004	Negative Archaeological Survey Report	Negative	TU-01196	Within ½ mile
Alexandra M. Greenwald and Karin Goetter	2009	Cultural and Paleontological Resources Study for the Woodlake Wastewater Treatment Facility Project	Negative	TU-1392	Adjacent to Project area
Scott M. Hudlow	2010	A Phase I Resource Survey for Woodlake Village II, City of Woodlake, California	Negative	TU-001445	Approx. 200' south
Scott M. Hudlow	2010	A Phase I Resource Survey for Woodlake Village II, City of Woodlake, California	Negative	TU-1563	Approx. 200' south

## 3.5.3.1.2 AB 52

No Tribes contacted the City of Woodlake requesting AB 52 consultations on City Projects. Therefore, on November 1, 2017, the NAHC was asked to review the Sacred Lands File for Tribal cultural resources that might be affected by the proposed Project. The NAHC responded on November 13, 2017, stating that a search of the Sacred Lands File was completed for the Project area referenced above with negative results.

## 3.5.3.1.3 Field Survey

On October 2, 2017, Stantec archaeologists conducted a pedestrian survey of the entire Project area. The weather was warm with clear skies and no wind. The Project area is located in residential and commercial areas that consist of paved streets, alleys, dirt, and concrete sidewalks, and undeveloped lots. The Project area was entirely accessible to survey.

The Project area was evaluated for the presence of prehistoric or historic site indicators. Site indicators for the presence of prehistoric sites in this area may include, but are not limited to:



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ground depressions; darkened soil areas indicative of middens; fire scorched and/or cracked rock; modified obsidian, chert, or other vitreous materials; and grinding stones including manos and metates. Historic era artifacts may include, but are not limited to: metal objects including nails; containers or miscellaneous hardware; glass fragments; ceramic or stoneware objects or fragments; milled or split lumber; trenches; feature or structure remains such as buildings or building foundations; and trash dumps.

Survey began on the northwest side of the Project area at W Naranjo Blvd and N Cypress St. and continued east along the north side of Naranjo Blvd and then south of Naranjo from west to east. Streets were surveyed from the side for safety. Three undeveloped lots located on the northeast corner of W. Naranjo Blvd. and N. Cypress, N. Castle Rock St. and E Naranjo, and on S. Magnolia Blvd. between Laguna and W Naranjo were surveyed in 5-10 meter transects to 30 meters from the road. At the south end of the paved portion of S Palm St. at Deltha Ave. is a fenced lot containing a large retention basin (8 acres) on the west and fenced residential and commercial lots on the east. The survey in this area continued south along the dirt road for approximately 300 meters to the roughly E-W trending Wutchumna Ditch, which is fenced.

Ground visibility was generally very poor (less than 10%) as the majority of the Project area is covered in asphalt. Areas that were not paved were grubbed (on Castlerock) or packed dirt. Vegetation was minimal and ground visibility on these lots was good (greater than 75%).

During the survey, two previously recorded sites were visited, updated, and site records were submitted to the SSJVIC. Bravo Lake (P-54-004033)\_remains as recorded. As documented in the Visalia Electric Railroad (P-54-004034) original site record, the rail is no longer extant and the grade has been obliterated through grading. The Woodlake Botanical Gardens have been created where a portion of the railroad once lay. Neither P-54-004033 or P-54-004034 will be affected by this project.

In addition to survey, archaeologists visited historic properties that are listed with the Office of Historic Preservation and within or adjacent to the Project area. These properties were previously evaluated and determined ineligible for the NRHP (see Table 3.5-2;) and are therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

During the pedestrian survey of the Project area, no new sites, features, or artifacts were identified.

## 3.5.3.2 Paleontological Resources

A qualified Stantec paleontologist conducted a paleontological resource review for the proposed Project. The results of the study are detailed below.



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#### 3.5.3.2.1 Professional Standards

According to standard professional procedures published by the Society of Vertebrate Paleontology (SVP 2007), sedimentary rock units may be described as having a high (or known) potential for containing significant non-renewable paleontological resources, a low potential for containing paleontological resources or an undetermined potential for containing 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. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and those which add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally (Reynolds 1988). While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines. Additionally, most federal, state, and local regulatory agencies have accepted and use the professional standards and practices set forth by SVP.

#### 3.5.3.2.1 Evaluation

The geology of the Project area was determined based on the regional geological map (Matthews and Burnett 1965). The Project area is a low-lying region of limited topographic relief at the eastern edge of the San Joaquin Valley. It is covered by Quaternary alluvium. This consists of Pleistocene non-marine deposits north of Naranjo Boulevard and Recent fan deposits south of Naranjo Boulevard. A search of the online University of California, Berkeley's Museum of Paleontology (2017) database indicates no vertebrate fossil sites on record in the Project area. The nearest fossil site is the Slick Rock Village site, approximately 10 miles to the southeast in a different geological setting.

Rating of paleontologically sensitive stratigraphic units follows the Society of Vertebrate Paleontology guidelines (2007, www.vertpaleo.org, accessed 21 December 2014) in assigning the potential as low:

Low Potential (sensitivity) – Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogeneic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction gets underway it is possible that significant and unanticipated paleontological resources might be encountered and require a change of classification from Low to High Potential and thus require monitoring and mitigation if the resources are found to be significant.



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# 3.5.3.3 Impact Analysis

The following section discusses the potential Project-related impacts relative to cultural, Tribal Cultural, and paleontological resources for the Project.

V.	CULTURAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?				
e)	Cause a substantial adverse change in the significance of a tribal cultural resource, 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 Public Resources Code section 5020.1 (k).				
f)	Cause a substantial adverse change in the significance of a tribal cultural resource, 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 a resource determined by the lead agency, in its discretion and supported by substantial evidence, to				



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be significant pursuant to criteria set		
forth in subdivision (c) of Public		
Resources Code Section 5024.1. In		
applying the criteria set forth in		
subdivision (c) of Public Resource		
Code Section 5024.1, the lead agency		
shall consider the significance of the		
resource to a California Native		
American tribe.		

# a) Would the Project cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?

Finding: Less than significant with Mitigation

One previously recorded cultural resource, a segment of the Visalia Electric Railroad (P-54-004034), and one previously recorded historic property, the Wutchumna Ditch Bridge, were identified in the Project area.

P-54-004034, a segment of the Visalia Electric Railroad, is located at the southeastern end of the Project area. P-54-4034 was visited by archaeologists during the field survey and found to be no longer extant. All traces of the railroad, including the grade, have been decimated, as documented in the most recent site-record update (2017). Therefore, the project will have no impacts to P-54-004034.

Wutchumna Ditch Bridge is within the Project area. The Wutchumna Ditch Bridge was previously determined ineligible for the NRHP and is therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

The Project as described will be conducted in areas with substantial past impacts during the construction of the Woodlake sewer system and associated repairs and maintenance to the system. The Project proposes trenching in locations of existing pipeline to remove and replace the pipelines. Generally, replacement of pipe involves some overcutting (i.e., excavation beyond the area previously excavated); however, excavation of undisturbed sediments is not expected to be extensive. Therefore, it is highly unlikely that new or previously unidentified resources will be recovered during the Project.

However, there is always the possibility that subsurface archaeological deposits may exist within the Project area, as archaeological sites may be buried with no surface manifestation. Therefore, Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources (described below), shall be implemented by the City for the proposed Project to reduce the potential for impacts to inadvertent cultural resource discoveries to a less than significant level.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource as identified in Section 15064.5?



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Finding: Less than significant with Mitigation

The record search and pedestrian survey did not identify previous archaeological resources, including districts, sites, features, or isolated finds, except for the Visalia Electric Railroad (discussed above) within the Project area.

The Project as described will be conducted in areas with substantial past impacts during the construction of the Woodlake sewer system and associated repairs and maintenance to the system. The Project proposes trenching in locations of existing pipeline to remove and replace the pipelines. Generally, replacement of pipe involves some overcutting (i.e., excavation beyond the area previously excavated); however, excavation of undisturbed sediments is not expected to be extensive. Therefore, it is highly unlikely that new or previously unidentified resources will be recovered during the Project.

However, there is always the possibility that subsurface archaeological deposits may exist within the Project area, as archaeological sites may be buried with no surface manifestation. Therefore, Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources (described below), shall be implemented by the City for the proposed Project to reduce the potential for impacts to inadvertent cultural resource discoveries to a less than significant level.

# c) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Less than significant with Mitigation

The Project area is covered by sediments considered to have low paleontological sensitivity. The Project as described will be conducted in areas with substantial past impacts during the construction of the Woodlake sewer system and associated repairs and maintenance to the system. The Project proposes trenching in locations of existing pipelines to remove and replace the pipeline. Generally, replacement of pipe involves some overcutting (i.e., excavation beyond the area previously excavated); however, excavation of undisturbed sediments is not expected to be extensive. Therefore, it is unlikely that new or previously unidentified paleontological resources will be recovered during Project construction.

However, there is always the possibility that subsurface paleontological resources may exist within the Project area. These resources include bones, shells and preserved plant material. Therefore, Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources, shall be implemented by the City for the proposed Project to reduce the potential for impacts to inadvertent paleontological resource discoveries to a less than significant level.

# d) Would the Project disturb any human remains, including those interred outsides of formal cemeteries?

Finding: Less than significant with Mitigation



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There are no known human burials or remains within the Project area. However, there is always the possibility that subsurface human remains may exist within a Project area. Therefore, Mitigation Measure CULTURAL-2: Proper Handling of Inadvertent Discovery of Human Remains, shall be implemented. Therefore, the potential to disturb human remains would be less than significant with mitigation incorporated.

e) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, 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 Public Resources Code section 5020.1(k)

Finding: Less than significant with Mitigation

No Tribes contacted the City of Woodlake requesting AB 52 consultations on City Projects. Therefore, on November 1, 2017, the NAHC was asked to review the Sacred Lands File for Tribal cultural resources that might be affected by the proposed Project. The NAHC responded on November 13, 2017, stating that a search of the Sacred Lands File was completed for the Project area referenced above with negative results.

The records search and pedestrian survey did not identify any Tribal cultural resources within the Project area. Additionally, the Project as described will be conducted in areas with substantial past impacts during the construction of the Woodlake sewer system and associated repairs and maintenance to the system. The Project proposes trenching in locations of existing pipeline to remove and replace the pipelines. Generally, replacement of pipe involves some overcutting (i.e., excavation beyond the area previously excavated); however, excavation of undisturbed sediments is not expected to be extensive. Therefore, it is highly unlikely that new or previously unidentified Tribal cultural resources will be recovered during the Project.

However, there is always the possibility that subsurface Tribal cultural resources may exist within the Project area, as Tribal cultural resources may be buried with no surface manifestation. Therefore, Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources (described below), shall be implemented by the City for the proposed Project to reduce the potential for impacts to inadvertent Tribal cultural resource discoveries to a less than significant level.

f) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, 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 a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in



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subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency

Finding: Less than significant with Mitigation

No Tribes contacted the City of Woodlake requesting AB 52 consultations on City Projects. Therefore, on November 1, 2017, the NAHC was asked to review the Sacred Lands File for Tribal cultural resources that might be affected by the proposed Project. The NAHC responded on November 13, 2017, stating that a search of the Sacred Lands File was completed for the Project area referenced above with negative results.

The records search and pedestrian survey did not identify any Tribal cultural resources within the Project area. Additionally, the Project as described will be conducted in areas with substantial past impacts during the construction of the Woodlake sewer system and associated repairs and maintenance to the system. The Project proposes trenching in locations of existing pipeline to remove and replace the pipelines. Generally, replacement of pipe involves some overcutting (i.e., excavation beyond the area previously excavated); however, excavation of undisturbed sediments is not expected to be extensive. Therefore, it is highly unlikely that new or previously unidentified Tribal cultural resources will be recovered during the Project.

However, there is always the possibility that subsurface Tribal cultural resources may exist within the Project area, as Tribal cultural resources may be buried with no surface manifestation. Therefore, Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources (described below), shall be implemented by the City for the proposed Project to reduce the potential for impacts to inadvertent Tribal cultural resource discoveries to a less than significant level.

# 3.5.4 Mitigation

# Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural, Tribal Cultural, and Paleontological Resources

If a cultural or Tribal cultural resource is encountered during Project construction, construction shall be halted immediately within 100 feet of the resource and the City shall be immediately notified. A qualified professional archaeologist and local Tribes (if a Tribal cultural resource is encountered) shall be consulted. The qualified archaeologist and local Tribes (if a Tribal cultural resource is encountered) shall evaluate the find and recommend appropriate treatment of the resource. The appropriate treatment of an inadvertently discovered cultural or Tribal cultural resource shall be implemented to ensure that impacts to a resource is avoided. Prehistoric resources may include chert or obsidian flakes, projectile points, mortars and pestles, dark friable soil containing shell and bone dietary debris, and heat-affected rock. Historic resources may include stone or wood foundations or walls, structures or remains with square nails, and refuse deposits.

If a paleontological resource (i.e., a fossil) is found during Project construction, construction shall be halted immediately within 100 feet if the resource and the City shall be immediately notified.



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A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resource. The appropriate treatment of an inadvertently discovered paleontological resource shall be implemented to ensure that impacts to a resource is avoided.

## Mitigation Measure CULTURAL-1 Implementation

**Responsible Party:** The City would ensure the appropriate treatment for any discovery of cultural, Tribal cultural, or paleontological resources during construction.

Timing: During all ground disturbing activities.

**Monitoring and Reporting Program:** If any find is determined to be significant, representatives of the City and a qualified archaeologist, Tribe, or paleontologist would meet to determine the appropriate avoidance measures or other appropriate mitigation and a report shall be kept on file at the City.

**Standards of Success:** The proper recording, evaluation, and treatment of any newly identified cultural, Tribal cultural, or paleontological resources.

## Mitigation Measure CULTURAL-2: Proper Handling of Inadvertent Discovery of Human Remains

If human remains are encountered, work shall halt within 100 feet and the County Coroner shall be notified immediately pursuant to PRC Section 7050.5. At the same time, an archaeologist shall be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the NAHC within 24 hours of this identification. The NAHC shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD shall have an opportunity to make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

## Mitigation Measure CULTURAL-2 Implementation

**Responsible Party:** The City and County Coroner would ensure the appropriate treatment for any discovery of any human remains during construction.

**Timing:** During all ground disturbing activities.

**Monitoring and Reporting Program:** The recording and evaluation of any newly identified human remains shall be conducted by the County Coroner and/or a qualified professional archaeologist and a report shall be kept on file at the City.

**Standards of Success:** The proper recording, evaluation, and treatment of any newly identified human remains.



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## 3.6 GEOLOGY AND SOILS

This section addresses the geology and soils present with the proposed Project area and the potential for impacts. In the subsections below, the regulatory setting discusses applicable rules and policies set forth in federal, state, and local rules and regulations and their relevance to soil and geologic hazards. The environmental setting describes the general character of geology and soils in the proposed Project area. The final subsection includes the impact analysis, which discusses the potential impacts to geology and soils from proposed Project activities and the potential for local geology and soils to impact the proposed Project infrastructure.

# 3.6.1 Regulatory Setting

# 3.6.1.1 Federal Regulations

## 3.6.1.1.1.1 International Building Code

The design and construction of engineered facilities in the state of California must comply with the requirements of the International Building Code (IBC) (ICC 2007); requirements to the IBC have been adopted by the State of California, California Building Standards Commission (BSC), in the California Building Standards Code (CBSC).

## 3.6.1.2 State Regulations

## 3.6.1.2.1 Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Act (PRC 2621 et seq.), originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (Earthquake Fault Zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active" and establishes a process for reviewing building proposals in and adjacent to Earthquake Fault Zones.

Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during the Holocene. A fault is considered well-defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (Bryant and Hart 2007).

## 3.6.1.2.2 Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC 2690–2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses



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surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act: the State is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones.

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites in Seismic Hazard Zones until appropriate site-specific geologic or geotechnical investigations have been carried out, and measures to reduce potential damage have been incorporated into the development plans. Geotechnical investigations conducted within Seismic Hazard Zones must incorporate standards specified by California Geological Survey Special Publication 117a, Guidelines for Evaluating and Mitigating Seismic Hazards (CGS 2008).

Mapping is prioritized so that the State's urban areas are mapped first. As a result, no Seismic Hazard maps have been prepared for the proposed Project site or surrounding area (CGS 2015).

## 3.6.1.2.3 2010 California Building Standards Code

The State's minimum standards for structural design and construction are given in the California Building Standards Code (CCR 24). The CBSC is based on the IBC, which is used widely throughout United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for California conditions with numerous, more detailed or more stringent regulations. The CBSC requires that "classification of the soil at each building site will be determined when required by the building official" and that "the classification will be based on observation and any necessary test of the materials disclosed by borings or excavations." In addition, the CBSC states that "the soil classification and design-bearing capacity will be shown on the (building) plans, unless the foundation conforms to specified requirements." The CBSC provides standards for various aspects of construction, including (i.e., not limited to) excavation, grading, and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soil strength loss. In accordance with California law, certain aspects of the project would be required to comply with all provisions of the CBSC.

The California Building Code (CBC) requires extensive geotechnical analysis and engineering for grading, foundations, retaining walls, and other structures, including criteria for seismic design.

## 3.6.1.3 Local Regulations

#### 3.6.1.3.1 Woodlake General Plan 2008 to 2028

There are no goals or policies related to geology and soils in the Woodlake General Plan that are relevant to the proposed Project.



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## 3.6.2 Environmental Setting

The proposed Project site is located in the north western portion of Tulare County, which is within the San Joaquin Valley and is generally considered to be relatively flat. The proposed Project site ranges in elevation from 440 to 450 feet amsl. The San Joaquin Valley is drained by the San Joaquin River and lies in the southern portion of the Great Valley geomorphic province, which is a trough in which sediments have been deposited almost continuously since the Jurassic. These non-marine sediments are generally at least a few thousand feet thick (California Geological Survey 2002).

Soils within the City of Woodlake are generally considered to consist of sandy loams with small amounts of clay. These soils have extremely variable infiltration rates and permabilities (from very low to very high), depending on the location (USDA NRCS 2014).

Liquefaction, a process in which the soil behaves like a liquid, can damage buildings, roads, and pipelines through uneven settlement of the soil and the soils loss of structural support capabilities (USGS 2006). In order for liquefaction to occur, there must be loose granular sediment that is saturated and there must be strong ground shaking (USGS 2006). According to the City of Woodlake general Plan EIR, the water table depth is about 20 feet along the St. Johns River, although the depth ranges throughout the year. Although the groundwater table in the City of Woodlake is considered to be relatively high, the soil types in the City are too coarse in texture to be conducive to liquefaction.

There are no active or potentially active faults of major historic significance mapped within the City of Woodlake; however, there are a number of faults in the Sierra Nevada Mountains including the Mount Williamson Fault which lies approximately 48 miles east of the City boundaries and the Kern Canyon Fault which lies approximately 28 miles east of the City boundaries. There are no other fault zones within the proximity to the City of Woodlake.

# 3.6.3 Impact Analysis

The section below discusses the potential impacts for the proposed Project relative to geology and soil-related issues based in the proposed Project's design, the existing understanding of soil and geologic conditions in the area, and regulatory guidance and oversight.

VI.	GEOLOGY AND SOILS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				



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VI.	GEOLOGY AND SOILS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
	i) 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? Refer to Division of Mines and Geology Special Publication 42.			$\boxtimes$	
	ii) Strong seismic ground shaking?			$\boxtimes$	
	iii) Seismic-related ground failure, including liquefaction?				
	iv) Landslides?			$\boxtimes$	
b)	Result in substantial soil erosion or the loss of topsoil?		$\boxtimes$		
c)	Be located on strata 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)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?			$\boxtimes$	
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?				

- a) Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i) 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? Refer to Division of Mines and Geology Special Publication 42.

Finding: Less than significant

The proposed Project site is not identified as being located in an Alquist-Priolo Fault Zone (CGS 2015). The Kern Valley Fault (approximately 28 miles east of the proposed Project site) is classified as a Holocene fault (displacement within the past 11,700 years). The proposed Project does not include construction of structures for human occupancy and would not subject people or



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structures to adverse effects due to rupture of a known fault because there are no known active faults in the proposed Project area.

