DRAFT
INITIAL STUDY
MITIGATED NEGATIVE DECLARATION

for the

City of Oakdale
Wastewater River Crossing Replacement Project
Oakdale, CA

September 2019

Prepared for:

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Abbreviations and Acronyms

Abbreviations and Acronyms	
AB	Assembly Bill
amsl	above mean sea level
APN	Assessor's Parcel Number
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology (now California Geological Survey)
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CIA	Community Impact Assessment
City	City of Oakdale
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Stanislaus County
Corps	U.S. Army Corps of Engineers
CRHR	California Register of Historic Resources
CRLF	California Red-Legged Frog
CTS	California tiger salamander
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Federal Clean Water Act
DTSC	California Department of Toxic Substance Control
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Maps
FYLF	Foothill Yellow-legged frog
GGS	Giant garter snake
GHG	Greenhouse Gas
HCP	Habitat Conservation Plan
HDD	Horizontal direction drilling

Abbreviations and Acronyms	
HSC	California Health and Safety Code
MBTA	Migratory Bird Treaty Act
MID	Modesto Irrigation District
MM	Mitigation Measure
$MTCO_2e$	Metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NOA	Naturally Occurring Asbestos
NPDES	National Pollution Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
PRC	Public Resources Code
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCC	Species of Special Concern
SJKF	San Joaquin kit fox
SOIS	Secretary of the Interior Standards
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VELB	Valley elderberry longhorn beetle
WPT	Western pond turtle
WWTP	Wastewater treatment plant

INITIAL STUDY

DATE: April 3, 2019

OWNERS: See Table 1

APPLICANT: City of Oakdale

LOCATION: City of Oakdale Wastewater River Crossing Replacement Project (Oakdale River Crossing Project) will consist of a pipeline which will connect the City of Oakdale Wastewater Treatment Plant (WWTP) at 9700 Liberini Avenue on the north bank of the Stanislaus River southerly across the river to the south bank of the Stanislaus River in proximity to the intersection of River Avenue/North Oak Avenue and Kimball Street. The project is located in a portion of Section 10, T2S, R10E MDB&M in the City of Oakdale, Stanislaus County. Oakdale USGS 7.5' Quadrangle. The proposed sewerline crossing is at River Mile 40.25± approximately parallel to the existing above-water crossing (See **Figure 1**).

ASSESSOR'S PARCEL NOS: See Table 1

GENERAL PLAN/ ZONING: See Table 1

1.0 PROJECT AND SETTING

1.1 PROJECT DESCRIPTION, PURPOSE AND NEED

The City of Oakdale (City) is planning to replace an existing 18-inch sewer crossing suspended over the Stanislaus River (River) from the intersection of Oak Avenue and Kimball Street to the City Wastewater Treatment Plant (WWTP) located at 9700 Liberini Avenue. The existing sewer crossing was constructed in 1977 and is located above ground, supported by a utility bridge across the River. Two six-inch Modesto Irrigation District (MID) conduits, installed in 2003, also are supported on the bridge. The conduits provide electrical power for the WWTP. The 18-inch sewer conveys all of the wastewater from the City and is a critical asset. To improve the reliability and redundancy of the sewer system, a 3-barrel inverted siphon located below the River is proposed to replace the existing sewer crossing. The new pipeline will be approximately 0.30 linear mile approximately parallel to the existing pipeline.

Project components include:

- Re-routing of existing collection system trunk sewers to an inverted siphon structure.
- An inverted siphon structure located in the upper portion of an empty lot near the river and intersection of Oak Avenue and Kimball Street which will be the transition point to the multi-barrel inverted siphons crossing under the River.
- Valves and fittings on the downstream portion of the alignment to transition from three siphons to one pipe
- A connection to existing piping upstream of the existing WWTP flow meter.

The existing pipeline results in surcharging of the collection system and is hydraulically limited during peak flow conditions. The Project will increase the pipeline size to address this deficiency. The increased pipeline size will not increase system capacity but will allow for the existing WWTP to realize its existing design capacity through improved delivery.

Construction Methods

Horizontal direction drilling (HDD) will be used to install the 3-barrel inverted siphon under the river. HDD is a trenchless construction method whereby a pipeline or pipelines are installed along an arcing drill path; beginning and ending at the ground surface and passing under the obstacle (i.e., the river) in between. HDD generally consists of three stages. The first stage involves directionally drilling a small diameter pilot hole along the design directional path. During the second stage, the pilot hole is reamed to a diameter suitable for installing the pipeline(s). The third stage consists of pulling the pipeline back into the enlarged hole (referred to as pull back).