In addition to the low hazard of surface fault rupture, this impact is considered less than significant because the project applicant is required to implement IBC and CBSC standards into the project design for applicable features to minimize the potential fault rupture hazards on associated project features. Structures must and would be designed to meet the regulations and standards associated with the IBC and CBSC. The proposed Project would not be subject to significant risk of loss, injury, or death from an earthquake fault since there are no major fault zones in the proposed Project area, therefore, the potential fault-related impacts are considered to be less than significant.

## ii) Strong seismic ground shaking?

Finding: Less than significant

The ground shaking hazard in the proposed Project area is generally low compared to most of California; however, a large earthquake on a nearby fault could cause substantial ground shaking at the proposed Project site, potentially resulting in an increased risk of structural loss, injury, or death. However, as part of the design process described above, the project applicant is required to implement IBC and CBSC standards into the project design for applicable features to minimize the potential ground shaking hazards on associated project features. Additionally, only maintenance activities would occur along the proposed Project pipelines and no full-time employees would be located along the pipelines, thereby minimizing exposure. These factors would ensure that impacts would be less than significant.

## iii) Seismic related ground failure, including liquefaction?

Finding: Less than significant

Liquefaction and related hazards such as lateral spreading and differential settlement have the potential to compromise the structural integrity of proposed new facilities and cause injury to construction workers and adjacent residents. However, based on the soil types at the proposed Project site, the potential for liquefaction, dynamic compaction, or seismically induced settlement or bearing loss is considered low. Furthermore, as part of the design process, the Project applicant is required to implement IBC and CBSC standards into the Project design for applicable features to minimize the potential liquefaction hazards on associated project features. This would ensure that impacts would be less than significant.

## iv) Landslides?

Finding: Less than significant

The proposed Project area is located in an area of low topographical relief and competent rocks with bedding and composition that do not have an elevated landslide potential. Due to the absence of permanently elevated groundwater table and the relatively low seismicity, the



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potential for seismically induced slope instability is considered negligible. Potential for landslides is also low, and thus associated impacts would be considered less than significant.

## b) Would the Project result in substantial soil erosion or the loss of topsoil?

## Finding: Less than significant with mitigation incorporated

Grading, excavation, removal of vegetation cover, and loading activities associated with construction could temporarily increase erosion, runoff, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at the construction sites and staging areas. Although most of the proposed Project area is flat and has very little topographic relief, sections of the proposed Project may exist in areas with sloping topography which create the potential for erosion to occur.

The Project design would incorporate Mitigation Measure GEO-1: Implement Sedimentation and Erosion Control Measures, which includes drainage control and the installation and implementation of Best Management Practices (BMPs), including straw bales, coir rolls, hydro seeding, etc., in areas of bare soil, and in drainages near all areas of disturbance during construction of the proposed Project and would therefore reduce potential impacts to less than significant. The requirements of the State General Construction Stormwater Permit will require a Stormwater Pollution Prevention Program (SWPPP) because area of impact would be greater than one acre. With the incorporation of Mitigation Measure GEO-1, which includes the above requirements, potential erosion and sedimentation impacts would be considered less than significant.

c) Would the Project be located on strata 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?

# Finding: Less than significant

The proposed Project is located in a flat area with little to no topographic relief. The soils in the proposed Project area are mostly composed of sandy loam and loamy sand, and are generally stable and not susceptible to landslide or lateral spreading, and are not likely susceptible to subsidence or liquefaction. Furthermore, the project design would incorporate IBC and CBSC standards into the proposed Project design for applicable features to maximize the stability of project features. This would ensure that potential soil instability impacts would be less than significant.



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d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (UBC), creating substantial risks to life or property?

Finding: Less than significant

The proposed Project involves the construction of approximately 28,207 feet of upsized and replaced pipeline. Soil types in the proposed Project area are mainly moderately well drained. Soils tend to be sandy loams, most of the soils in the proposed Project area characterized by San Joaquin loam, 2 to 9 percent slopes (USDA NRCS 2014). Due to the minimal amount of clay soils in the area, the potential for shrink-swell characteristics is considered to be low and would be addressed through standardized foundation engineering practices. The upsized and replaced pipelines would be constructed in compliance with applicable UBC regulations and other City and State requirements. Therefore, this impact would be considered less than significant.

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?

Finding: Less than significant

The proposed Project involves the construction of approximately 28,207 feet of upsized and replaced pipeline. No septic tanks are proposed for the proposed Project. The residents of the city of Woodlake are currently on the City's wastewater treatment system and the soils are adequate to support the existing system. Thus, the soils would also be adequate to support the upsizing and replacement of these pipes. Therefore, impacts from poor soils inadequately support wastewater disposal systems would be considered less than significant.

## 3.6.4 Mitigation

## Mitigation Measure GEO-1: Implement Sedimentation and Erosion Control Measures

In compliance with the requirements of the State General Construction Activity Stormwater Permit, the City of Woodlake shall obtain coverage under the current Construction General Permit (2009-0009-DWQ) and prepare a Stormwater Pollution Prevention Plan (SWPPP) that incorporates measures or comparable Best Management Practices (BMPs) which describes the site, erosion and sediment controls, means of waste disposal, implementation of approved local plans, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. The erosion control plan shall provide, at a minimum, measures to trap sediment, stabilize excavated soil, and stabilize and revegetate disturbed areas. Straw bales, coir rolls, hydro seeding and other BMPs shall be used in areas of bare soil, and in drainages near all areas of disturbance to reduce surface runoff velocities and to prevent sediment from entering drainages. Additionally, the SWPPP shall ensure that all stormwater discharges are in compliance with all current requirements of the Construction General Permit (2009-009-DWQ).

# Mitigation Measure GEO-1 Implementation



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**Responsible Party:** The City shall obtain coverage under the current Construction General Permit (2009-0009-DWQ) and prepare a SWPPP. This mitigation measure will be referenced in the plans and specifications bid for the proposed Project.

**Timing:** During construction activities and until the site is stabilized.

**Monitoring and Reporting Program:** The recording and evaluation of the SWPPP and erosion control practices shall be conducted by the City of Woodlake and the contractor and kept on file at the City office and at the proposed Project site.

**Standards of Success:** Minimize on- and off-site erosion and prevent introduction of significant amounts of sediment into any stream or drainage. Ensure that all stormwater discharges are in compliance with all current requirements of the Construction General Permit.



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## 3.7 GREENHOUSE GAS EMISSIONS

This section identifies and evaluates issues related to greenhouse gas emissions in the proposed Project area. The Regulatory Setting discloses all relevant regulations, policies, and laws relative to greenhouse gas emissions; the Environmental Setting discussion describes the current setting of the proposed Project area to establish the existing environmental context against which the reader can then understand the environmental changes caused by proposed Project. The environmental changes and potential impacts associated with the proposed Project are identified and discussed in the Impact Analysis section as well as prescribed mitigation measures to reduce significant impacts, if and when necessary.

# 3.7.1 Regulatory Setting

Greenhouse gases (GHGs) and climate changes are a cumulative global issue. The California Air Resources Board (CARB) and US Environmental Protection Agency (EPA) regulate GHG emissions within the State of California and the United States, respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

## 3.7.1.1 Federal Regulations

#### 3.7.1.1.1 Federal Clean Air Act

On April 2, 2007, in Massachusetts v. EPA, 549 US 497, the Supreme Court found that GHGs are air pollutants covered by the CAA. The Court held that the EPA must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA is required to follow the language of Section 202(a) of the CAA.

On April 17, 2009, the EPA Administrator signed proposed "endangerment" and "cause or contribute" findings for GHGs under Section 202(a) of the CAA. The EPA held a 60-day public comment period, considered public comments, and issued final findings. The EPA found that six GHGs taken in combination endanger both the public health and the public welfare of current and future generations. The EPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse effect as air pollution that endangers public health and welfare under CAA Section 202(a) (EPA 2013b).

In collaboration with the National Highway Traffic Safety Administration, the EPA adopted GHG emission standards for light-duty vehicles in May 2010 and for heavy-duty vehicles in August of 2011 (EPA, 2016a). In 2012, the agencies jointly adopted more stringent Phase 2 standards for light duty cars and trucks, which would cover model years 2017 through 2025 (EPA, 2016b). In August of 2016, the agencies adopted more stringent Phase 2 standards for medium- and heavy-duty vehicles, which would cover model years 2018 through 2027 for certain trailers and model years



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2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks (EPA, 2016c).

President Obama and the EPA announced the Clean Power Plan in August of 2015. In 2030, the Clean Power Plan would cut carbon pollution from power plants by 32 percent below 2005 levels and increase renewable energy generation percent to nearly 20 percent of all power supplied (EPA, 2015). By comparison, in 2015, renewable energy accounted for about 13% of electricity generation (USEIA, 2016). However, on February 9, 2016, the U.S. Supreme Court stayed implementation of the Clean Power Plan pending judicial review (EPA, 2016d).

## 3.7.1.2 State Regulations

There are currently no state regulations in California that establish ambient air quality standards for GHGs. However, California has passed laws directing the CARB to develop actions to reduce GHG emissions, and several state legislative actions related to climate change and GHG emissions have come into play in the past decade.

#### 3.7.1.2.1 Executive Order S-3-05

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2006 and establishes the following statewide emission reduction targets through the year 2050:

- by 2010, reduce GHG emissions to 2000 levels
- by 2020, reduce GHG emissions to 1990 levels
- by 2050, reduce GHG emissions to 80 percent below 1990 levels

This Executive Order does not include any specific requirements that would pertain directly to the proposed Project. However, actions taken by the State to implement these goals may affect the proposed Project, depending on the specific implementation measures that are developed.

#### 3.7.1.2.2 Assembly Bill 32

AB 32, also known as the California Global Warming Solutions Act of 2006, was established in 2006 to mandate the quantification and reduction of GHGs to 1990 levels by 2020. The law establishes periodic targets for reductions, and requires certain facilities to report emissions of GHGs annually. The bill also reserves the ability to reduce emissions targets lower than those proposed in certain sectors which contribute the most to emissions of GHGs, including transportation. Additionally, the bill requires:

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every five years.
- Maintain and continue reductions in emissions of GHG beyond 2020.



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- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020.
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010.
- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions.
- Convene an Environmental Justice Advisory Committee to advise the Board in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32.
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research and GHG emission reduction measures.

The Assembly Bill 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The scoping plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 cost of implementation fee regulation to fund the program.

## 3.7.1.2.3 Senate Bill 97

SB 97 requires the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines for addressing GHG emissions. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions, as required by Senate Bill 97. These proposed CEQA Guideline amendments would provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in draft CEQA documents. A key aspect of the proposed OPR guidance is that a lead agency shall have the discretion to determine, in the context of a particular project, whether to:

- Use a model of methodology to quantify GHG emissions, or
- Rely on a qualitative analysis or performance based standards

Furthermore, when assessing the significance of impacts from GHG emissions the lead agency may consider the following:

- The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
- Whether project emissions exceeds a threshold of significance;



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> The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for reduction or mitigation of GHG emissions.

## 3.7.1.3 Local Regulations

## 3.7.1.3.1 San Joaquin Valley Air Pollution Control District

In August 2008, the SJVAPCD's Governing Board adopted the Climate Change Action Plan (CCAP). The CCAP directed the SJVAPCD Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change.

On December 17, 2009, the SJVAPCD adopted the guidance: Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, and the policy: District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA (SJVAPCD, 2009a; 2009b).

Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less than cumulatively significant impact. Otherwise, demonstration of a 29 percent reduction in GHG emissions, from business-as-usual, is required to determine that a project would have a less than cumulatively significant impact. The guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project-related impacts on global climate change (SJVAPCD 2014b).

## 3.7.2 Environmental Setting

Many chemical compounds in the Earth's atmosphere act as GHGs that absorb and emit radiation within the thermal infrared range. When radiation from the sun reaches the Earth's surface, some of it is reflected back into the atmosphere as infrared radiation (heat). GHGs absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy from the sun to the Earth's surface should be approximately equal to the amount of energy radiated back into space, leaving the temperature of the Earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some of them occur in nature (e.g., water vapor, carbon dioxide, methane, and nitrous oxide), while others are exclusively human-made (e.g., gases used for aerosols).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below:



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- Carbon Dioxide (CO<sub>2</sub>): CO<sub>2</sub> enters the atmosphere through the burning of fossil fuels (i.e., oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO<sub>2</sub> is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH4):** CH4 is emitted during the production and transport of coal, natural gas, and oil. CH4 emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.
- **Nitrous Oxide (N2O)**: N2O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated Gases:** Hydrofluorocarbons (HFCs), Perfluorinated Chemicals (PFCs), and SF<sub>6</sub> are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochloro fluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high Global Warming Potential (GWP) gases.

# 3.7.3 Impact Analysis

As mentioned above, the SJVAPCD has not established quantitative significance thresholds for greenhouse gases. SJVAPCD staff conclude that it is not feasible to scientifically establish a numerical threshold that supports a determination that GHG emissions from a specific project, of any size, would or would not have a significant impact on global climate change. In other words, the SJVAPCD t was not able to determine a specific quantitative level of GHG emissions increase, above which the project would have a significant impact on the environment, and below which would have an insignificant impact. SJVAPCD staff further conclude that impacts of project specific emissions on global climatic change are cumulative in nature, and the significance thereof should be examined in that context. This is readily understood when one considers that global climatic change is the result of the sum total of GHG emissions, both anthropogenic and natural that occurred in the past; that is occurring now; and will occur in the future.

The methodology being proposed by the SJVAPCD relies on the use of performance based standards that would be applicable to stationary and development projects that result in increased GHG emissions. Use of performance based standards is not a method of mitigating emissions. Rather it is a method of determining significance of project specific GHG emission impacts using established specifications or project design elements. The efficiency of GHG emission reduction measures would be quantified at the time BPS are established for a specific project type or source category. The SJVAPCD has determined that implementing BPS for stationary sources is expected to achieve an overall 34.0% reduction in GHG emissions, exceeding the overall 29% GHG emission reduction targeted by ARB in their AB32 scoping plan.



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Because the proposed Project is not a stationary source or development project, only construction-related greenhouse gas emissions were estimated and BPS were not integrated. Greenhouse gas emissions associated with the proposed Project construction were estimated using  $CO_{2e}$  (Carbon Dioxide Equivalent) emissions as a proxy for all greenhouse gas emissions. In order to obtain the  $CO_{2e}$ , an individual GHG is multiplied by its global warming potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to  $CO_{2e}$ .

The primary sources of proposed Project-related GHG emissions are anticipated to be combustion of fossil fuels from the operation of internal combustion engines used during Project construction (e.g., portable equipment, off road equipment, and vehicles). For this analysis, predicted GHG emissions were compared to AB 32 scoping plan action measures. Based on CalEEMod modeling results, predicted Project emissions from construction are estimated to be 338 metric tons of CO<sub>2e</sub> per year.

VII.	GREENHOUSE GAS EMISSIONS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\boxtimes$	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Finding: Less than significant

The proposed Project would not generate GHG emissions levels that either directly or indirectly have significant impacts on the environment because of low Project  $CO_{2e}$  emission estimates from construction (338 metric tons of  $CO_{2e}$  per year). As mentioned above, the SJVAPCD has not established quantitative greenhouse gas emissions thresholds; however, the Sacramento Metropolitan Air Quality Management District (SMAQMD), also located in the central valley, has established quantitative significance thresholds of 1,100 metric tons of  $CO_{2e}$  per year for the construction phase of projects. Emission estimates of 338 metric tons of  $CO_{2e}$  per year, for the proposed Project construction activities, are relatively low. Operational emissions would be similar to existing conditions and are not anticipated to significantly increase energy usage or employee vehicle trips. Therefore, potential greenhouse gas emissions impacts are considered less than significant.

b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?



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Finding: Less than significant

The SJVAPCD has developed a Climate Change Action Plan (CCAP) through which a guidance document, "Addressing Greenhouse Gas Emissions Impact under the California Environmental Quality Act". The SJVAPCD recommends BPS be implemented for stationary source and development projects. The proposed Project would not be considered a stationary source or development project because once constructed, operational impacts would be similar to existing conditions. Therefore, the analysis of greenhouse gases for the proposed Project looks to AB 32 to determine potential significance. The Scoping Plan states, "The 2020 goal was established to be an aggressive, but achievable, midterm target, and the 2050 GHG emissions reduction goal represents the level scientists believe is necessary to reach levels that would stabilize climate" (CARB 2008). The year 2020 GHG emission reduction goal of AB 32 corresponds with the mid-term target established by Executive Order S-3-05, which aims to reduce California's fair-share contribution of GHGs in 2050 to levels that would stabilize the climate.

Construction of the proposed Project is estimated to generate greenhouse gases. However, AB 32 requires that greenhouse gas emissions generated in California in year 2020 be equal to or less than California's statewide inventory from 1990.

The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high
  global warming potential gases, and a fee to fund the administrative costs of the State's
  long-term commitment to AB 32 implementation.



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There isn't a specific goal for wastewater collection systems; however, regionalizing wastewater treatment reduces the need for redundancy and capitalizes on energy efficiencies that come with scale. Therefore, the proposed Project is in line with the AB 32 goal of reducing GHG emissions statewide and there would be a less than significant impact.

# 3.7.4 Mitigation

No mitigation required.



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# 3.8 HAZARDS AND HAZARDOUS MATERIALS

The hazards and hazardous materials section of this ISMND discusses the regulatory setting, environmental setting, potential impacts of the proposed Project to result in effects associated with hazardous materials and environmental hazards, and appropriate mitigation measures to reduce potential impacts to less than significant.

# 3.8.1 Regulatory Setting

A hazardous material is defined by the California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control (DTSC), as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 California Code of Regulations 25501). For the purposes of this analysis, hazardous materials include raw materials and material remaining onsite as a result of past activities. Applicable regulations and policies considered relevant to the proposed Project are summarized below.

## 3.8.1.1 Federal Regulations

The principal federal regulatory agency responsible for the safe use and handling of hazardous materials is the Environmental Protection Agency (EPA). Two key federal regulations pertaining to hazardous wastes are described below. Other applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations.

## 3.8.1.1.1 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) enables the EPA to administer a regulatory program that extends from the manufacture of hazardous materials to their disposal, thus regulating the generation, transport, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation (EPA 1976).

#### 3.8.1.1.2 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund, was passed to facilitate the cleanup of the nation's toxic waste sites. In 1986, CERCLA was amended through the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws). Title III states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the clean-up, even if the material was dumped illegally when the property was under different ownership (EPA 1986).



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## 3.8.1.2 State Regulations

California regulations are equal to or more stringent than federal regulations. The EPA has granted the State of California primary oversight responsibility to administer and enforce hazardous waste management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key laws pertaining to hazardous wastes are discussed below.

# 3.8.1.2.1 Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a report that describes their facilities, inventories, emergency response plans and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous materials; however, are similar to those relating to hazardous waste.

## 3.8.1.2.2 Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to, but more stringent than, the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the California Code of Regulations, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;
- Generation and transport;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of them. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location.



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## 3.8.1.2.3 Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including the EPA, the California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

#### 3.8.1.2.4 Fire Protection

California state fire safety regulations apply to State Responsibility Areas (SRAs), adopted by the Board of Forestry and Fire Protection during the time of year designated as having hazardous fire conditions. During the fire hazard season, these regulations: (a) restrict the use of equipment that may produce a spark, flame, or fire; (b) require the use of spark arrestors on equipment that has an internal combustion engine; (c) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (d) specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. The California Department of Forestry and Fire Protection (CAL FIRE) has primary financial responsibility for fire protection within SRAs.

## 3.8.1.2.5 Other Laws, Regulations, and Programs

Various other state regulations have been enacted that affect hazardous waste management, including:

- Safe Drinking Water and Toxic enforcement Act of 1986 (Proposition 65), which requires labeling of substance known or suspected by the state to cause cancer.
- California Government Code Section 65962.5, which requires the Office of Permit Assistance to compile a list of possible contaminate sites in the state.

State and federal regulations also require that hazardous materials sites be identified and listed in public records. These lists are:

- Comprehensive Environmental Response, Compensation, and Liability Information System;
- National Priorities List for Uncontrolled Hazardous Waste Sites;
- Resource Conservation and Recovery Act;
- California Superfund List of Active Annual Workplan Sites; and
- Lists of state-registered underground and leaking underground storage tanks.

## 3.8.1.3 Local Regulations

#### 3.8.1.3.1 Woodlake General Plan 2008 to 2028

## Public Safety



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Goal 1. A community that is free of crime and fire hazards

## 3.8.1.3.2 City of Woodlake Zoning Ordinance

Under Chapter 41 of the City of Woodlake Zoning Ordinance, The Airport District is defined as an area of Woodlake that is reserved for Woodlake Municipal Airport and the associated land uses. Wastewater facilities are defined under this ordinance as a conditional use that is allowed within the vicinity of the Woodlake Municipal Airport (City of Woodlake 2014).

# 3.8.2 Environmental Setting

#### 3.8.2.1 Hazardous Sites

A review of the SWRCB GeoTracker Database and the DTSC EnviroStor Database was performed to identify existing leaking underground storage tank (LUST) sites and other contaminated sites on- or off-site of the Project site. As shown in Table 3.8-1 below, the SWRCB GeoTracker Database results included 14 registered sites within the Project area which are mostly concentrated around Valencia Boulevard and Naranjo Boulevard (SWRCB 2017). Eleven of the sites are considered to be case closed, while three are considered to have a cleanup status of open. There were no sites identified in the Project area within the Envirostor Database (DTSC 2017).

Table 3.8-1 Hazardous Sites Within Project Area

Site	Type of Site	Status	Street Location
SWRCB GeoTracker Databas	e Results		
City of Woodlake Yard	LUST Cleanup Site	Completed – Case Closed	South Valencia Boulevard
Padilla Trucking	LUST Cleanup Site	Completed – Case Closed	South Valencia Boulevard
Quick Stop Food Market	LUST Cleanup Site	Completed – Case Closed	South Valencia Boulevard
Woodlake Forest Fire Station	LUST Cleanup Site	Completed – Case Closed	East Naranjo Boulevard
Felix's Cheveron LUST Cleanup Site		Completed – Case Closed Open -Site Assessment	East Naranjo Boulevard
		,	



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Valero Brothers Exxon	LUSt Cleanup Site	Open – Verification Monitoring	North Valencia Boulevard
Woodlake Drive-In	LUST Cleanup Site	Completed – Case Closed	North Valencia Boulevard
Villicana's Gasoline Alley	LUST Cleanup Site	Open – Remediation	West Naranjo Boulevard
Orange Belt Supply – Woodlake	Cleanup Program Site	Completed Case Closed	West Naranjo Boulevard
Orange Belt Supply Company	LUST Cleanup Site	Completed – Case Closed	West Naranjo Boulevard
Gas Ranch	LUST Cleanup Site	Completed – Case Closed	North Valencia Boulevard
Woodlake High School	LUST Cleanup Site	Completed – Case Closed	West Whitney Avenue
Calmat	LUST Cleanup Site	Completed – Case Closed	West Sequoia Avenue
Sun Pacific Shippers LUST Cleanup Site		Completed – Case Closed	West Naranjo Boulevard

# 3.8.2.2 Airports

The Woodlake Municipal Airport is located approximately two miles from the center of the City of Woodlake, within the City limits. A portion of the proposed Project would be located within two miles of this airport.

## 3.8.2.3 Schools

Schools within the proposed Project area are operated through the Woodlake Public School District. Schools within the Project area include: Woodlake Union High School, Bravo Lake High School, Saint Clements Day Care Center, Woodlake Valley Middle School, Castle Rock Elementary School, and Tulare County Child Care.

## 3.8.2.4 Wildland Fire Risk

The severity of wildland fires is influenced primarily by vegetation, topography, and weather (temperature, humidity, and wind). Cal Fire has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all State



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Responsibility Areas. A SRA is defined as the part of the state where CalFire is primarily responsible for providing basic wildland fire protection assistance. Areas under the jurisdiction of other fire protection services are considered to be Local Responsibility Areas (LRAs). The current Project area is designated as a LRA with an unzoned fire hazard severity ratings (CalFire 2007). Fire hazard zoning is used to indicate both the likelihood for a fire (e.g., prevalence of fuels) and the potential for damage (e.g., proximity to residences).

# 3.8.3 Impact Analysis

All hazardous materials are currently regulated and controlled by CalEPA in a manner that minimizes risks of spills or accidents. A small amount of potentially hazardous materials would be used for fuel and lubricants for machinery and would be utilized during construction of the proposed Project. Any hazardous materials used in the construction, start-up, or operations of the proposed Project, such as diesel for equipment, would be handled according to current practices. The potential for construction and operation related impacts from hazardous materials are discussed below.

VI.	HAZARDS AND HAZARDOUS MATERIALS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		$\boxtimes$		
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?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials 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?				
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 for people residing or working in the Project area?			$\boxtimes$	



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VI.	HAZARDS AND HAZARDOUS MATERIALS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
f)	For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Finding: Less than significant with mitigation incorporated

Temporary construction activities associated with the proposed Project would involve the transport and use of limited quantities of miscellaneous hazardous substances including gasoline, diesel fuel, hydraulic fluid, solvents, and oils. These chemicals would be brought to the Project area, as well as transported along the roadways. Federal and state laws regulate the handling, storage, and transport of these and other hazardous materials, as well as the mechanisms to respond and clean up any spills along local and regional roadways. Chemicals present onsite or used for the proposed Project would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances. As these materials are required for operation of construction vehicles and equipment, standard BMPs would be implemented under the SWPPP to reduce the exposure to or potential for accidental spills involving the use of these materials. Additionally, Mitigation Measure HAZ-1, Avoid/Minimize Potential Impacts from Construction Material Release, would be implemented which includes the development of a Spill Prevention and Contingency Plan that would further reduce potential impacts from the use of hazardous materials during Project construction.

Operation of the proposed Project would be similar as under current conditions and would not involve the use of hazardous materials. Therefore, with the implementation if Mitigation Measure HAZ-1, the proposed Project would have a less than significant impact to exposing the public or the environment to hazardous materials through the routine transport, use, or disposal of such materials.

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?



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Finding: Less than significant with mitigation incorporated

California is known to have areas containing Naturally Occurring Asbestos (NOA) which occur in (ultramafic rocks) particularly rich in serpentine. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. Disturbing these materials can release NOA which could create a significant hazard to the public. According to the California Department of Conservation and through reviewing the "General Location Guide for Ultramafic Rocks in California – Areas likely to Contain Naturally Occurring Asbestos" indicated that NOA was not mapped on or in the near vicinity of the Project area (CDC 2011). In addition, NOAs are not typically encountered in valley floor regions and thus the likelihood of inadvertent exposure is considered minimal.

Site workers, the public, and the environment could be inadvertently exposed to other preexisting contaminants onsite during proposed Project construction. Small quantities of potentially toxic substances (such as petroleum and other chemicals used to operate and maintain construction equipment) would be used at the proposed Project site and transported to and from the area during construction. Release of these hazardous materials into the environment would be a significant impact.

However, the handling and disposal of these materials would be governed according to regulations enforced by California Unified Program Agencies (CUPAs), California Division of Occupational Safety and Health (Cal-OSHA), and the DTSC, as previously discussed. With the implementation of Mitigation Measure HAZ-1, chemicals present on site or used for the proposed Project would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances, and any spills would be immediately cleaned up and disposed of in the appropriate manner.

Regulations under the Clean Water Act (CWA) require contractors to avoid allowing the release of materials into surface waters as part of their SWPPP and NPDES permit requirements (see Geology and Soils Section 3.6 and Mitigation Measure GEO-1, Section 3.6, for a discussion of the CWA and SWPPPs). This regulatory structure would ensure that safety measures and precautions are taken, thereby reducing any potential impacts associated with the accidental upset or release of hazardous materials. Accordingly, given the unlikely potential for NOA, the application of state and federal materials handling regulations, and the implementation of Mitigation Measure HAZ-1, Avoid/Minimize Potential Impacts from Construction Material Release, the impact due to potential construction or operation hazards to the public or environment from upset or accident conditions involving hazardous materials would be less than significant.

c) Would the Project Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Finding: Less than significant with mitigation incorporated

As discussed in the environmental setting of this section, there are a number of schools within the Project area. Project construction would occur within most of the southern portions of the City of



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Woodlake and would likely occur within one-quarter mile of the schools located within the City limits.

Temporary construction activities associated with the proposed Project would involve the transport and use of limited quantities of miscellaneous hazardous substances including gasoline, diesel fuel, hydraulic fluid, solvents, and oils. These chemicals would be brought to the proposed Project site, as well as transported along the roadways. Federal and state laws regulate the handling, storage, and transport of these and other hazardous materials, as well as the mechanisms to respond and clean up any spills along local and regional roadways. With the implementation of Mitigation Measure HAZ-1, Avoid/Minimize Potential Impacts from Construction Material Release, the impact due to potential hazards to an existing or proposed school from upset or accident conditions involving hazardous materials would be less than significant.

d) Would the Project be located on a site which is included on a list of hazardous materials 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?

Finding: Less than significant impact

A review of the SWRCB and DTSC hazardous materials sites database identified 14 hazardous materials sites within the Project area. As discussed in the environmental setting of this section, 11 of these sites have a cleanup status of case close and three of these sites have a cleanup status of open. The proposed Project would not create a significant hazard to the public or the environment in combination with the three open status hazardous sites in the area because the pipelines would be constructed within the existing roadways and would be constructed in accordance with state and federal standards for safety. Therefore, there would be a 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 for people residing or working in the Project area?

Finding: Less than significant

As discussed in the environmental setting of this section, a portion of the proposed Project would be located within two miles of the Woodlake Municipal Airport. Under the City of Woodlake Zoning Ordinance, the airport zoning district outlines conditional uses that are allowed within the vicinity of the Woodlake Municipal Airport. Under these conditional uses, wastewater facilities are included as an acceptable use. Pipeline construction would be temporary in nature and would not result in a safety hazard for the people residing or working in the Project area. Additionally, once constructed, the pipeline would be underground and would not interfere with the Woodlake Municipal Airport operations. Therefore, the proposed Project would have a less than significant impact to safety for people working or residing within the Woodlake Municipal Airport.



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f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

Finding: No impact

The proposed Project is not located within the vicinity of a private airstrip. The closest private airstrip, the Harris River Ranch Airport, is located approximately 30 miles north of the City of Woodlake. Therefore, no impacts would occur.

g) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: Less than significant

The proposed Project may include one-lane traffic control to maintain access along Naranjo Boulevard, Valencia Boulevard, and associated connectors during construction. However, access for all fire and police emergency response vehicles would be maintained along the entire proposed Project alignment throughout the construction period, therefore, potential impacts to emergency, fire, and police response is less than significant.

h) Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Finding: Less than significant

The current Project area is designated as a LRA with an unzoned fire hazard severity rating (CalFire 2007). Fire hazard zoning is used to indicate both the likelihood for a fire (e.g., prevalence of fuels) and the potential for damage (e.g., proximity to residences).

Equipment used during trenching, grading, and other construction activities may generate sparks that could ignite dry vegetation on or adjacent to the construction area and cause wildland fires in the area. The City of Woodlake is in the jurisdiction of the Woodlake Fire Department which operates out the main office located at 216 East Naranjo Boulevard, Woodlake, California 93286. Because the CalFire designated fire risk in this area is unzoned and the construction activities would occur within the previously developed areas such as roadways in the City of Woodlake, the potential risk involving wildland fires is considered less than significant.

## 3.8.4 Mitigation

Mitigation Measure GEO-1: Implement Sedimentation and Erosion Control Measures

See Mitigation Measure GEO-1, Section 3.6.

Mitigation Measure HAZ-1: Avoid/Minimize Potential Impacts from Construction Material Release.



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Prior to construction, the contractor shall develop a Spill Prevention and Contingency Plan for the Project. The plan shall include, but would not be limited to, the following:

- Containment and cleanup equipment (e.g. absorbent pads, mats, socks, granules, drip
  pans, shovels, and lined clean drums) shall be at the staging areas and construction site
  for use as needed;
- Construction equipment shall be maintained and kept in good operating condition to reduce the likelihood of line breaks or leakage;
- No refueling service shall be done without absorbed material (e.g. absorbent pads, mats, socks, pillows, and granules) or drip pans underneath to contain spilled material. If these activities result in an accumulation of materials on the soil, the soil shall be removed and properly disposed of as hazardous waste;
- If a spill is detected, construction activity shall cease immediately and the procedures described in the Spill Prevention and Contingency Plan shall be immediately enacted to safely contain and remove spilled materials;
- Spill areas shall be restored to pre-spill conditions, as practicable; and
- Spills shall be documented and reported to the City and appropriate resource agency personnel.

## Mitigation Measure HAZ-1 Implementation

**Responsible Party**: The City shall require the construction contractor develop the Spill Prevention and Contingency Plan for all activities in the vicinity of drainages. This mitigation measure shall be referenced in the plans and specifications bid for the proposed Project.

**Timing:** The SPCCP shall be implemented prior to and during all phases of construction.

**Monitoring and Reporting**: Evaluation of the Spill Prevention and Contingency Plan shall be conducted by the City. Reports of spills shall be documented and kept on file at the project site and the City office.

**Standard of Success:** Minimize the potential for, and effects from spills, hazardous, toxic, or petroleum substances during construction activities in accordance with the requirements of this measure as well as State and Federal laws.



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# 3.9 HYDROLOGY AND WATER QUALITY

Section 3.9 addresses the hydrology, drainage, and water quality present within the proposed Project site and the potential for the proposed Project to impact hydrology and water quality. The Regulatory Framework section discusses the applicable rules and policies set forth in federal, state, and local rules and regulations. The Environmental Setting introduces the general character of hydrology, drainage, and water quality in the proposed Project site. The methods for assessing project specific impacts to hydrology and drainage along with an evaluation of the impacts are discussed in the Impacts section.

# 3.9.1 Regulatory Setting

Numerous federal, state, and local laws and policies regulate water quality in relation to the proposed Project. The federal CWA, managed by the EPA, regulates water quality in California. Implementation of CWA regulations is the responsibility of the State Water Board and the nine Regional Water Boards. Water quality at the project site is regulated by the Central Valley Regional Water Board and the Tulare County Environmental Health Division. The Federal Emergency Management Agency (FEMA) is responsible for flood protection guidance and information, which is implemented at the state and local level through state legislation and local flood protection ordinances. The following laws and regulations provide the water quality requirements applicable to the proposed Project.

## 3.9.1.1 Federal Regulations

#### 3.9.1.1.1 Clean Water Act

The Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Section 401 of the CWA regulates surface water quality and a Water Quality Certification is required for federal actions (including construction activities) that may entail impacts to surface water. In California, NPDES permitting authority is delegated to, and administered by, the nine Regional Water Quality Control Boards (RWQCB).

## 3.9.1.1.2 Federal Anti-Degradation Policy

The Federal Anti-degradation Policy is part of the CWA (Section 303(d)) and is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing in-stream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary



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for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

# 3.9.1.1.3 National Flood Insurance Policy Act

The Federal Emergency Management Agency (FEMA) is responsible for managing the National Flood Insurance Program (NFIP), which makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage.

The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level known as base flood elevation. To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRMs) that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

# 3.9.1.2 State Regulations

# 3.9.1.2.1 Porter Cologne Water Quality Control Act

The State of California established the SWRCB, which oversees the nine Regional Water Quality Control Boards (RWQCBs), through the Porter-Cologne Water Quality Control Act (Porter-Cologne). Through the enforcement of the Porter Cologne Act, the SWRCB determines the beneficial uses of the waters (surface and groundwater) of the State, establishes narrative and/or numerical water quality standards, and initiates policies relating to water quality. The SWRCB and, more specifically, the RWQCB, is authorized to prescribe Waste Discharge Requirements (WDRs) for the discharge of waste, which may impact the waters of the State. Furthermore, the development of water quality control plans, or Basin Plans, are required by Porter-Cologne to protect water quality.

# 3.9.1.2.2 National Pollutant Discharge Elimination System Permits (NPDES) and Waste Discharge Requirements (WDR)

## 3.9.1.2.2.1 Wastewater Treatment Plant Discharge Permits

Wastewater Treatment Facilities (WWTFs) that discharge to surface waters are regulated through the NPDES permitting process, which is mandated under the Federal CWA (CFR Title 40). The NPDES permit system is divided into separate programs and regulations for point-source discharges (such as industrial facilities and WWTFs) and nonpoint sources (such as urban stormwater runoff from larger municipalities and stormwater runoff from general construction



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and industrial activities). The NPDES permit process for WWTFs typically involves the imposition of standards on the effluent and receiving water body for various chemical, physical, and biological parameters (e.g., flow, temperature, pH, BOD, DO, total coliform bacteria, TSS, total settleable matter, turbidity, residual chlorine, ammonia, and other compounds of specific concern for a given receiving water).

#### 3.9.1.2.2.2 NPDES General Construction Permit

The 1987 amendments to the CWA, created a new section of the Act devoted to stormwater permitting (Section 402[p]), with individual States designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The SWRCB issues both General Construction Permits and individual permits under this program.

Projects disturbing more than one acre of land during construction, including linear projects, are required to file a Notice of Intent (NOI) with the SWRCB to be covered under the State NPDES General Construction Permit for discharges of stormwater associated with construction activity. The project proponent must implement control measures that are consistent with the State NPDES General Construction Permit.

A Stormwater Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the General Permit. A SWPPP describes BMPs the discharger will use to protect stormwater runoff and reduce potential impacts to surface water quality through the construction period. The SWPPP must contain the following: a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment (SWRCB 2006).

## 3.9.1.2.3 California State Nondegradation Policy

In 1968, as required under the federal antidegradation policy, the State Water Board adopted a nondegradation policy aimed at maintaining high quality for waters in California. The nondegradation policy states that the disposal of wastes into State waters shall be regulated to achieve the highest water quality consistent with the maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of California. The policy can be summarized as follows.

- Where the existing water quality of water is better than required under existing water quality control plans (basin plans), such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the state and would not unreasonably affect present and anticipated beneficial uses of such water.
- 2. Any activity that produces waste or increases the volume or concentrations of waste and which discharges to existing high-quality waters would be required to meet WDRs which would ensure (1) pollution or nuisance would not occur and (2) the highest water



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quality consistent with the maximum benefit to the people of the State would be maintained.

3.9.1.2.4 California Department of Fish and Wildlife Section 1600 et. seq.

California Fish and Game Code Section 1600 et. seq. is intended to protect fish and wildlife resources. The CDFW must be notified prior to any activity that will substantially modify a river, stream, or lake. Sponsors of projects that are deemed to substantially adversely affect existing fish and wildlife resource are required to enter into a Streambed Alteration Agreement with the CDFW. These agreements included a project desertion, a list of allowed routine maintenance activities and as well as activities not authorized by the agreement, and measures to protect fish and wildlife resources,

## 3.9.1.3 Local Regulations

### 3.9.1.3.1 Woodlake General Plan 2008 to 2028

**Goal 1.** Promote a community awareness program that will educate the community in watersaving methodologies at the home and the work place.

**Goal 2.** Allow for adequate groundwater recharge by developing storm ponding and retention basins where feasible. In some areas these ponds or basins can be incorporated into a recreational area or used in wildlife habitat areas.

# 3.9.2 Environmental Setting

Tulare County is located within the Tulare Lake Hydrologic Region. This region is bounded by the San Joaquin River basin to the north, the South Lahontan basin to the east, the South Coast basin to the south, and the Central Coast basin to the west (Department of Conservation 2007). The proposed project is located within the Upper Kaweah watershed (Hydrologic Unit Code: 18030007) (EPA 2017). The Upper Kaweah watershed covers approximately 1,523 square miles and consists of drainage from the Kaweah River.

Antelope Creek, St. Johns River, and the Bravo Lake/Wutchumna Ditch make up the three surface water systems within the City. Stormwater runoff generated by urban development is primarily diverted to retention or detention ponds instead of directly into surface waters. After being released, stormwater primarily drains into Bravo Lake and Little Bravo Lake, which is the City's Waste Water Treatment Plant (WWTP) disposal area (Woodlake 2008b).