Drilling fluids are continuously pumped to the drilling tool during all phases of the installation process to transport drilled spoils, reduce friction, and stabilize the hole. Drilling fluids consist of a mixture of water, bentonite, and/or polymers. The generated soil cuttings are mixed with the injected drilling fluids to create a slurry that is removed from the bore using a drilling fluid induced pressure gradient.

An open cut portion of piping would be used from the end of the HDD operation to the connection point with existing piping.

Construction Schedule

Construction is expected to occur within a single construction season. Construction is expected to begin in approximately May 2020 with completion in March 2021.

1.2 PROJECT SETTING

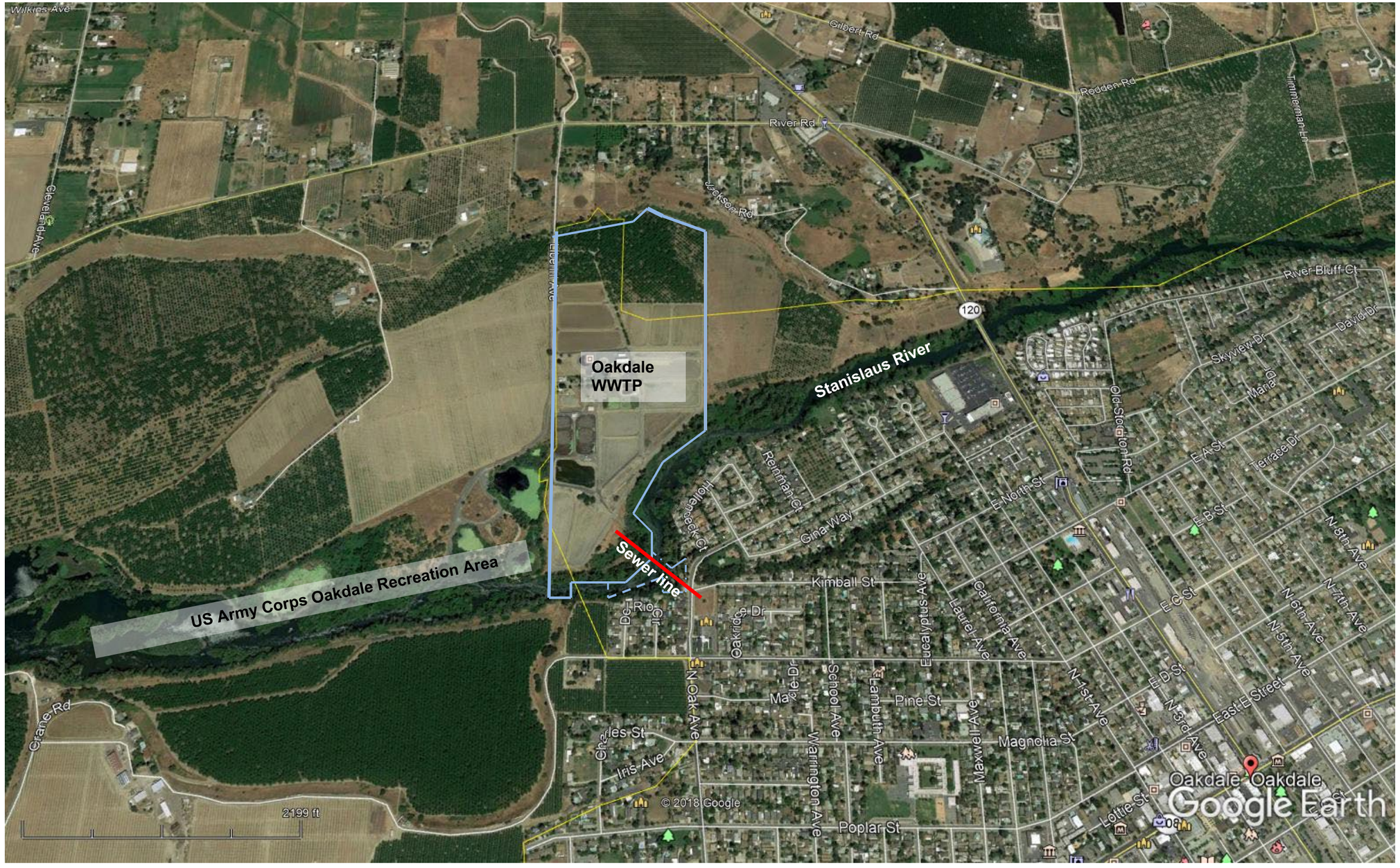
The WWTP on the north bank of the Stanislaus is located northwest of the City of Oakdale's urban center. It is surrounded by agricultural parcels (orchards) to the north, east and west, with a portion of the U.S. Army Corps of Engineers Stanislaus River Park system adjacent to the site to the southwest. The Stanislaus River forms the approximately southern boundary of the WWTP, although portions of the City's WWTP parcel extends across the river to the south bank of the river. Table 1 lists the parcels surrounding the south and southeast portion of the Project, their zoning and general plan land use designations. Existing land uses within and adjacent to the Project are shown in Figure 1

Elevations within the Project footprint range between 110± feet and 150± feet above mean sea level (amsl).