The City's water supply relies on domestic wells to pump groundwater. The City provides water service to residents throughout the city limits and the unincorporated community of Wells Tract. Currently, the City is seeking to expand its number of functioning wells because the City's low water table has reduced the efficiency of the existing wells (Woodlake 2016).



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The proposed project would reduce the potential for future water contamination by reducing the potential for future sewer overflows.

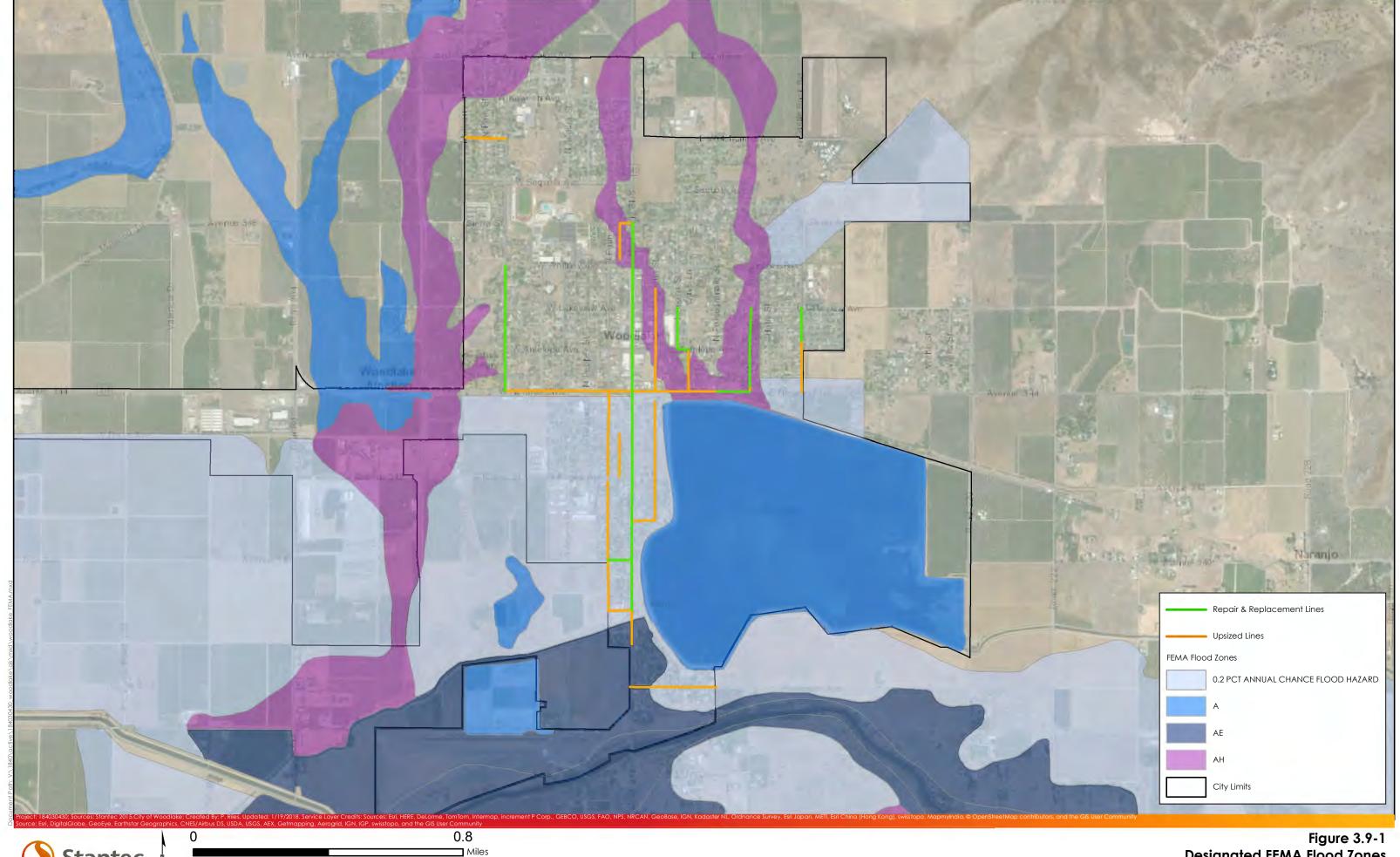
## 3.9.2.1 Regional Groundwater

According to the California Department of Water Resources, the proposed Project is located in the Kaweah Subbasin of the San Joaquin Valley Groundwater Basin. The San Joaquin Valley comprises the southernmost portion of the Great Valley Geomorphic Province of California. The Great Valley is a broad structural trough bounded by the tilted block of the Sierra Nevada on the east and the complexly folded and faulted Coast Ranges on the west. The Kaweah Subbasin primarily consists of land in the Kaweah Delta Water Conservation District. The subbasin is bounded by the Kings Groundwater Subbasin to the north, the Tule Groundwater Subbasin to the south, bedrock of the Sierra Nevada foothills to the east, and the Kings River Conservation District to the west. Older alluvium consisting of arkosic material in the east side of the subbasin is the major aquifer source in the region (CDWR 2004).

## 3.9.2.2 Floodplains and Flooding

As shown in Figure 3.9-1 on the Designated FEMA Flood Zones Map, large portions of the project area are within flood hazard zones. The areas south of SR-216, as well as the eastern edge of the project site, are within the 500-year flood hazard area. Additionally, the southernmost portion of the project area along SR-245 and areas north of SR-216 and east of SR-245 are considered within 100-year flood hazard areas. The remaining sections of the project area do not lie within a flood hazard area.





# 3.9.3 Impact Analysis

The potential for construction and operation related impacts to hydrology and water quality are discussed in detail below.

IX.	HYDROLOGY AND WATER QUALITY: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there should be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?		$\boxtimes$		
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			$\boxtimes$	
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				



IX	. HYDROLOGY AND WATER QUALITY: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
j)	Inundation of seiche, tsunami, or mudflow?				

# a, f) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality?

# Finding: Less than significant with mitigation incorporated

There is a potential for pollutants to enter the Upper Kaweah Watershed during project construction. Activities related to the construction of the proposed Project would create the potential for soil erosion and possibly increase sedimentation, both onsite and downstream of the proposed Project site. Construction activities also increase the potential for accidental release of pollutants that could affect not only surface waters, but the beneficial uses associated with them. Such pollutants include oil and gas from machinery, chemicals associated with construction, and waste material. Many construction-related pollutants have the potential to degrade water quality by increasing constituent levels in surface waters and could lead to an exceedance of water quality standards. Proposed construction activities could violate these standards if mitigation measures are not implemented and could cause harm to surrounding habitats and their associated plant and animal life. Construction would require special consideration, including the implemented of HAZ-1: Avoid/Minimize Potential Impacts from Construction Material Release, to prevent significant impacts to the surface waters, especially in the vicinity of Bravo Lake and the section of Wutchumna Ditch that the proposed Project crosses under.

Grading and the removal of vegetation during proposed Project construction could expose site soils to rain and potential erosion prior to successful revegetation or completion of improvements. The potential for erosion hazards within the proposed Project site is low, as most of the Project area is relatively level; however, sections of the proposed Project may exist in areas with higher sloping topography (i.e. near Bravo Lake and Wutchumna Ditch) which create the potential for erosion to occur. Rainfall and associated stormwater runoff could result in periods of sheet erosion within areas of exposed or stockpiled soils. If uncontrolled, these soil materials could cause sedimentation and blockage of drainage channels or excess sediment deposition within surface water bodies. Further, the compaction of unpaved soils by heavy equipment may reduce the infiltration capacity of soils and increase the potential for runoff and erosion. Stormwater runoff could also wash construction materials into receiving water bodies that discharge outside of the proposed Project site and negatively affect water quality. Non-stormwater discharges could result from discharge or accidental spills of hazardous substances such as fuels, oils, concrete, paints, solvents, cleaners, or other construction materials.



Because implementation of the proposed Project could result in the introduction of sediment and other nonpoint source pollutants into onsite drainage channels and ultimately offsite drainage channels as a result of temporary construction activities, short-term, construction-related water quality degradation would be considered a significant impact. The General Permit for Stormwater Discharges Associated with Construction Activity (General Permit) adopted by the State Water Resources Control Board will be obtained prior to construction as detailed in Mitigation Measure GEO-1. The General Permit requires the City and/or contractor to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). This plan must specify BMPs that would prevent all construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off site into receiving waters. The permit also requires elimination or reduction of non-stormwater runoff. The Project will adhere to the conditions of the General Permit, SWPPP, BMPs, and Mitigation Measure GEO-1, Prepare an Erosion Control and SWPPP, therefore, there would be a less than significant impact to water quality standards or waste discharge requirements.

Long-term operation of the site would not adversely affect water quality or lead to violation of water quality standards. The proposed Project would replace existing pipelines and would not generate new sources of pollutants or risk of spillage. Additionally, the proposed Project would actually reduce the risk of unintended sewage spillage that could impair water quality. Thus, the potential for operational activities to violate any water quality standards or waste discharge requirements or otherwise degrade water quality is considered less than significant.

b) Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there should be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

## Finding: Less than significant

It is not expected that the proposed Project construction would deplete groundwater supplies. As the purveyor of water to local residents, the City would not deplete groundwater resources and would limit excessive water withdrawal. Additionally, increased pumping of groundwater to support urban development and associated mitigation measures were previously considered in the City's General Plan EIR. Therefore, the proposed Project would not result in unplanned depletion of local groundwater. Thus, construction related impacts to groundwater resources would be considered less than significant.

No new wells that could place additional water supply demands on the local aquifer are proposed as part of the Project. It is expected that water usage would be similar to existing conditions and would not place additional stress on the local groundwater table.

The proposed Project is not expected to result in an increase of impervious surface because the new pipes and manhole covers would replace already existing pipes and manhole covers.

Additionally, the areas impacted by construction activity would be restored to pre-project



conditions. Consequently, the proposed Project is not expected to substantially interfere with local groundwater recharge. In light of these Project characteristics, impacts to groundwater resources are considered less than significant.

c) 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, in a manner which would result in substantial erosion or siltation on- or off-site?

Finding: Less than significant with mitigation incorporated

Construction of the proposed Project would involve grading, trenching, and other earth movement that would result in soil disturbance that could temporarily alter drainage patterns and increase hazard of erosion and sedimentation. In particular, the proposed Project would require construction adjacent to the Wutchumna Ditch, using HDD, or similar methods, to cross below the ditch. This segment of the project area represents the greatest risk of material release into surface water.

The proposed Project would not significantly increase impervious areas or generate increased stormwater flows. Implementation of Mitigation Measure GEO-1: Prepare an Erosion Control and SWPPP would minimize the potential for the proposed Project to substantially alter the existing drainage pattern of the site or area, reducing impacts to a less than significant with mitigation incorporated. Therefore, impacts from the proposed Project would be less than significant with mitigation incorporated.

d) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Finding: Less than significant with mitigation incorporated

Project construction could temporarily alter drainage patterns during trenching activities; however, all disturbed areas will be restored to pre-existing conditions to the extent feasible. Mitigation Measure GEO-1 would minimize the potential to alter the existing drainage pattern while soils are exposed during trenching and grading. Therefore, construction related Project impacts would be considered less than significant with mitigation incorporated.

e) Would the Project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Finding: Less than significant with mitigation incorporated

The proposed Project could provide substantial additional sources of polluted runoff during construction in the event of an unexpected spill. Implementation of best management practices and Mitigation Measure HAZ-1 for spill prevention and containment will be implemented to



minimize the potential for polluted runoff due to the Project, reducing impacts to less than significant with mitigation incorporated.

g) Would the Project Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Finding: No impact

The proposed Project does not include the construction of housing, nor would it place housing in a 100-year flood hazard area as defined by the FEMA FIRMs. No impact would occur.

h) Would the Project Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Finding: Less than significant

According to the FEMA FIRM Map Panels #06107C0686E, #06107C687E, and #06107C088E, portions of the Project area are located within a 100-year floodplain. However, the planned construction in this area consists of underground sewer pipelines and would not have any effect of flood flows. Therefore, potential Project impacts from flooding are considered less than significant.

i) Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Finding: Less than significant

The proposed Project does not include any activities within the vicinity of a levee or dam. Additionally, as discussed in (h) above, although portions of the Project lie within a 100-year floodplain, planned construction in this area consists of underground sewer pipelines. Thus, the Project would not expose people or structures to a significant risk involving flooding and impacts are considered less than significant.

j) Would the Project expose people or structures to a significant risk of loss, injury or death as a result of inundation of seiche, tsunami, or mudflow?

Finding: Less than significant

The proposed Project's inland location makes the risk of tsunami highly unlikely. The probability of a seiche occurring in Tulare County is considered negligible. Furthermore, given the geologic context at the proposed Project site, if such an event were to occur, the likelihood of it exposing Project structures or people to a significant risk of injury or death is considered low. Finally, the project is located on relatively flat slopes; therefore, there is little or no risk of mudflow. The risk of tsunami, seiche, or mudflow is considered less than significant.

# 3.9.4 Mitigation



Mitigation Measure GEO-1: Implement Sedimentation and Erosion Control Measures

See Mitigation Measure GEO-1, Section 3.6.

Mitigation Measure HAZ-1: Avoid/Minimize Potential Impacts from Construction Material Release

See Mitigation Measure HAZ-1, Section 3.8.



## 3.10 LAND USE PLANNING

The following land use section evaluates the proposed Project's consistency with and impacts to land use plans and policies. The section begins with the regulatory setting discussing the applicable land use plans and policies within the proposed Project area followed by the environmental setting including the specific land use and zoning designations of the proposed Project area. The last section evaluates the potential impacts of the proposed Project looking to both the regulatory and environmental setting to assess the potential for the proposed Project causing a significant impact to land use planning.

# 3.10.1 Regulatory Settings

There are no federal or state requirements regarding land use that are applicable to the proposed Project.

## 3.10.1.1 Local Regulations

3.10.1.1.1 Woodlake General Plan 2008 to 2028

## Growth Management

**Goal 1.** Maintain Woodlake as a small, agriculturally-oriented city surrounded by farmland and open space features.

#### Infrastructure

Goal 2. Insure infrastructure master plans and the general plan are in concert with each other.

Goal 3. Maintain, rebuild and upgrade infrastructure systems.

#### Community Image

Goal 2. A community that is free of land use conflicts.

## 3.10.2 Environmental Setting

The proposed Project has taken the Woodlake General Plan goals, objectives, and policies into consideration during the planning stages. The proposed wastewater system and repair and upgrades would be located within the City of Woodlake boundaries. The pipelines would run through much of the south portion of the City limits and through the center of the City. SR 216 and SR 245 are the two main roadways that flow through the City. The proposed Project construction activities would occur along these roadways along with other local roads in the City limits.

The Woodlake General Plan land use designations for the proposed Project area include the following:



- Residential
- Public
- Industrial
- Commercial

- Churches
- Agriculture
- Right-of-way

The City of Woodlake zoning designations for the proposed Project area include the following:

- Neighborhood Commercial (CN)
- Central Commercial (CC)
- Service Commercial (CS)
- Light Manufacturing (ML)
- Heavy Manufacturing (MH)
- Rural residential (RA)

- Very Low- High Density Residential (R10, R, R2, R3)
- Planned Development (PRD)
- Resource Conservation (RSC)
- Urban Reserve (UR)

Due to the nature of the proposed Project encompassing most of the City, the zoning and land use designations are mixed and include a variety of the land use and zoning designations listed above. The center of the city consists mostly of areas zoned commercial and residential while the outer edges of the City consist mostly of low density residential and resource conservation areas (City of Woodlake 2008; Woodlake General Plan 2008).

# 3.10.3 Impact Analysis

The potential land use and planning related impacts for the proposed Project are discussed below.

X.	LAND USE AND PLANNING Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Physically divide an established community?				
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural communities' conservation plan?				



## a) Would the Project physically divide an established community?

Finding: No impact

The wastewater system repair and replacement would be constructed within existing roads, disturbed areas, and other rights-of-way. Surrounding lands include residential, community commercial, residential, light industrial, and resource conservation areas. The construction of the wastewater system repair and replacement would improve conditions within the community by reducing the risk of aging septic systems failing and would allow for additional development and growth to the area.

The piping associated with the proposed project would be constructed underground and would not be visible above ground except for the associate appurtenances upon completion of the construction activities. The proposed Project would not physically divide an established community and thus, there would be no impact.

b) Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Finding: Less than significant

As an infrastructure improvement project the proposed Project would be consistent with the Goals and Policies of the Woodlake General Plan and would not conflict with any land use plans, policies, or regulations that are applicable to the proposed Project. No change in land use is proposed or required and none would result from the implementation of the proposed Project. The proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project. Therefore, there would be a less than significant impact.

c) Would the Project conflict with any applicable habitat conservation plan or natural communities' conservation plan?

Finding: No impact

There are no approved habitat conservation plans or natural communities' conservation plans that apply to the proposed Project site. Therefore, it would not conflict with any such plan and there would be no impact.

## 3.10.4 Mitigation

No mitigation required.



# 3.11 MINERAL RESOURCES

The Mineral Resources section addresses the potential of the proposed Project to impact the mineral resources that could be potentially present in the Project area. The regulatory framework discusses the applicable policies set forth by the federal, state, and local rules and regulations. The environmental setting presents the general character and mineral resources of Tulare County and the proposed Project area. Finally, the impact analysis evaluates the potential impacts from the proposed Project regarding mineral resources.

# 3.11.1 Regulatory Setting

## 3.11.1.1 Federal Regulations

3.11.1.1.1 The Mining and Minerals Policy Act of 1970 (30 U.S.C 21(a))

The Mining and Minerals Policy Act of 1970 declared that it is in the national interest to foster and encourage private enterprise in the following ways:

- Development of economically sound and stable domestic mining and mineral related industries.
- Orderly and economic development of mineral resources to satisfy industrial, security, and environmental needs.
- Research to promote wise and efficient use of resources.
- Research and development of mining and reclamation methods to lessen the impact of mining on the environment.

This act codified the importance of mining and mineral resources and recognized that public policy should evaluate these resources.

## 3.11.1.2 State Regulations

## 3.11.1.2.1 California Surface Mining and Reclamation Act of 1975

The State of California regulates surface mining and reclamation of surface mines through the Surface Mining and Reclamation Act (SMARA) (Public Resources Code, Sections 2710-2796). SMARA was enacted in part to identify the location of and preserve access to significant mineral deposits, and is primarily regulated by the local government who has jurisdiction over the land use of the mining project. The California Mineral Land Classification System was developed and includes four categories, or Mineral Resource Zone designations: MRZ-1, MRZ-2, MRZ-3, and MRZ-4. MRZ-1 are areas where geologic information indicates no significant mineral deposits present, MRZ-2 classified areas contain identified mineral resources, MRZ-3 are areas of undetermined mineral resource significance, and lands classified MRZ-4 are areas of unknown mineral resource potential. Additionally, SMARA requires local governments to evaluate the presence of mineral resources in their General Plans and when making land use decisions (CDC 2017).



## 3.11.1.3 Local Regulations

There are no applicable local regulations regarding mineral resources related to the proposed Project.

# 3.11.2 Environmental Setting

Mineral resources are generally finite and occur in sporadic deposits, which often create a relative scarcity and a need to protect access to supplies. Many mineral resources are important to global, national, state, and local economies. In 2015, California had approximately 717 active mines responsible for approximately 4.2 percent of the U.S. non-fuel mineral production (California Geological Survey, 2015). The largest component of this production was derived from sand and gravel mining.

According to the City of Woodlake General Plan, there are no known mineral resources within the City limits. The nearest mineral resources are near the Sierra Nevada foothills along Saint Johns River (Woodlake General Plan 2008).

# 3.11.3 Impact Analysis

The potential impacts to mineral resources are analyzed below.

XI.	MINERAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?				$\boxtimes$
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?				

a) Would the Project result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?

Finding: No impact

There are no mineral sources classified as MRZ-2 located within the vicinity of the Project area. As such, the Project would not cause the loss of availability of known mineral resources. According to the most recently published AB 3098 list, as of July 21, 2017, there are currently 25 active mines within Tulare County. However, there are no active mines in the vicinity of the Project area nor



are there any historic mines in the vicinity of the Project area (OMR 2017). Therefore, there would be no impact to mineral resources.

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?

Finding: No impact

There are no locally important minerals resources identified in the Woodlake General Plan General Plan. Therefore, there would be no impact.

# 3.11.4 Mitigation

No mitigation required.



# **3.12 NOISE**

The purpose of this section is to analyze the potential noise impacts associated with construction and operation of the proposed Project. It describes the regulatory setting, existing noise conditions in the proposed Project area (environmental setting), and discusses the potential impacts of the proposed Project related to noise.

Noise is generally defined as unwanted sound. The definition of sound is: any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough, at least 20 times per second, they can be heard and hence are called sound. The frequency of sound is the number of pressure variations per second, and is expressed as cycles per second, called Hertz (Hz).

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans 1998): It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA.

- A change in level of 5 dBA is a readily perceptible increase in noise level.
- A 10 dBA change is recognized as twice as loud as the original source.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. Noise levels are measured on a logarithmic scale, instead of a linear scale. On a Logarithmic scale, the sum of two noise sources of equal loudness is 3 dBA greater than the noise generated by just one of the noise sources (e.g., a noise source of 60 dBA plus another noise source of 60 dBA generate a composite noise level of 63 dBA). To apply this formula to a specific noise source, in areas where existing levels are dominated by traffic, a doubling in the volume of the traffic will increase ambient noise levels by 3 dBA. Similarly, a doubling in the use of heavy



equipment, such as use of two landfill dozer/compactors where formerly one was used, would also increase ambient noise levels by 3 dBA. A 3 dBA increase is the smallest change in noise level detectable to the average person. A change in ambient sound of 5 dBA can start to create concern among neighbors.

In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Table 3.12-1 Definition of Sound Measurement

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Maximum Sound Level (Lmax)	The maximum sound level measured during the measurement period.
Minimum Sound Level (Lmin)	The minimum sound level measured during the measurement period.
Equivalent Sound Level (Leq)	The equivalent steady state sound level that in a stated period of time would contain the same acoustical energy.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/second.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.



As described above, noise is defined as unwanted sound and that becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Sound pressure levels are used to measure the intensity of sound and expressed in terms of decibels.

A second consideration under this section is ground vibration. Typically, developed areas are continuously affected by vibrations but these are not normally noticeable to humans. Offsite sources that may produce perceptible vibrations are usually caused by construction equipment, traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. While traffic noise and vibration impacts related to the proposed Project in the long term are minimal, there are impacts to be addressed during the construction due to excavation, trenching, and other construction activities along roads that are adjacent to residential neighborhoods.

# 3.12.1 Regulatory Setting

## 3.12.1.1 Federal and State Regulations

Federal, state, and local agencies regulate different aspects of environmental noise. Generally, the federal government sets noise standards for transportation-related noise sources closely linked to interstate commerce. These include aircraft, locomotives, and trucks. No federal noise standards are directly applicable to the proposed Project. The state government sets noise standards for transportation noise sources such as automobiles, light trucks, and motorcycles. Noise sources associated with industrial, commercial, and construction activities are generally subject to local control through noise ordinances and general plan policies. Local general plans identify general principles intended to guide and influence development plans.

#### 3.12.1.1.1 General Plan Noise Element Guidelines

The State of California General Plan Guidelines (OPR 2003) establishes guidelines for the preparation of local general plan noise elements, including a sound level/land use compatibility chart that categorizes, by land use, outdoor Ldn ranges in up to four categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable). For many land uses, the chart shows overlapping Ldn ranges for two or more compatibility categories.

The noise element guideline chart identifies the normally acceptable range of Ldn values for low-density residential uses as less than 60 dB and the conditionally acceptable range as 55–70 dB. The normally acceptable range for high-density residential uses is identified as Ldn values of less than 65 dB, and the conditionally acceptable range is identified as 60–70 dB. For educational and medical facilities, Ldn values of less than 70 dB are considered normally acceptable, and Ldn values of 60–70 dB are considered conditionally acceptable. For office and commercial land uses, Ldn values of less than 70 dB are considered normally acceptable, and Ldn values of 67.5–77.5 are categorized as conditionally acceptable. When noise levels are



in the conditionally acceptable range new construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation requirements are included in the design.

These overlapping Ldn ranges are intended to indicate that local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations.

## 3.12.1.2 Local Regulations

## 3.12.1.2.1 Tulare County Noise Element 2012-2030

- 4.A.1. Areas within Tulare County shall be designated as noise-impacted if exposed to existing or projected future noise levels at the exterior of buildings which exceed 60 dB Ldn (or CNEL).
- 4.Al.1 Tulare County shall review all relevant development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance with the policy framework outlined in this Noise Element.
- 4.B.1. New development of industrial, commercial or other noise-generating land uses will not be permitted if resulting noise levels will exceed 60 dB Ldn (or CNEL) at the boundary of areas planned and zoned for residential or other noise-sensitive land uses, unless determined to be necessary to promote the public health, safety and welfare of the County.

## 3.12.1.2.2 Woodlake City Ordinance

8.24.020 - Special restrictions—Residential areas.

Between the hours of ten p.m. of one day and seven a.m. of the following day, it is unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom, to create, cause to be created or maintain sources of noise which shall cause annoyance or discomfort to a reasonable person of normal sensitiveness in the neighborhood. Such sources shall include but not be limited to the following:

- B. Operation of equipment or performance of any outside construction or repair work on buildings, structures or projects or operation of construction type device;
- D. Excessively loud noise caused by the operation of any machinery, equipment, device, pump, fan compressor, air conditioning apparatus, or similar mechanical device;

#### 3.12.2 Environmental Setting

The City adopted the Tulare County Noise Element as its own in 1989 (Woodlake 2008a). The primary goal of the noise element is to protect noise sensitive uses and residential areas from potential conflicts with transportation and stationary noise sources. The County, and the City by extension, have implemented noise standards for outside areas surrounding noise sensitive uses



such as residential and commercial areas. Noise impacts from a proposed project can be categorized as those resulting from construction and those from operational activities.

Construction would have a short-term effect, while operational noise would continue throughout the lifetime of the proposed Project.

Table 3.12-1 describes the current noise conditions along the major roadways in the City. Traffic, particularly truck traffic, is the primary source of ambient noise levels within the City (Woodlake 2008b).

Table 3.12-1 Traffic and Noise Level Data

Roadway	Average Daily Vehicles	Ldn (100 feet from centerline) (dB)
SR-216 (Road 196- Castlerock)	5400	63.1
SR-245 (Cajon- Woodlake S. Limits)	7700	64.7
Source: Tulare 2010		

The proposed Project involves the replacement and improvement of approximately 5.3 miles of pipeline and associated manhole covers. Construction would occur along large sections of these roads, though other areas of the City will also have construction activity. Construction activities may have a short-term increase in noise impacts; however, operational noise after the completion of the proposed Project would return to normal levels.

# 3.12.3 Impact Analysis

Potential noise impacts from construction activities are discussed below.

XII.	NOISE: Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		$\boxtimes$		
b)	Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				
c)	A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?		$\boxtimes$		



XII	. NOISE: Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No 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 of public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?			$\boxtimes$	
f)	For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?				

a) Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Finding: Less than significant with mitigation incorporated

The construction of the proposed Project would entail the use of construction-related equipment (i.e., backhoe, dump truck, pavement saw, etc.). Construction noise would result from operation of machinery and equipment used in the construction process. Construction is projected to extend across a duration of six to nine months, during which noise impacts would result in temporary or periodic increases in ambient noise levels, especially during trenching activities. Sensitive noise receptors in the vicinity of the proposed Project may be affected by the temporary construction noise.

With the implementation of the Mitigation Measure NOISE-1, construction activities would occur during the daytime hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, and 9:00 a.m. and 5:00 p.m. on Saturdays in accordance with the City's municipal code, unless neighbors are otherwise properly notified and construction equipment uses a muffled exhaust). Additionally, construction related noise generation would be temporary and would not permanently increase the City's ambient noise levels. As such, the potential noise impacts from construction are expected to be less than significant with mitigation incorporated.

Noise levels would be similar to existing conditions because pipe replacement or improvements would follow the existing paths and have similar distances to surrounding residences. The proposed project would not modify existing wastewater facilities including the WWTP and lift stations. Maintenance activity would be similar to existing conditions, so there would not be a significant increase maintenance frequency or noise levels associated with maintenance activity. Additionally, the pipes would be buried and would not generate noise. Therefore, noise impacts during operation would be less than significant.



# b) Would the Project result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

Finding: Less than significant

Construction equipment used during the proposed Project such as backhoes, mechanical compactors, and other equipment may generate localized ground borne vibration or noise levels. Table 3.12-2 lists example ground borne vibration intensities at various distances. The distance from the centerline of roadways where construction would occur to the front of adjacent residential buildings is approximately 50 feet. Potential vibrations at this distance would be below the threshold of human annoyance. Additionally, vibrations would be temporary and would occur during normal work hours. Therefore, construction related ground borne vibration impacts would be less than significant.

Table 3.12-2 Construction Equipment Related to Ground Borne Vibration

Type of Equipment	Peak Particle Velocity at 25 feet	Peak Particle Velocity at 50 feet	Peak Particle Velocity at 100 feet	Threshold at Which Human Annoyance Could Occur	Potential for Proposed Project to Exceed Threshold
Large Bulldozer	0.089	0.042	0.019	0.1	None
Loaded Trucks	0.076	0.035	0.017	0.1	None
Small Bulldozer	0.003	0.001	0.001	0.1	None
Jackhammer	0.035	0.016	0.008	0.1	None
Vibratory Hammer	0.070	0.033	0.015	0.1	None
Vibratory Compactor/roller	0.210	0.098	0.046	0.1	None

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines 2004.

The operation of the collection system would not be significantly different than the current operational practices relative to ground vibrations. Therefore, the proposed Project operation would not result in excessive ground born vibration or ground borne noise levels. This impact is less than significant.

c) Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Finding: Less than significant



Noise associated with the construction activities of the proposed Project are not considered permanent and therefore would not result in a sustained increase in ambient noise levels.

The operation of the proposed Project would not result in an increase in permanent ambient noise levels. The proposed Project would replace existing pipelines, and operation and maintenance activity frequency would be similar to existing conditions. Therefore, it would be a less than significant impact on noise levels associated with operation of the proposed Project.

d) Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Finding: Less than significant with mitigation incorporated

The construction of the proposed Project would entail the use of construction-related equipment (i.e., backhoe, dump truck, pavement saw, etc.). Construction noise would result from operation of machinery and equipment used in the construction process. Construction is projected to extend across a duration of six to nine months, during which noise impacts would result in temporary or periodic increases in ambient noise levels, especially during trenching activities.

Increases in noise from construction activities would be temporary and would only occur between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and 9:00 a.m. and 5 p.m. on weekends. Any noise created by activities of the proposed Project is not considered permanent and would not result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the proposed Project. With Mitigation Measure NOISE-1, this impact would be considered less than significant.

The operation of the proposed Project would not result in an increase in permanent ambient noise levels. The proposed Project would replace existing pipelines, and operation and maintenance frequency would be similar to existing conditions. Therefore, it would be a less than significant impact on noise levels associated with operation of the proposed Project.

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 of public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Finding: Less than significant

The proposed Project would involve construction activity within the Woodlake Airport area of influence (Tulare County Airport Land Use Commission 2012). Do to the temporary nature of the project, it is not anticipated that the construction worker would be subject to excessive noise levels. Impacts would be considered less than significant.



# f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

Finding: No impact

The proposed Project is not located within the vicinity of a private airstrip. Gilbert Aviation Heliport in Visalia is the closest private airstrip, but is located over 10 miles away (Tulare County Airport Land Use Commission 2012). Therefore, the proposed project would have no impact.

# 3.12.4 Mitigation

## Mitigation Measure NOISE-1: Noise Reduction Measures

The City of Woodlake shall incorporate the following BMPs to minimize noise impacts during construction activities:

- Construction shall be limited to daytime hours between 7:00 a.m. and 7:00 p.m Monday through Friday and 9:00 a.m. and 5:00 p.m. on Saturdays.
- All construction equipment shall be equipped with sound-control devices no less
  effective than those provided on the original equipment. Equipment shall have a muffled
  exhaust.
- Appropriate additional noise-reducing measures will be implemented, including but not limited to:
  - Changing the location of stationary construction equipment when practical; and
  - Shutting off idling equipment.

If construction activities are required outside of the daytime working hours described above, the City of Woodlake shall notify residents 48 hours in advance. If after-hour construction is required due to an emergency, the City of Woodlake will notify nearby residents immediately.

## Mitigation Measure NOISE-1 Implementation

**Responsible Party**: The City of Woodlake's contractor shall adhere to the construction schedule and noise mitigation measures.

**Timing**: During all phases of construction.

**Monitoring and Reporting**: The City of Woodlake shall document all after hour work that generates noise louder than background.

**Standard of Success**: Minimize noise complaints.



# 3.13 POPULATION AND HOUSING

The Population and Housing section begins with the regulatory setting discussing the applicable plans and policies within the proposed Project area followed by the environmental setting of proposed Project area. The Impact Analysis evaluates the potential impacts of the proposed Project looking to both the regulatory and environmental setting to assess the potential to cause a significant impact to population and housing in the area.

# 3.13.1 Regulatory Setting

There are no applicable state or federal regulations or policies regarding population and housing that are applicable to the proposed Project.

## 3.13.1.1 Local Regulations

3.13.1.1.1 Woodlake General Plan 2008 to 2028

## **Growth Management**

**Goal 1.** Maintain Woodlake as a small, agriculturally-oriented city surrounded by farmland and open pace features.

**Goal 2.** Use natural barriers as a means of delineating the urbanized portion of Woodlake, including the St. Johns River, Antelope Creek, Bravo Lake and foothill lands.

**Goal 3.** Promote Smart Growth planning principals in order to discourage urban sprawl and the premature urbanization of agricultural land.

## Community Image

Goal 1. An attractive, clean and well-maintained community.

Goal 2. A community that is free of land use conflicts

## 3.13.2 Environmental Setting

The City of Woodlake is a relatively small, rural community located along State Routes 216 and 245 with a population of 7,623 people (US Census Bureau 2016). The City of Woodlake is located approximately 11 miles to the north-east of the larger city of Visalia. The City of Woodlake includes a concentrated population of people around the center of the City, along State Route 245 (North Valencia Blvd. through the City) and State Route 216 (West Naranjo Blvd. through the City). The surrounding residential homes are scattered with some agricultural lands and public park spaces included intermittently.



The City of Woodlake Public Works is responsible for the distribution system and the WWTP within the City limits and the unincorporated community east of the City known as Wells Tract.

# 3.13.2.1 Population Characteristics

The historic population growth for the City and Tulare County is presented in Table 3.13-1.

Table 3.13-1 Historical City/County Population Growth Comparison from 1990 to 2015

	City of Woodlake			Tulare County			
Year	Population	Change	Percent Change	Population	Change	Percent Change	
1980	4343	-	-	245738	-	-	
1990	5678	1335	30.1%	314062	68324	27.8%	
2000	6651	973	17.1%	368021	56121	17.9%	
2010	7279	628	9.4%	442179	74158	20.2%	
2015	7623	321	4.7%	455769	13590	3.1%	
Source: Woodlake General Plan 2008, U.S. Census Bureau 2016.							

According to the City's General Plan, from 1980 to 2000, the City had the second slowest growth rate in Tulare County. Over the last 27 years, the City has constructed an average 15 single family homes and 10 multi-family residential units per year (Woodlake 2008a).

## 3.13.2.2 Population Projections

The City's General Plan includes a 20 year population projection, starting at the baseline year of 2008. The low population growth estimate (1.59% yearly growth) for 2018 and 2028 was 8,809 and 10,315 respectively. The high population growth estimate (2.15% yearly growth) for that same time period was 9,307 and 11,514 respectively. Based on 2015 population levels, the City's yearly growth rate since the adoption of the General Plan has been below both estimates. A more recent estimate from the City's Municipal Service Review indicated that since 1990, the City's growth rate was approximately 1.25%, and would be expected to remain between 1.25% and 1.6% until 2036 (Tulare LAFCO 2016).

Based on the City's original estimates made in 2008, the City expected that new land would be required to meet urban development needs. By 2018, the City estimated that 15 acres would be needed to meet growth projections for 462 new residential units, and between 90 and 179 acres by 2028 for between 723 and 1,034 residential units (Woodlake 2008a). A possible impact from



this growth would be the conversion of agricultural land to meet future urban uses (Woodlake 2008b). Additionally, the Woodlake Housing Element stated that "zoning revisions to Woodlake's commercial districts are needed to facilitate the development of high density residential uses in these districts" because some potential housing sites needed to meet the regional housing needs allocation are on land that is currently non-residentially zoned (Woodlake 2016).

# 3.13.3 Impact Analysis

The potential impacts to population and housing are discussed below.

XIII	I. POPULATION AND HOUSING: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Induce substantial 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)?			$\boxtimes$	
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$
c)	Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?				$\boxtimes$

a) Would the Project induce substantial 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)?

Finding: Less than significant

The proposed Project would improve or replace existing pipes within the City's wastewater collection system to address aging pipes and increase system capacity. Implementation of the proposed Project would not result in the construction of new homes or businesses. Additionally, there would be no associated change in land use determinations that would facilitate new urban development. The proposed project would therefore not directly induce significant population growth.

However, the proposed Project does increase the capacity of the City to handle larger amounts of wastewater. The expected population growth and buildout of areas within the current sewer service area is projected to increase the City's WWTP flow from 0.9 Mgal/d to 1.44 Mgal/d. The proposed project would help accommodate this population growth and associated increased wastewater flow. While the proposed Project would indirectly support population growth within the City, this growth is already accounted for in the City's Housing



Element, General Plan, and other associated environmental documents. Therefore, the potential to induce substantial growth is considered less than significant.

b) Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Finding: No impact

Implementation of the proposed Project would not displace any existing housing and would therefore not result in the necessity for the construction of replacement housing at an alternate location(s). The proposed Project would be constructed in existing roads and rights-of-ways, disturbed areas, and/or vacant lands and would not displace any existing housing. Therefore, no impact would result from proposed Project development.

c) Would the Project displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

Finding: No impact

The project would not displace substantial numbers of existing housing. Implementation of the proposed Project would not result in the displacement of substantial numbers of people necessitating the construction of replacement housing in any other location(s). The proposed Project would be constructed in existing roads and rights-of-ways, disturbed areas, and/or vacant land, thus would not necessitate the construction of replacement housing elsewhere. Therefore, no impact would result from Project development.

## 3.13.4 Mitigation

No mitigation required.



# 3.14 PUBLIC SERVICES

Public services are typically provided by fire districts, park districts, public utility districts, school districts, sewer districts, water districts, and other single purpose districts in addition to those provided by Tulare County and any state and federal agencies.

# 3.14.1 Regulatory Setting

There are no specific federal or local regulations that govern the provision of local public services and utilities.

## 3.14.1.1 State Regulations

#### 3.14.1.1.1 Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

## 3.14.1.1.2 California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), and fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

## 3.14.1.1.3 California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, Cal-OSHA has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

# 3.14.2 Environmental Setting

## 3.14.2.1 Fire Protection

The City of Woodlake and the proposed Project are in the jurisdiction of the Woodlake Fire Department which is a part of the Woodlake Fire Protection District. The closest fire station is



located at 216 East Naranjo Boulevard within the City of Woodlake and is adjacent to the proposed Project site.

#### 3.14.2.2 Police Protection

The Woodlake Police Department currently consists of a Chief, one Lieutenant, two Sergeants, five officers, and one clerical personnel. The closest police station is located at 350 North Valencia Boulevard within the City of Woodlake and is also adjacent to the Project site.

#### 3.14.2.3 Schools

Schools within the proposed Project area are operated through the Woodlake Public School District. Schools within the Project area include: Woodlake Union High School, Bravo Lake High School, Saint Clements Day Care Center, Woodlake Valley Middle School, Castle Rock Elementary School, and Tulare County Child Care.