Table 1: Parcels, Zoning, General Plan

Assessor's Parcel Number	Owner	Zoning	General Plan
006-110-042	City of Oakdale	Limited Industrial (LM)	Public Semi-Public (PSP)
063-004-041	City of Oakdale	Public Semi-Public (PSP)	Public Semi-Public (PSP)
006-110-053	USA	Not assigned	Open Space (OS)
063-004-038	7th Day Adventist Church CCC	Single-family residential (R-1)	Very Low Density Residential (VLDR)
063-004-036	Wilene J & Edward Schofield	Single-family residential (R-1)	Very Low Density Residential (VLDR)

Figure 1 Project Setting



1.3 PUBLIC RESOURCE CODE SECTION 21080.3.1 CONSULTATION

Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process for California tribes as part of CEQA. Under AB 52, tribes requesting formal consultation from the Lead Agency are notified of the project prior to the preparing the CEQA document. The results of that consultation are summarized in Section 2.17. The following tribes were notified and commented: California Valley Miwok, Southern Sierra Miwuk Nation, and Calaveras Band of Mi-Wuk.

1.4 CEQA PROCESS

This document has been prepared to satisfy the requirements of CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before they approve or implement those projects.

The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. In the case of the proposed Project, the City of Oakdale is the lead agency and will use the Initial Study to determine whether the proposed Project has a significant effect on the environment.

If the lead agency finds substantial evidence that any aspect of the proposed Project, either alone or in combination with other projects, may have a significant effect on the environment, that agency is required to prepare an Environmental Impact Report (EIR), a supplement to a previously prepared EIR, or a subsequent EIR to analyze the proposed Project at hand. If the agency finds no substantial evidence that the proposed Project or any of its aspects may cause a significant impact on the environment, a negative declaration may be prepared. If, over the course of the analysis, the proposed Project is found to have a significant impact on the environment that, with specific mitigation measures, can be reduced to a less-than-significant level, a supplemental mitigated negative declaration may be prepared. In the case of this proposed Project, all significant or potentially significant impacts on the environment would be reduced to less-than-significant levels with incorporation of specific mitigation measures. Therefore, this document is a mitigated negative declaration.

1.5 INCORPORATION BY REFERENCE

The following studies applicable to the proposed Project are hereby incorporated by reference. Copies of these studies, unless identified as confidential, may be viewed at the City of Oakdale Public Works Department located at 455 South Fifth Avenue, Oakdale, CA 95361 during regular business hours.

Patrick, Ian with contributions from Judith Marvin. Patrick GIS Group, Inc. March 2018. *Draft Oakdale Wastewater Treatment Plant River Crossing Alignment Project, Stanislaus County California*.

Shijo, Wayne. KD Anderson & Associates, Inc. Transportation Engineers. June 2018. *Oakdale River Crossing Project Air Quality Analysis*.

1.6 OTHER PUBLIC AGENCY APPROVALS

Other public agency approvals that may be required for the Project are summarized in the following table.

Table 2: Other Public Agency Approvals or Reviews that May be Required

Permitting Agency	Permit
City of Oakdale	Road Encroachment Permit
US Army Corps of Engineers	Encroachment Permit, Section 404
California State Lands Commission	General Lease
Central Valley Flood Protection Board	Encroachment Permit
Stanislaus County Air Pollution Control District	Regulation VIII Fugitive PM10 Prohibitions Construction Notification Form
California Regional Water Quality Control Board	Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit [California's National Pollutant Discharge Elimination System (NPDES) General Permit; Section 401
California Department of Fish and Wildlife	Streambed Alteration Agreement
All other applicable local, state and federal permits required by law.	

2.0 ENVIRONMENTAL EVALUATION

TERMINOLOGY DEFINITIONS: The following terminology is used in this environmental analysis to describe the level of significance of potential impacts to each resource area:

- ***Potentially Significant Impact.*** This term applies to adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared consistent with the California Environmental Quality Act (CEQA).

- ***Less-than-Significant Impact with Mitigation.*** This term applies to adverse environmental consequences that have the potential to be significant but can be reduced to less-than- significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed Project.