#### 3.14.2.4 Parks

Parks and recreational areas in the City of Woodlake consist of the Woodlake Botanical Garden, Bravo Lake, Woodlake City Park, Willow Court Park, and various walking and biking trails and roadways in and around the City limits.

## 3.14.2.5 Electricity, Natural Gas, and Telecommunications

Electricity within the City of Woodlake is provided primarily by the Southern California Edison Company and privately owned utility companies. Propane within the City of Woodlake is provided by a number of private companies. The main providers of telephone, internet, and cable service include AT&T, HughesNet, UnWired Broadband, OACYS Technology, and Exede Internet (City of Woodlake 2016).

# 3.14.3 Impact Analysis

The potential impacts to public services are discussed below.



XIV	. PUBLIC SERVICES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
	Fire protection?		$\boxtimes$		
	Police protection?		$\boxtimes$		
	Schools?		$\boxtimes$		
	Parks?		$\boxtimes$		
	Other public facilities?		$\boxtimes$		

a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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: Fire protection? Police protection? Schools? Parks?

Finding: Less than significant with mitigation incorporated

The proposed Project would not result in the need for additional government facilities. The city of Woodlake WWTP, which is a City building, would not require expansion. Therefore, the proposed Project activities would not impact service ratios for fire protection, police protection, schools, and parks.

There are no federal, state, or local regulatory measures for utility disruptions and relocations during the proposed Project construction period. It is assumed that all regulatory requirements that are being met by a particular utility (e.g., Southern California Edison Company) would be maintained during the construction process. Final design work would be conducted at a level of specificity to identify the precise locations of utilities to be relocated, the typical types of protection-in-place, and the requirements for maintaining operations during construction would be developed. Utility relocation or protection-in-place must include consultation with utility operators to avoid or minimize the potential for disruptions of service. However, the proposed Project has the potential to impact and disrupt service, mainly along roadways, during



construction. As such Mitigation Measure TRANS-1 would be implemented in order to allow adequate ingress and egress along roadways during construction. Through this mitigation measure, the public roadways would have adequate access for police and fire protection as well as for access to the local parks in the area. Therefore, with the implementation of Mitigation Measure TRANS-1 impacts would be reduced to a less than significant level.

# 3.14.4 Mitigation

Mitigation Measure TRANS-1: Traffic Control Plan

See Mitigation Measure TRANS-1, Section 3.16.



# 3.15 RECREATION

# 3.15.1 Regulatory Setting

## 3.15.1.1 Federal

The proposed Project does not propose improvements on or affect access to or use of any federally-owned land. Therefore, there are no Federal regulations that apply to this project pertaining to recreation and recreational facilities.

## 3.15.1.2 State Regulations

## 3.15.1.2.1 California Government Code Section65560(b)

California Government Code Section65560(b) defines "open space land" as any parcel or area of land or water that is unimproved and devoted to an open space use. State law requires that the Woodlake General Plan include a Parks and Recreation element to promote the retention of open space for recreational purposes.

## 3.15.1.2.2 California Recreation Policy

The 2005 California Recreation Policy provides a comprehensive set of policies for many types of recreation activities ranging from active to passive, indoors to outdoors, on land and water, in facilities, and in programs and support functions (California State Parks, 2008). This policy addresses five separate areas of recreation with the following objectives:

- 1. <u>Adequacy of recreation opportunities:</u> The supply of parklands, water, open space, recreation facilities, and services must be adequate to meet future and current demands, particularly in the state's most populated areas.
- 2. <u>Leadership in recreation management:</u> Leadership, cooperation, and partnership must be demonstrated at all levels to ensure that quality recreation resources, opportunities, programs and services are provided.
- 3. <u>Recreation's role in a healthier California:</u> Meaningful recreation activities, facilities, programs and increased opportunities for physical activity are vital to improving health and well-being of Californians.
- 4. <u>Preservation of natural and cultural resources:</u> Educating Californians about their state's invaluable resources is a critical part of ensuring these resources continue to be available for the enjoyment of current and future generations.
- 5. <u>Accessibility to all Californians:</u> All citizens have the right to enjoy California's park and recreation legacy.



#### 3.15.1.2.3 California Recreational Trails Plan

**Goal for Private Property Owners**: Work to identify and resolve conflicts between property owners and trail users and advocates.

**Action Guideline**: Encourage and support open and continuing dialogue among private property owners, community organizations, professional land use organizations such as farm and cattlemen associations, adjacent public property government entities, and trail expansion advocates regarding trail systems and needed links.

#### 3.15.1.3 Local Regulations

### 3.15.1.3.1 Woodlake General Plan 2008 to 2028

#### <u>Designation of Park Facilities</u>

**Goal 1**. Plan for adequate park and recreation facilities to meet existing and future needs in Woodlake.

**Policy 6.** Creeks and ditches in the planning area shall be investigated for use as public open space features, with landscaped pathways and landscaping adjacent to the waterway.

#### Park Location and Design

**Goal 1**. Establish parks in appropriate locations and ensure their design caters to the needs of the community.

**Policy 4.** Consider the design of parks that double as storm water retention/detention facilities.

#### 3.15.2 Environmental Setting

The proposed Project is located within Tulare County in the City of Woodlake, California. Recreational resources in an area can be valuable to its residents as well as the local economy. Beyond national, state, and local developed facilities, recreational resources also include areas such as reservoirs, lakes, caves, game and wildlife refuges, and fair grounds.

Recreation resources in the City of Woodlake consist of the Woodlake Botanical Garden, Bravo Lake, Woodlake City Park, Willow Court Park, and various walking and biking trails and roadways in and around the City limits. Additionally, the Dry Creek Preserve is located approximately 3.5 miles to the east of the City of Woodlake and the Lemon Hill Recreation Area is located approximately 4.5 miles to the south east of the City of Woodlake. These areas include a wide range of recreational opportunities such as hiking, biking, camping, fishing, and wildlife viewing.



## 3.15.3 Impact Analysis

Impacts to recreation are discussed below.

XV	. RECREATION:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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?				$\boxtimes$
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?				$\boxtimes$

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?

Finding: No impact

The proposed Project site would not be located directly in any recreation areas. Recreationalists at the Woodlake City Park, the Woodlake Botanical Garden, and Bravo Lake could experience some disruption from construction activities along Valencia Boulevard and along Naranjo Boulevard. However, these disruptions would be temporary and would occur within the road way right-of-way. The proposed Project would not increase the use of any existing neighborhood or regional parks or other recreational facilities, nor would it require the construction of new recreational facilities. Therefore, no impacts would occur.

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?

Finding: No impact

The proposed Project does not involve recreational facilities or require the construction or expansion of recreational facilities. Therefore, no adverse physical effect on the environment involving parks or recreational facilities would occur. No impacts would occur.

#### 3.15.4 Mitigation

No mitigation required.



#### 3.16 TRANSPORTATION AND TRAFFIC

The Transportation and Traffic section discusses the potential impacts of the proposed Project to traffic systems within and around the proposed Project area. The regulatory setting describes applicable laws and regulations administered the local governing body that aim to preserve efficiency to transportation systems and traffic. The environmental setting provides general information of the scenic and transportation systems of the proposed Project area, and finally, the impact analysis evaluates the potential impacts of the proposed Project on those systems.

## 3.16.1 Regulatory Setting

No federal plans, policies, regulations, or laws related to transportation/traffic apply to the proposed Project.

#### 3.16.1.1 State Regulations

#### 3.16.1.1.1 California Department of Transportation

The California Department of Transportation (Caltrans) manages interregional transportation, including the management and construction of the California highway system. In addition, Caltrans is responsible for the permitting and regulation of state roadways and requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance.

#### 3.16.1.2 Local Regulations

3.16.1.2.1 Woodlake General Plan 2008 to 2028

#### Traffic

**Goal 1**. Insure that streets in Woodlake are not congested.

**Policy 1.** A level of service C will be the desirable minimum service level in Woodlake at which highway, arterial and collector segments will operate. A level of service of B will be the desirable minimum service level in Woodlake at which intersections will operate.

Goal 2. Insure that traffic on Woodlake's streets operates in an efficient and safe manner.

#### **Arterials**

**Goal 1**. Arterial roadways shall be constructed to include two travel lanes with left- and right-hand turn pockets, sidewalks, on-street parking and tree-lined parkways or tree wells.

#### Collectors



**Goal 1.** New collector roadways shall be constructed to include two travel lanes, sidewalks, onstreet parking and tree-lined parkways.

#### Local Roadways

**Goal 1**. Local roadways shall be constructed to include two travel lanes, sidewalks, on-street parking and tree-lined parkways.

#### <u>Transit</u>

- Goal 1. Promote alternative modes of transportation, including bicycles, buses, and walking.
- **Policy 2**. Woodlake shall adopt the Tulare County Regional Bike Plan.
- Goal 2. Reduce automobile use by improving transit service and encouraging transit use.

**Policy 1.** Facilitate the provision of convenient, frequent, dependable, and efficient scheduled transit for Woodlake residents.

#### Bikes and Pedestrian Pathways

- Goal 1. Encourage persons to ride bikes for health reasons as well as for environmental reasons.
- Goal 4. Promote persons to walk in Woodlake.

#### 3.16.2 Environmental Setting

The City's vehicle circulation is primarily provided by State Route (SR)-216 (Naranjo Boulevard) which runs east-west, and SR-245 (Valencia Boulevard) which runs north-south. Tulare County considers the segments of SR-216 and SR-245 that run through the City's Sphere of Influence (SOI) as 2-lane arterials. These are the only two regionally significant roadways within the City's SOI (Tulare 2010). The rest of the City's roads are a network of collector and local streets. Currently, all roadways are operating at Levels of Service (LOS) of B and above, except SR-245 from SR-216 to Cajon Avenue (Woodlake 2008b).

The City is served by several public transportation options. The Tulare County Area Transit (TCAT) provides rural route service throughout Tulare County. The TCAT's Northeast County route services the City (Tulare County 2010). Additionally, the City also provides Dial-A-Ride public transportation service for members of the Woodlake community.

Construction activity within existing streets would occur primarily in residential and commercial areas throughout the city, including the following:

• SR-245 (Valencia Boulevard)



- SR 216 (Naranjo Boulevard)
- North Cypress Street
- Magnolia Street
- South Palm Street
- Riverside Drive
- North Castle Rock Street
- North Lemona Street
- Olive Lane
- West Wutchumna Avenue

The proposed project is expected to disturb approximately 16,210 linear feet of roadway for sewer improvements and 12,010 linear feet for repair throughout the City's road system. The total linear area that would be disturbed would be approximately 5.3 miles. Construction of the proposed Project would have temporary effects on segments of the public roadway network by increasing traffic volumes on roads that provide access to the construction work areas and reducing the available width of some public roadways to a single lane during the construction phase. Workers are expected to contribute 20 daily vehicle trips. Construction activities would normally occur on weekdays, and possibly weekends, between 7:00 a.m. and 7:00 p.m, for a period of six to nine months.

## 3.16.3 Impact Analysis

Potential impacts to transportation and traffic are discussed below.

xv	I. TRANSPORTATION / TRAFFIC: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				



χV	I. TRANSPORTATION / TRAFFIC: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		$\boxtimes$		
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				
d)	Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		$\boxtimes$		
e)	Result in inadequate emergency access?		$\boxtimes$		
f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?		$\boxtimes$		

a) Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Finding: Less than significant with mitigation incorporated

Construction of the proposed Project would result in a temporary increase in approximately 20 d truck trips on the local streets and highways in order to deliver materials and construction equipment to the Project area, including worker commutes. Increased traffic is expected to occur over a period of six to nine months during peak hours (approximately 7:00 am to 7:00 pm) but once construction is complete, it would return to current levels. Local roads are generally narrow, and access may be temporarily restricted during construction times as trucks are using the roads. Roads would also be restricted to one lane while trenching is occurring within the roadway, and the LOS for impacted streets would temporarily fall below the General Plan LOS standards. Therefore, traffic would be temporarily impacted due to construction activities associated with the proposed Project. However, standard traffic control measures would be implemented by the contractor to maintain safe flow of traffic in the area. Additionally, impacts would be temporary and only during construction; traffic would return to existing conditions following the completion of construction. With the implementation of Mitigation Measure TRANS-1, construction impacts related to pipeline installations along public roadways to transportation resources would



not conflict with a local plan or policy establishing measures of effectiveness for the performance of the circulation system and thus would be considered less than significant with mitigation incorporated.

b) Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Finding: Less than significant with mitigation incorporated

The proposed Project would cause short-term increases in traffic on local roads and SR-216 and SR-245 during the construction phase. With the exception of temporary increases due to construction, traffic is not expected to increase substantially as a result of the Project activities. Additionally, implementation of Mitigation Measure TRANS-1 would limit temporary congestion and ensure continual controlled traffic flow. Therefore, the potential impact to congestion would be less than significant with mitigation incorporated.

c) Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Finding: Less than significant

The proposed Project area is located in close proximity to the Woodlake Airport. Due to construction traffic and the lane reduction along Valencia Boulevard, which the main road used by vehicles to access the airport, road traffic is expected to temporarily be impacted. However, the proposed Project would not change airport operations or traffic patterns. Additionally, emergency services would still be able to access the airport. Finally, traffic impacts would only be during construction and road conditions would be restored to pre-Project conditions. Therefore, flight patterns in the Project vicinity would not be affected and impacts would be less than significant.

d) Would the Project substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: Less than significant with mitigation incorporated

Roadways in and surrounding the proposed Project areas are generally straight with good sight distance, so visibility and access is acceptable. However, the maneuvering of slow-moving construction trucks and equipment among the general-purpose traffic could temporarily disrupt traffic flow and cause potential conflicts with other vehicles. Project construction would require the transportation of heavy machinery and light trucks on the roads described above. The truck trips would be temporary and the frequency minimal and site specific. Additionally, open trenches due to trenching would pose a potential hazards for drivers. However, implementation of Mitigation Measure TRANS-1 would reduce driver risk within the project area. Additionally, roadway conditions would be restored and traffic levels would return to pre-Project conditions.



Therefore, impacts from incompatible roadway uses are considered less than significant with mitigation incorporated.

#### e) Would the Project result in inadequate emergency access?

#### Finding: Less than significant with mitigation incorporated

The proposed Project is not expected to interfere with emergency access. In the event that construction activities prevent local residents' access, detour routes would be identified. Implementation of Mitigation Measure TRANS-1 would ensure adequate emergency access and interference with normal traffic flows to be minimal. Therefore, impact to emergency access would be less than significant with mitigation incorporated.

# f) Would the Project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

#### Finding: Less than significant with mitigation incorporated

The proposed Project would not affect transportation policies or add residences or other land uses that would generate a need for alternative transportation. However, proposed construction along North Cypress Street and North Magnolia Street could potentially interfere with the operation of existing fixed bus stops within TCAT's Northeast County route (TCAT 2017). However, implementation of MM TRANS-1 would limit interference with normal traffic flows. Additionally, the City would coordinate with the developer and TCAT, and if deemed necessary, set up temporary bus stop locations and route changes to utilize less impacted sections of roadway. Finally, traffic impacts would only be temporary during construction, and is not expected to impact the long-term operation of alternative transportation within the City and Tulare County. Therefore, the impact to alternative transportation would be less than significant with mitigation incorporated.

#### 3.16.4 Mitigation

#### Mitigation Measure TRANS-1: Traffic Management Plan

The contractor will develop and submit to the City a traffic management plan. Elements of the plan will likely include, but are not necessarily limited to, the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Truck hauling routes would be designated to minimize impact on local roadways to the extent possible. Truck activity would be scheduled to avoid peak traffic hours to the greatest extent possible. Signage/flaggers would alert drivers to construction activities and lane closures within the project area and direct traffic as necessary to maintain safe driving conditions.
- Limit lane closures to the greatest extent possible. Lanes would be made accessible by covering trenches with steel plates outside of allowed working hours or when work is not in progress.



- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions.
- Notify emergency service providers of expected lane closures so that alternative routes can be established.
- To the maximum extent feasible, maintain access to private driveways located within construction zones.
- Coordinate with the City and TCAT so that bus routes or bus stops in work zones can be temporarily relocated as deemed necessary.

#### Mitigation Measure TRANS-1 Implementation

**Responsible Party**: The City of Woodlake's contractor shall adhere to the construction schedule and all traffic mitigation measures

**Timing**: During all phases of construction.

**Monitoring and Reporting**: The City will monitor road and traffic conditions to ensure that the management elements are being properly implemented

Standard of Success: Minimize traffic delay to the greatest extent possible



#### 3.17 UTILITIES AND SERVICE SYSTEMS

The following section includes an overview of the regulatory setting, environmental setting and overview of the existing public services and utilities in Woodlake and Tulare County, including water and wastewater collection and treatment, storm water drainage, and solid waste disposal. Finally, this section assesses the potential impacts on public utilities that could occur with the implementation of the proposed Project.

## 3.17.1 Regulatory Setting

#### 3.17.1.1 Federal Regulations

See section 3.6 and 3.8 for discussion of National Pollutant Discharge Elimination System Permits and waste discharge requirements.

#### 3.17.1.2 State Regulations

#### 3.17.1.2.1 California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires counties to develop an Integrated Waste Management Plan (IWMP) that describes county objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. The Act also mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000 (CalRecyle 2006).

#### 3.17.1.3 Local Regulations

# 3.17.1.3.1 Woodlake City Ordinance Chapter 8.17- Recycling and Diversion of Construction and Demolition Debris

The City's ordinance is intended to increase recycling and reuse of debris in consistency with the Integrated Waste Management Act. Projects are required to submit and follow a construction and debris recycling and reuse plan to help the City meet state goals (Woodlake 2016).

#### 3.17.1.3.2 Woodlake General Plan 2008 to 2028

#### Infrastructure

- **Goal 1.** Adequately finance infrastructure systems.
- **Policy 1.** The City shall install water, sewer and storm drainage improvements that correct existing infrastructure deficiencies.
- **Goal 2.** Maintain, rebuild and upgrade infrastructure systems.



**Policy 1.** The City shall update its 5-Year Capital Improvement Program to insure that its infrastructure system can accommodate the urban growth provided for by the Land Use Element.

**Policy 2.** The Redevelopment Agency shall prepare a 5-Year Capital Improvement Program to assist in the maintenance, rebuilding and upgrading of Woodlake's infrastructure system.

**Policy 3.** The City should work with the private sector to participate in the upgrading of the infrastructure system when it is developing in the City.

a. From time to time, the City may wish to work with a developer to upgrade a part of the infrastructure or street system that is not part of the project being developed.

## 3.17.2 Environmental Setting

#### 3.17.2.1 Water & Wastewater

The City owns and operates its own water service and wastewater collection system. The City's Waste Water Treatment Plant (WWTP) is located approximately a mile south of the City on Valencia Boulevard on land previously owned by the Sentinel Butte Water Company. The City's WWTF is currently subject to the following orders issued by the Central Valley Regional Water Quality Control Board (RWQCB):

- Order No. 5-01-082 "Water Reclamation Requirements for Sentinel Butte Water Company and City of Woodlake Reclamation Project Tulare County"
- Order No. R5-2009-0103 "Waste Discharge Requirements for City of Woodlake Wastewater Treatment Facility Tulare County"
- Order No. R5-2009-0104 "Cease and Desist Order Requiring City of Woodlake Wastewater Treatment Facility Tulare County to Cease and Desist Discharging Waste Contrary to Requirements". The "Cease and Desist" order was caused by the WWTP's effluence discharge that violated regulatory limits for biochemical oxygen demand (BOD) and total suspended solids (TSS) (Tulare LAFCO 2016).

The WWTP has a regulatory capacity of 1.38 Mgal/day. The existing average base flow is 0.9 Mgal/d, and is estimated to increase to 1.44 Mgal/d following the buildout of the current sewer service area. With planned future improvements to meet the expected increase in the City's wastewater generation, the WWTP would have a regulatory capacity of 1.92 Mgal/d.

The proposed Project would expand the capacity of the wastewater collection and prevent help reduce the risk of spills due to partial blockages of the pipes and flows that exceed the capacity of the pipes.



The City's water supply system currently has an average daily demand of 1,689 gallons per minute (gpm) and a peak of 6,052 gpm. The buildout of the City's Water Master Plan would accommodate up to an estimated 10,500 people (Tulare LAFCO 2016).

#### 3.17.2.2 Stormwater Drainage

The City's stormwater drainage system is detailed in the Woodlake Storm Drainage Master Plan. Currently, small ditches and drainage swales channel stormwater to either Bravo lake or St. Johns River.

#### 3.17.2.3 Solid Waste Disposal

The City's solid waste disposal is provided by Mid Valley Disposal which operates transfer stations throughout Tulare County, and the closest facility is the Visalia Material Recovery Facility (MRF) & Transfer Station. The Visalia MRF & Transfer Station has a capacity of 100 tons per day (CalRecycle 2017a). The closest landfill is the Visalia Landfill, operated by Tulare County. The Visalia Landfill accepts agricultural, construction, industrial, and mixed municipal solid wastes. The facility has a maximum capacity of 18,630,666 cubic yards and has a remaining capacity of 14,815,501 cubic yards. The site is expected to operate until 2024 (CalRecycle 2017b).

## 3.17.3 Impact Analysis

The potential impacts to utilities and service systems are and discussed below.

xv	II. UTILITIES AND SERVICE SYSTEMS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			$\boxtimes$	
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			$\boxtimes$	
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			$\boxtimes$	
d)	Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?			$\boxtimes$	



xv	II. UTILITIES AND SERVICE SYSTEMS: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
e)	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?			$\boxtimes$	
f)	Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?			$\boxtimes$	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				

# a) Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Finding: Less than significant

The existing WWTF is currently operating at 57% of its allowed operational capacity (Tulare County 2016). Although Project-related activities would result in the increased generation of wastewater, the amount generated would be minimal, and the existing WWTF has the physical and permitted capacity to handle this increase without exceeding Regional Water Control Board treatment requirements. Operation and maintenance of the new pipeline would be similar to existing municipal pipelines and would not require normal disposal of wastewater. Therefore, impacts are considered less than significant.

b) Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Finding: Less than significant

The proposed Project would replace existing pipes and improve an existing wastewater management infrastructure; the proposed Project would not cause or require the construction or expansion of new facilities. The proposed Project would not induce population growth, any increases to the sewer system capacity have been accounted for in the City's General Plan. The project itself would not create additional wastewater; however, it would allow increased capacity to the City's sewer system. The impact on the City's wastewater facilities would be marginal, and would not require development or expansion of the wastewater treatment facilities. Therefore, the impacts from the proposed project would be less than significant.



c) Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Finding: Less than significant

Due to the amount of land disturbed, the proposed Project would be required to develop and implement a Stormwater Pollution Plan. Implementation of the plan's BMPs, including appropriate grading and drainage design features, would minimize disruption to any drainage flows and the performance of the existing stormwater drainage system. The proposed Project would not significantly increase water-resistant areas or generate increased stormwater flows since the pipelines would be buried below surface level and impacted areas would be restored to pre-project conditions. Nor would the proposed Project result in the construction of new stormwater drainage facilities. Therefore, environmental effects and impacts would be considered less than significant.

d) Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Finding: Less than significant

Proposed project activities during construction may require some additional water supply for dust control, hydrostatic testing, and site cleanup. Additional water use during construction would be temporary and minimal, and would not constitute a significant impact that would require new or expanded water supply resources. Water requirements during operation and maintenance would be similar to existing pipelines and would not require significant amounts of additional water. Therefore, potential impacts would be considered less than significant.

e) 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?

Finding: Less than significant

The WWTP has a regulatory capacity of 1.38 Mgal/day. The existing average base flow is 0.9 Mgal/d, and is estimated to increase to 1.44 Mgal/day following the buildout of the current sewer service area. Currently, the WWTP is operating at 65% of its allowed operational capacity. With planned future improvements to meet the expected increase in the City's wastewater generation, the WWTP has the regulatory capacity of 1.92 Mgal/d and would operate at 25% below its regulatory capacity. Any additional wastewater produced during construction would be minimal and would not cause the WWTP operate exceed its regulatory capacity. Therefore, the WWTP has the capacity to serve the proposed Project and the impacts would be less than significant.

f) Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?



#### Finding: Less than significant

Debris and demolished material created during construction would be taken to either the Visalia Landfill or Visalia MRF & Transfer Station for proper disposal. During construction, the proposed Project may minimally and temporarily increase solid waste production over the current levels. However, the Visalia Landfill is estimated to operate until 2024 and its facilities are able to accept solid waste materials generated by the construction of the proposed Project. Solid waste production would be limited to construction and occasional maintenance. Impacts from solid waste generation would be less than significant.

# g) Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

Finding: Less than significant

Disposal of all solid waste would comply with applicable federal, state, and local regulations. Operation and maintenance of the new pipelines would be similar to existing municipal pipelines and would not require normal disposal of solid waste. Therefore, the proposed project would have no impact.

## 3.17.4 Mitigation

No mitigation is required.



#### 3.18 MANDATORY FINDINGS OF SIGNIFICANCE

# 3.18.1 Impact Analysis

The mandatory findings of significance including potential impacts to sensitive resources, potential cumulative impacts, potential impacts to human beings, and potential global warming impacts and are discussed below.

XVI	III. MANDATORY FINDINGS OF SIGNIFICANCE: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less than Significant Impact	No Impact
a)	Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative 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)?				
c)	Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Finding: Less than significant with mitigation incorporated



#### <u>Biological</u>

As disclosed in Section 3.4 of this document, based on the desktop screening analysis and field verification, no special status plant species were identified as having a moderate or high potential to occur within the proposed Project region. For special status wildlife species, the San Joaquin kit fox and Western mastiff bat both have a moderate potential to occur within the proposed Project area. No suitable habitat for San Joaquin kit fox or western mastiff bat were observed in the proposed Project area or footprint during field surveys conducted on September 28, 2017. Therefore, it is highly unlikely that San Joaquin kit fox or mastiff bat or their habitat would occur within or be affected by the proposed Project. With the implementation of Mitigation Measure BIO-1: Conduct Worker Environmental Awareness Training Prior to Construction, impacts would be reduced to a less than significant level.

There is a moderate potential for nesting raptors and other migratory birds protected under the MBTA, to occur within the proposed Project site and surrounding area. Construction activities during the nesting season (approximately February 15 through August 31) could disturb or cause nest abandonment and subsequent loss of eggs or developing young at active nests. Disturbance resulting in nest abandonment or loss of eggs would be considered a substantial adverse effect, and violates the MBTA. Implementation of Mitigation Measures BIO-2: Avoid Disturbance of Nesting Raptors and other Migratory Birsds, would reduce this impact to a less than significant level.

The proposed Project will not cause a significant change to the quality of the environment. The proposed pipeline replacement, repairs, and upgrades will be installed within existing roadways or roadway shoulder, within the right-of-way and staging will take place in previously disturbed areas. Horizontal Directional Drilling (HDD), or similar methods, would be used to install the pipeline where it crosses Wutchumna ditch. These impacts will be temporary, each taking less than one week to install and restore. Proper permissions from the California Department of Fish and Wildlife will be obtained.

The proposed Project will not cause a fish or wildlife species population to drop below self-sustaining levels, or threaten to eliminate a rare or endangered plant or animal because the proposed Project is not expected to significantly impact any locally, state, or federally rare and endangered species (see Section 3.4-1, Table 3.4-1). Therefore, the proposed Project will not cause a population to drop below self-sustaining levels.

#### Cultural

As indicated in Section 3.5, Cultural Resources, of this document, a full accounting of all potential cultural resources located within the Project site was achieved through a records search and intensive level pedestrian survey of the proposed Project area and adjacent areas. The proposed Project area was evaluated for the presence of prehistoric and historic site indications. The records search revealed that two historic cultural resource have been recorded within ½ mile of the proposed Project area (See Table 3.5-1, Section 3.5). One site consists of a



historic railroad grade that was constructed by the Visalia Electric Railway, an affiliate of the Southern Pacific Railroad. This railway was in operation from 1906-1990 and many features associated with it have been removed or built over. The railroad is no longer extant. The second site, the Wutchumna Ditch Bridge, was previously determined ineligible for the NRHP and is therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

Additionally, 10 historic properties were identified outside the Project area. One historic property that is outside the Project area has not been evaluated for the CRHR or NRHP. The other nine historic properties were previously determined ineligible for the NRHP and are therefore ineligible for the CRHR, are not considered significant cultural resources for the purposes of CEQA, and require no further consideration.

The record search indicates that 18 previous studies have been conducted within a half mile radius of the Project area. Five of these studies are located within or directly adjacent to the Project area and all resulted in negative findings. Four of the studies are within 300' of the Project area with, one with positive findings. Investigative report number TU-00409 noted a historic refuse scatter of 19th century ceramics, old glass, and iron fragments in the cut bank of the Visalia Electric Railroad bed however, no site record was created. All remaining studies located within a half mile radius of the Project area resulted in negative findings except report number TU-00297, that resulted in positive findings of a prehistoric campsite located on the north bank of St. Johns River (outside the project area).

No Tribes contacted the City of Woodlake requesting AB 52 consultations on City Projects. Therefore, on November 1, 2017, the NAHC was asked to review the Sacred Lands File for Tribal cultural resources that might be affected by the proposed Project. The NAHC responded on November 13, 2017, stating that a search of the Sacred Lands File was completed for the Project area referenced above with negative results.

No other historic or prehistoric cultural resources were observed within or immediately adjacent to the proposed Project area. No further cultural resources study is warranted unless the proposed Project site changes. The possibility for encountering buried cultural resources or human remains during Project construction is always a possibility and Mitigation Measures CULTURAL-1 and CULTURAL-2 are required to reduce impacts to a less than significant level. Therefore, impacts to cultural resources are considered less than significant with mitigation incorporated.

b) Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative 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 air quality and traffic impacts are considered in Section 3.3 and Section 3.16, respectively, in this IS/MND. As described in the impact analyses in Sections 3.1 through 3.17 of



this IS/MND, the proposed Project would not result in any potentially significant impacts that cannot be mitigated. The proposed Project would also not cause, or result in, a cumulatively considerable contribution to any significant adverse impacts when considered in connection with the effects of past projects, current projects, or probable future projects, primarily because the incremental contributions of the proposed Project are so modest.

As explained in this IS/MND, mitigation measures have been incorporated into the proposed Projects such that their incremental impacts would not be cumulatively considerable. Accordingly, the incremental addition of impacts from other projects would be considered less than significant.

# c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As discussed in the various sections throughout this IS/MND, the proposed Project operation would not include uses that would result in substantial adverse effects on human beings.

Potential impacts to human beings include increase in ambient noises during construction (see Section 3.12, Noise, Mitigation Measure NOISE-1) and increases in particulate matter (fugitive dust) and Toxic Air Contaminant (TAC) emissions during construction (see Section 3.3, Air Quality, Mitigation Measure AIR-1). Both impacts are considered temporary and impacts will be reduced to a less than significant through incorporation of mitigation measures. Specifically, to the extent feasible, construction activities will be limited to daylight or normal working hours to mitigate disturbance from temporary increases in noise during construction. An approved dust control plan with measures that include watering down the construction area and halting construction in high winds will be implemented to reduce temporary impacts to air quality. These BMPs and mitigation measures will ensure all potential adverse effects on human beings are reduced to less than significant levels. The monitoring, mitigation and reporting program shall be followed to ensure compliance with said measures.



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# **APPENDIX A CALEEMOD**



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## **City of Woodlake Sewer Improvement Project**

#### San Joaquin Valley Air Basin, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	141.03	1000sqft	3.24	141,035.00	0

(lb/MWhr)

## 1.2 Other Project Characteristics

Urbanization Wind Speed (m/s) Rural 2.7 Precipitation Freq (Days) 45 3 **Climate Zone Operational Year** 2020 **Utility Company** Pacific Gas & Electric Company **CO2 Intensity** 641.35 **CH4 Intensity** 0.029 **N2O Intensity** 0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics - non-default values based on PD

Land Use - non-default values based on PD

Construction Phase - None default information from Project Description

(lb/MWhr)

Off-road Equipment - None default information from Project Description.

Off-road Equipment - non-default information from Project Description

Off-road Equipment - non-defualt information from Project Description

Off-road Equipment - Non-deault information entered from Project Description.

Grading - non-default values based on PD

Trips and VMT - non-default values based on PD

Energy Use -

(lb/MWhr)

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Table Name	Column Name	Default Value	New Value		
tblConstructionPhase	NumDays	18.00	16.00		
tblConstructionPhase	PhaseEndDate	3/2/2020	12/31/2019		
tblConstructionPhase	PhaseEndDate	4/3/2020	1/24/2020		
tblConstructionPhase	PhaseStartDate -	7/2/2019	4/8/2019		
tblConstructionPhase	PhaseStartDate #	3/3/2020	1/3/2020		
tblGrading	AcresOfGrading	0.00	3.00		
tblLandUse	BuildingSpaceSquareFeet	141,030.00	141,035.00		
tblLandUse	LandUseSquareFeet	141,030.00	141,035.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00		
tblProjectCharacteristics	OperationalYear	2018	2020		
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural		
tblTripsAndVMT	VendorTripNumber	0.00	23.00		
tblTripsAndVMT	WorkerTripNumber	8.00	20.00		
tblTripsAndVMT	WorkerTripNumber	23.00	20.00		
tblTripsAndVMT	WorkerTripNumber	18.00	20.00		

# 2.0 Emissions Summary

# 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					ton	s/yr							MT	<sup>7</sup> /yr		
2019	0.2691	2.5078	1.9086	3.6100e- 003	0.1165	0.1364	0.2529	0.0498	0.1281	0.1779	0.0000	321.2124	321.2124	0.0655	0.0000	322.8507
2020	0.0101	0.0929	0.1032	1.7000e- 004	1.9900e- 003	5.1300e- 003	7.1200e- 003	5.3000e- 004	4.7300e- 003	5.2600e- 003	0.0000	14.5912	14.5912	4.1400e- 003	0.0000	14.6946
Total	0.2792	2.6007	2.0118	3.7800e- 003	0.1185	0.1415	0.2601	0.0503	0.1328	0.1831	0.0000	335.8036	335.8036	0.0697	0.0000	337.5453

# **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					ton	s/yr							МТ	7/yr		
2019	0.2691	2.5078	1.9086	3.6100e- 003	0.1165	0.1364	0.2529	0.0498	0.1281	0.1779	0.0000	321.2121	321.2121	0.0655	0.0000	322.8504
2020	0.0101	0.0929	0.1032	1.7000e- 004	1.9900e- 003	5.1300e- 003	7.1200e- 003	5.3000e- 004	4.7300e- 003	5.2600e- 003	0.0000	14.5912	14.5912	4.1400e- 003	0.0000	14.6945
Total	0.2792	2.6007	2.0118	3.7800e- 003	0.1185	0.1415	0.2601	0.0503	0.1328	0.1831	0.0000	335.8033	335.8033	0.0697	0.0000	337.5450

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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

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# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ıs/yr				-			MT	T/yr		
Area	0.6490	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003
Energy	0.0159	0.1448	0.1217	8.7000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	526.5212	526.5212	0.0197	6.3400e- 003	528.9034
Mobile	0.3488	3.7739	4.0005	0.0180	1.0942	0.0204	1.1146	0.2944	0.0194	0.3137	0.0000	1,667.224 5	1,667.224 5	0.0976	0.0000	1,669.66 0
Waste			İ	:		0.0000	0.0000	ĺ	0.0000	0.0000	35.4991	0.0000	35.4991	2.0979	0.0000	87.9474
Water						0.0000	0.0000		0.0000	0.0000	10.3467	51.3371	61.6838	1.0650	0.0256	95.9301
Total	1.0137	3.9188	4.1234	0.0189	1.0942	0.0314	1.1256	0.2944	0.0304	0.3247	45.8457	2,245.085	2,290.931	3.2802	0.0319	2,382.44

2.2 Overall Operational Mitigated Operational

744.282,2 9	6160.0	3.2802	2,290.931 0	2,245.085 3	7248.24	7426.0	<del>1</del> 080.0	446 <u>2.0</u>	1.1256	4180.0	2460.↑	6810.0	4.1234	8816.8	7£10.1	Total
1086.39	0.0256	0990.1	8683.19	1766.13	79 <del>4</del> 6.01	0000.0	0000.0		0000.0	0000.0						Water
<b>⊅</b> 7 <b>⊅</b> 6.78	0000.0	6760.S	1667.35	0000.0	166 <del>1</del> .35	0000.0	0000.0		0000.0	0000.0						Waste
ا '699'699 1 499	0000.0	9260.0	ا,667.224 5	1,667.224 5	0000.0	7£1£.0	4610.0	776Z.0	9711.1	4020.0	Z⊅60.1	0810.0	9000 <sup>-</sup> †	9£77.£	8846.0	əlidoM
£28.9034	-900 <del>1</del> .6 -900	7610.0	2123.6212	526.5212	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	0.0159	Епегду
-9000e- 003	0000.0	1.0000e- 300	-90022.5 003	-8003 003	0000.0	0000.0	0000.0		0000.0	0000.0		0.000	1.3000e- 003	-90000.1 300	0649.0	Агеа
		ر۸د	TM.		= 4					s/yr	suoj					Category
COSe	OZN	CH4	Total CO2	ZOO - COZ	ZOO -019	PM2.5 Total	Exhaust PM2.5	Fugitive PM2.5	PM10 Total	Exhaust PM10	Fugitive PM10	zos	00	×ON	ВОС	

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	00.0	Percent Reduction
COZe	N20	CH¢	Total CO2	NBio-COS	Bio- CO2	8.SM9 IstoT	Exhaust 5.2Mq	Fugitive PM2.5	OrMq IstoT	Exhaust PM10	Fugitive PM10	zos	00	×on	ьоя	

# 3.0 Construction Detail

# Construction Phase

Phase Description	Num Days	Num Days Week	End Date	Start Date	Phase Type	Phase Name	Phase Number
	g	S	4/2/2016	3/1/5016	Site Preparation	Site Preparation	l
	Z61	S	6102/18/21	6102/8/7	Trenching	Pipeline Installation or Repair	7
	91	<u>g</u>	1/24/2020	1/3/5050	gnivs9	gnivs9	3

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Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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
Site Preparation	Rubber Tired Dozers		1 8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes		2 8.00	97	0.37
Pipeline Installation or Repair	Cranes	MINISTER STATE	7.00	231	0.29
Pipeline Installation or Repair	Forklifts		8.00	89	0.20
Pipeline Installation or Repair	Generator Sets	THE COURSE OF STREET	1 8.00	84	0.74
Pipeline Installation or Repair	Tractors/Loaders/Backhoes		7.00	97	0.37
Pipeline Installation or Repair	Welders	THE STATE OF THE S	1 8.00	46	0.45
Paving	Cement and Mortar Mixers		1 6.00	9	0.56
Paving	Pavers		1 8.00	130	0.42
Paving	Paving Equipment		2 6.00	132	0.36
Paving	Rollers		6.00	80	0.38
Paving	Tractors/Loaders/Backhoes		1. 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
Site Preparation	3	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation or	9	20.00	23.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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# **3.1 Mitigation Measures Construction**

# 3.2 Site Preparation - 2019

# **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					ton	s/yr							МТ	-/yr		
Fugitive Dust					0.0766	0.0000	0.0766	0.0389	0.0000	0.0389	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1926	0.1022	1.7000e- 004		0.0104	0.0104		9.5300e- 003	9.5300e- 003	0.0000	15.2370	15.2370	4.8200e- 003	0.0000	15.3575
Total	0.0184	0.1926	0.1022	1.7000e- 004	0.0766	0.0104	0.0869	0.0389	9.5300e- 003	0.0484	0.0000	15.2370	15.2370	4.8200e- 003	0.0000	15.3575

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ıs/yr							МТ	-/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	0.000
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	0.000
Worker	1.4900e- 003	1.1100e- 003	0.0109	3.0000e- 005	2.8600e- 003	2.0000e- 005	2.8800e- 003	7.6000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.6235	2.6235	8.0000e- 005	0.0000	2.625
Total	1.4900e- 003	1.1100e- 003	0.0109	3.0000e- 005	2.8600e- 003	2.0000e- 005	2.8800e- 003	7.6000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.6235	2.6235	8.0000e- 005	0.0000	2.62

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# 3.2 Site Preparation - 2019

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Fugitive Dust					0.0766	0.0000	0.0766	0.0389	0.0000	0.0389	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1926	0.1022	1.7000e- 004		0.0104	0.0104	       	9.5300e- 003	9.5300e- 003	0.0000	15.2370	15.2370	4.8200e- 003	0.0000	15.3575
Total	0.0184	0.1926	0.1022	1.7000e- 004	0.0766	0.0104	0.0869	0.0389	9.5300e- 003	0.0484	0.0000	15.2370	15.2370	4.8200e- 003	0.0000	15.3575

# **Mitigated Construction Off-Site**

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ns/yr							МТ	-/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	0.000
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	0.000
Worker	1.4900e- 003	1.1100e- 003	0.0109	3.0000e- 005	2.8600e- 003	2.0000e- 005	2.8800e- 003	7.6000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.6235	2.6235	8.0000e- 005	0.0000	2.625
Total	1.4900e- 003	1.1100e- 003	0.0109	3.0000e- 005	2.8600e- 003	2.0000e- 005	2.8800e- 003	7.6000e- 004	2.0000e- 005	7.8000e- 004	0.0000	2.6235	2.6235	8.0000e- 005	0.0000	2.625

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# 3.3 Pipeline Installation or Repair - 2019

# <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2267	2.0236	1.6477	2.5800e- 003		0.1238	0.1238		0.1164	0.1164	0.0000	225.7000	225.7000	0.0550	0.0000	227.0746
Total	0.2267	2.0236	1.6477	2.5800e- 003		0.1238	0.1238		0.1164	0.1164	0.0000	225.7000	225.7000	0.0550	0.0000	227.0746

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ns/yr							M	Г/уг		
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	0.0101	0.2812	0.0564	5.9000e- 004	0.0132	2.0300e- 003	0.0153	3.8300e- 003	1.9400e- 003	5.7600e- 003	0.0000	55.7513	55.7513	4.9700e- 003	0.0000	55.875
Worker	0.0124	9.2900e- 003	0.0913	2.4000e- 004	0.0239	1.7000e- 004	0.0240	6.3400e- 003	1.6000e- 004	6.5000e- 003	0.0000	21.9006	21.9006	6.7000e- 004	0.0000	21.917
Total	0.0225	0.2905	0.1477	8.3000e- 004	0.0371	2.2000e- 003	0.0393	0.0102	2.1000e- 003	0.0123	0.0000	77.6519	77.6519	5.6400e- 003	0.0000	77.793

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# 3.3 Pipeline Installation or Repair - 2019

# **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					ton	s/yr							MT	/yr		
Off-Road	0.2267	2.0236	1.6477	2.5800e- 003		0.1238	0.1238		0.1164	0.1164	0.0000	225.6998	225.6998	0.0550	0.0000	227.0743
Total	0.2267	2.0236	1.6477	2.5800e- 003		0.1238	0.1238		0.1164	0.1164	0.0000	225.6998	225.6998	0.0550	0.0000	227.0743

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive 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	0.000				
Vendor	0.0101	0.2812	0.0564	5.9000e- 004	0.0132	2.0300e- 003	0.0153	3.8300e- 003	1.9400e- 003	5.7600e- 003	0.0000	55.7513	55.7513	4.9700e- 003	0.0000	55.875				
Worker	0.0124	9.2900e- 003	0.0913	2.4000e- 004	0.0239	1.7000e- 004	0.0240	6.3400e- 003	1.6000e- 004	6.5000e- 003	0.0000	21.9006	21.9006	6.7000e- 004	0.0000	21.917				
Total	0.0225	0.2905	0.1477	8.3000e- 004	0.0371	2.2000e- 003	0.0393	0.0102	2.1000e- 003	0.0123	0.0000	77.6519	77.6519	5.6400e- 003	0.0000	77.793				

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3.4 Paving - 2020
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					ton	s/yr							MT	/yr		
Off-Road	9.1200e- 003	0.0922	0.0964	1.5000e- 004		5.1200e- 003	5.1200e- 003		4.7200e- 003	4.7200e- 003	0.0000	12.8227	12.8227	4.0900e- 003	0.0000	12.9248
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1200e- 003	0.0922	0.0964	1.5000e- 004		5.1200e- 003	5.1200e- 003		4.7200e- 003	4.7200e- 003	0.0000	12.8227	12.8227	4.0900e- 003	0.0000	12.9248

# **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	0.000				
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	0.000				
Worker	9.4000e- 004	6.8000e- 004	6.7600e- 003	2.0000e- 005	1.9900e- 003	1.0000e- 005	2.0000e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7685	1.7685	5.0000e- 005	0.0000	1.769				
Total	9.4000e- 004	6.8000e- 004	6.7600e- 003	2.0000e- 005	1.9900e- 003	1.0000e- 005	2.0000e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7685	1.7685	5.0000e- 005	0.0000	1.769				

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3.4 Paving - 2020 <u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	9.1200e- 003	0.0922	0.0964	1.5000e- 004		5.1200e- 003	5.1200e- 003		4.7200e- 003	4.7200e- 003	0.0000	12.8226	12.8226	4.0900e- 003	0.0000	12.9248
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1200e- 003	0.0922	0.0964	1.5000e- 004		5.1200e- 003	5.1200e- 003		4.7200e- 003	4.7200e- 003	0.0000	12.8226	12.8226	4.0900e- 003	0.0000	12.9248

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO26		
Category	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	0.000		
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	0.000		
Worker	9.4000e- 004	6.8000e- 004	6.7600e- 003	2.0000e- 005	1.9900e- 003	1.0000e- 005	2.0000e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7685	1.7685	5.0000e- 005	0.0000	1.76		
Total	9.4000e- 004	6.8000e- 004	6.7600e- 003	2.0000e- 005	1.9900e- 003	1.0000e- 005	2.0000e- 003	5.3000e- 004	1.0000e- 005	5.4000e- 004	0.0000	1.7685	1.7685	5.0000e- 005	0.0000	1.76		

# 4.0 Operational Detail - Mobile

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#### **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					ton	s/yr							MT	/yr		
Mitigated	0.3488	3.7739	4.0005	0.0180	1.0942	0.0204	1.1146	0.2944	0.0194	0.3137	0.0000	1,667.224 5	1,667.224 5	0.0976	0.0000	1,669.664 0
Unmitigated	0.3488	3.7739	4.0005	0.0180	1.0942	0.0204	1.1146	0.2944	0.0194	0.3137	0.0000	1,667.224 5	1,667.224 5	0.0976	0.0000	1,669.664 0

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	982.98	186.16	95.90	2,868,323	2,868,323
Total	982.98	186.16	95.90	2,868,323	2,868,323

#### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	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
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.499524	0.033454	0.168279	0.130431	0.021581	0.005690	0.021752	0.108566	0.001799	0.001690	0.005397	0.000987	0.000848

### 5.0 Energy Detail

Historical Energy Use: N

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#### 5.1 Mitigation Measures Energy

COSe	NZO	CH4	Total CO2	NBio- COS	Bio- CO2	2.SM9 Total	Exhaust 5.SM9	Fugitive 5.2M9	01M9 IstoT	Exhaust PM10	Fugitive PM10	zos	00	×ON	ВОВ	
		/yr	TM							s/yr	noi					Category
370.2933	-900 <del>21</del> .£	7910.0	368.8480	0848.896	0000.0	0.000	0000.0		0.000	0000.0						Electricity Mitigated
8562.07E	-900 <del>1</del> -800	7910.0	368.8480	0848.83E	0000.0	0000.0	0000.0		0000.0	0000.0						Electricity Inmitigated
1019.831	-9008.2 003	-90200e- 003	2673.731	157.6731	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	0.0159	laturalGas Mitigated
158.6101	-90068.Z 003	-90020.E 003	2573.731	2673.731	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	6910.0	asələrutal bətsgitimnl

#### 5.2 Energy by Land Use - NaturalGas Unmitigated

1019.831	2.8900e- 003	3.0200e- 003	2£73.7∂1	287a.7a1	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	6210.0		IstoT
1019.831	-90068.2 003	3.0200e- 003	2873.731	2873.731	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	6910.0	989486.2 900+	General Light Industry
		/۸د	TM							s/yr	not					KB⊥∩\⁄\r	esU bnsJ
COSe	OZN	CH¢	Total CO2	NBio- COS	Bio- CO2	5.2M9 Total	tshaust 3.2Mq	Fugitive 5.2Mq	OM90 Total	Exhaust PM10	Fugitive PM10	ZOS	00	XON	ВОС	NaturalGa s Use	

Mitigated 5.2 Energy by Land Use - NaturalGas

1019.831	-90068.2 003	3.0200e- 003	26T3.TZ1	26T3.TZ1	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	0.0159		IstoT
158.6101	-90068.Z 003	-90020.£	2873.T31	157.6732	0000.0	0110.0	0110.0		0110.0	0110.0		-90007.8 400	7121.0	8441.0	0.0159	9894686 +006	General Light Industry
		//۸د	TM							s/yr	enot					KB⊥∩∖λι	esU bnsJ
COSe	NZO	CH⊄	Total CO2	NBio- COS	Bio- CO2	8.2M9 IstoT	tsuadx∃ 3.2Mq	Fugitive 5.2Mq	01M9 lstoT	Exhaust PM10	Fugitive 01Mq	70S	00	XON	ROG	NaturalGa esU s	

**Unmitigated** 5.3 Energy by Land Use - Electricity

370.2933	3.4500e-	7910.0	368.8480		IstoT
370.2933	-900 <del>6</del> - 003	7910.0	08 <del>1</del> 8.89£	96792.1 900+	General Light Industry
	\yr	TM		κ <sub>Μ</sub> μλι	esU bnsJ
COSe	NSO	CH⊄	Total CO2	Electricity Use	

#### 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
General Light Industry	1.2679e +006	368.8480	0.0167	3.4500e- 003	370.2933
Total		368.8480	0.0167	3.4500e- 003	370.2933

#### 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					ton	s/yr							MT	/yr		
Mitigated	0.6490	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003
Unmitigated	0.6490	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003

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#### 6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	СО	SO2	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					tor	is/yr							МТ	/yr		
Architectural Coating	0.0981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e- 004	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003
Total	0.6490	1.0000e- 005	1.3000e- 003	0.0000	J	0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003

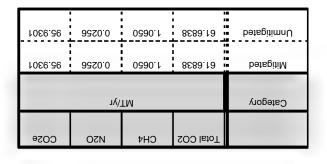
#### **Mitigated**

	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					ton	s/yr							МТ	/yr		
Consumer Products	0.5508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e- 004	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003
Architectural Coating	0.0981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.6490	1.0000e- 005	1.3000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5200e- 003	2.5200e- 003	1.0000e- 005	0.0000	2.6900e- 003

#### 7.0 Water Detail

Date: 1/11/2018 2:26 PM

#### 7.1 Mitigation Measures Water



7.2 Water by Land Use Unmitigated

1086.39	9920.0	1.0650	8583.19		IstoT
1086.36	9920.0	ا .0650	8£83.13	\ 22.613.2 <i>E</i> 0	General Light Industry
1V/TM				Mgal	esU bnsJ
COZe	NZO	CH4	Total CO2	Indoor/Out door Use	

#### 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	32.6132 / 0	61.6838	1.0650	0.0256	95.9301
Total		61.6838	1.0650	0.0256	95.9301

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2 CH4		N2O	CO2e
	MT/yr			
ga.ea	35.4991	2.0979	0.0000	87.9474
	35.4991	2.0979	0.0000	87.9474

## 8.2 Waste by Land Use Unmitigated

<b>474</b> 6.78	0000.0	6760.S	35.4991		Total
4746.78	0000.0	6760.≤	166 <del>1</del> .35	į ,	General Light Industry
	//۸د	snot	esU basd		
COSe	NSO	CH₫	Total CO2	Waste Disposed	

#### <u>Mitigated</u>

<b>474</b> 6.78	0000.0	2.0979	1664.35		Total
₽ <b>₹</b> ₽6. <b>7</b> 8	0000.0	6760. <u>c</u>	1667.35		General Light Industry
	//۸د	snot	esU bnsJ		
CO2e	NSO	CH4	Total CO2	Waste Disposed	

#### 9.0 Operational Offroad

Enel Type	Load Factor	Horse Power	Days/Year	Honrs/Day	Number	Equipment Type

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#### 10.0 Vegetation

### **APPENDIX B BIOLOGICAL RESULTS**













City of Woodlake California **City of Woodlake Capital** Client: Project: Improvement Plan (CIP) **Project Observed Water Features Site Location:** Woodlake, CA Site Name: Photograph ID: 3 NE **Photo Location:** Woodlake, CA Direction: **Survey Date:** 9/28/2017 Comments: Catch basin and culvert 28 Sep 2017, 08:16 Photograph ID: 4 **S** NE ŝΕ **Photo Location:** Woodlake, CA **Direction: Survey Date:** 9/28/2017 Comments: Man-made aesthetic stream feature 28 Sep 2017, 08:33





Client: City of Woodlake California Project: City of Woodlake Capital

Improvement Plan (CIP)

**Project** 

Site Name: Observed Water Features Site Location: Woodlake, CA

Photograph ID: 5

Photo Location: Woodlake, CA

Direction:

**Survey Date:** 9/28/2017

Comments:

Small man made drainage canal



Photograph ID: 6

**Photo Location:** 

Woodlake, CA

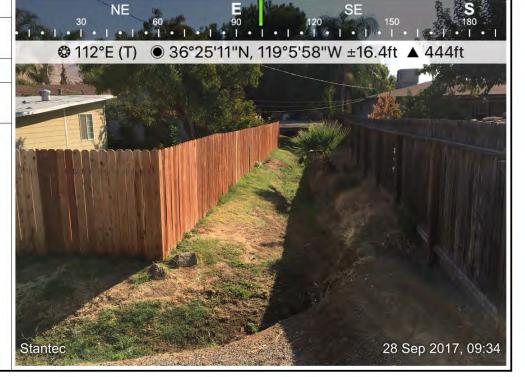
Direction:

**Survey Date:** 

9/28/2017

Comments:

Small man made drainage canal







Client: City of Woodlake California Project: City of Woodlake Capital Improvement Plan (CIP)

**Project** 

Site Name: Observed Water Features Site Location: Woodlake, CA

Photograph ID: 7
Photo Location:

Woodlake, CA

Direction:

**Survey Date:** 9/28/2017

Comments:

Small man made drainage canal



Photograph ID: 8
Photo Location:

Woodlake, CA

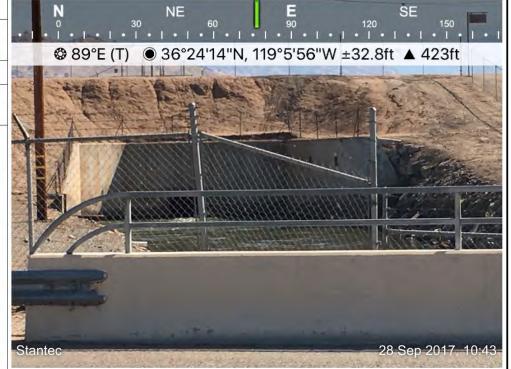
Direction:

Survey Date:

9/28/2017

Comments:

Wutchaumna canal







City of Woodlake California **City of Woodlake Capital** Client: Project: Improvement Plan (CIP) **Project Observed Water Features Site Location:** Woodlake, CA Site Name: Photograph ID: 9 **Photo Location:** Woodlake, CA @ 217°SW (T) ● 36°24'14"N, 119°5'56"W ±16.4ft ▲ 424ft Direction: **Survey Date:** 9/28/2017 Comments: Wutchaumna canal Stantec Photograph ID: 10 W SE SW **Photo Location:** Woodlake, CA Direction: **Survey Date:** 9/28/2017 Comments: Storage pond area 28 Sep 2017, 11:00 Stantec

# BEFORE THE CITY COUNCIL OF THE CITY OF WOODLAKE COUNTY OF TULARE STATE OF CALIFORNIA

In the matter of:

APPROVAL OF MITIGATED NEGATIVE	)	
DECLARATION FOR WOODLAKE SEWER	)	Resolution No. 18-38
IMPROVEMENTS PROJECT	)	

Councilmember G. Gonzalez Jr., offered the following resolution and moved its adoption. Approval of Mitigated Negative Declaration for the Woodlake Sewer Improvements project.

WHEREAS, the project will implement capacity improvements, as well as repair and replacement of aging sewer system assets, and

WHEREAS, the project will occur throughout the city, and

WHEREAS, a public meeting notice was published in the Foothill Sun Gazette prior to the Woodlake City Council meeting, and

WHEREAS, the City has determined that the "project" necessitated a Mitigated Negative Declaration and one has been prepared on the project, and

WHEREAS, the City Council held a public meeting on this matter, reviewed the staff report prepared on this proposed project and considered public input regarding the design of the project, and

NOW, THEREFORE, BE IT RESOLVED that the Woodlake City Council hereby approves a Mitigated Negative Declaration for the Woodlake Sewer Improvements Project.

The foregoing resolution was adopted upon a motion of Councilmember G. Gonzalez Jr., and seconded by Councilmember Ortiz, and carried by the following vote at the City Council meeting held on April 9, 2018.

AYES: Ortiz, G. Gonzalez Jr. & Martinez

NOES: ABSTAIN:.

ABSENT: Mendoza & Lopez

Frances Ortiz, Vice-Mayor

ATTEST:

Emmanuel Llamas, Acting City Cla

# DEFORE THE CITY COUNCIL OF THE CITY OF WOODLAKE COUNTY OF TULARE STATE OF CALIFORNIA

In the matter of:

APPROVE A CATEGORICAL EXEMPTION	)	Resolution No. 22-144
FOR THE CITY OF WOODLAKE EAST	)	
NARANJO BLVD. BEAUTIFICAITON		
AND CONNECTIVITY PROJECT	)	
AND AUTHORIZE THE CITY ADMINISTRATOR	)	
TO FILE A NOTICE OF EXEMPTION	)	

Councilmember Martinez, offered the following resolution and moved its adoption. Approve a Categorical Exemption for the City of Woodlake East Naranjo Beautification and Connectivity Project and authorize the City Administrator to file a Notice of Exemption.

WHEREAS, the City of Woodlake wishes upgrade trash facilities available, add public art and beatification elements, add curb, gutter and sidewalks to both sides of E Naranjo and build a Class1 bike lane via the Rose Garden and Botanical Garden and improve the Botanical Garden parking area; and

WHEREAS, the project will beautify east Naranjo, City Park, Botanical Garden, and increase pedestrian and bicycle safety along the corridor; and

WHEREAS, the Project as proposed by the City is classified under Title 14, Chapter 3, Article 19 of the California Code of Regulations as a Class 1 project as it consists of minor alterations to an existing highway, streets and pedestrian and bicycle facilities; and

WHEREAS, the improvements included in the project would reduce the exposure to existing bicycle and pedestrian safety hazards, reduce litter and beautify the City while having a negligible increase in vehicle traffic; and

WHEREAS, the Project meets the criteria for a Categorical Exemption under CEQA Guidelines Section 15301(c), which states, "Existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities (this includes road grading for the purpose of public safety, and other alterations such as the addition of bicycle facilities, including but not limited to bicycle parking, bicycle-share facilities and bicycle lanes....and other alterations that do not create additional automobile lanes)."

NOW, THEREFORE, THE CITY OF WOODLAKE DOES RESOLVE to approve a Categorical Exemption for the City of Woodlake East Naranjo Beautification and Connectivity Project and authorizes the City Administrator to file a Notice of Exemption.

The foregoing resolution was adopted upon a motion of Councilmember Martinez, and seconded by Councilmember Wallace, and carried by the following vote at the City Council meeting held on December 27, 2022.

AYES: Mendoza, Ortiz, Wallace, Martinez & Valero

THIRING THE

NOES:

ABSTAIN: ABSENT:

ATTEST:

Irene Zacapias, City Clerk

Rudy Mendoza, Mayo