- ***Less-than-Significant Impact.*** This term applies to potentially adverse environmental consequences that do not meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.

- ***No Impact.*** This term means no adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklists and report on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	X	Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology /Soils
X	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	X	Hydrology / Water Quality
☐	Land Use / Planning	☐	Mineral Resources	X	Noise
☐	Population / Housing	☐	Public Services	☐	Recreation
☐	Transportation / Traffic	☐	Tribal Cultural Resources	X	Utilities/Service Systems
X	Mandatory Findings of Significance				

DETERMINATION:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent and a MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

City of Oakdale Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a)Earlier Analysis Used. Identify and state where they are available for review.
    b)Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c)Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

2.1 AESTHETICS

I. AESTHETICS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

2.1.1 Background and Setting

The Project involves installing a sewer line underground, beneath the Stanislaus River. The pipe will "daylight" to the north at the wastewater treatment plant which is not visible from either a public easement or from the river. The southerly end of the pipeline will connect to the existing sewer lines at an inverted siphon structure. The inverted siphon structure will be underground, with the top of the structure level with the surrounding grade.

2.1.2 Analysis

a. Have a substantial adverse effect on a scenic vista?

No Impact. Due to the nature of the project, an underground sewerline, no scenic vistas will be impacted.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project is not located near or adjacent to a state scenic highway. Therefore, no substantial adverse impacts to scenic resources within a state scenic highway are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The sewer line will be underground and, therefore, out of sight. No impacts to the existing visual character or quality of the area is anticipated. The underground pipeline will

not be visible from the river or public easements. Similarly, the underground sewer line will not require lighting for operations. Therefore, no new lighting will occur in conjunction with the Project and no impacts to day or nighttime views related to substantial light or glare are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.2 AGRICULTURE AND FORESTRY RESOURCES

II. Agriculture and Forestry Resources: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

2.2.1 Background and Setting

The project involves installing an underground sewer line from an existing publicly owned and operated wastewater treatment facility beneath the Stanislaus River to a vacant grassy lot adjacent to a church in proximity to single-family residences.

Surrounding land uses and agricultural ratings on county lands abutting the City-owned WWTP are:

Direction	Zoning	General Plan	Farmland Rating/a/
North, West	General Agriculture, 40 acre minimum	Agriculture (AG)	Prime
Northwest corner	Rural Residential	Estate (EST)	Rural residential
East	General Agriculture, ten acre minimum (General AG 10-acre)	Agriculture (AG)	Grazing land

Direction	Zoning	General Plan	Farmland Rating/a/
Southwest corner	General Agriculture, ten acre minimum	Urban Transition (UT)	Grazing land
South, Southeast	Oakdale City Limits	See **Table 1**	Urban and Built Up

/a/ California Department of Conservation Farmland Mapping & Monitoring Program Maps Important Farmland Mapping (2016)

2.2.2 Analysis

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?

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?

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?

No Impact.
Although prime agricultural land exists to the north and west of the WWTP, none of the agricultural land will be disturbed or altered by the proposed pipeline which is located in the southern portion of the WWTP parcel. No agricultural land is located within the proposed sewer line route. The Project increases the capacity of the River crossing to address existing deficiencies and will not be directly inducing growth. Therefore, no direct impacts to important agricultural lands will occur.

No timber production lands exist on or adjacent to the proposed Project. Therefore, no conversion of forest land or agricultural lands to an alternative use is anticipated and no impact will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.3 AIR QUALITY

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 substantially to an existing or projected air quality violation?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

2.3.1 Background and Setting

An air quality analysis, previously incorporated by reference, was prepared for the project as follows (hereinafter, Air Quality Study):

Shijo, Wayne. KD Anderson & Associates, Inc. Transportation Engineers. June 22, 2018. *Oakdale River Crossing Project Air Quality Analysis*.

The existing pipeline results in surcharging of the collection system and is hydraulically limited during peak flow conditions. The Project will increase the pipeline size to address this deficiency. The increased pipeline size will not increase system capacity but will allow for the existing WWTP to realize its existing design capacity through improved delivery. Once constructed, the Project will not use equipment that increases air pollutant emissions. Therefore, the project is not expected to result in a change in long-term operational air pollutant emissions and the Air Quality Study focuses on short-term construction related impacts.

Ozone Precursor, Particular Matter and Carbon Monoxide Emissions

To evaluate the significance of pollutant emissions impacts, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has established significance thresholds for emissions of ozone precursors reactive organic gas (ROG) and NO_x, PM_{10}, $PM_{2.5}$, sulfur oxides (SO_x) and carbon monoxide (CO) (http://www.valleyair.org/transportation/ceqa_idx.htm). These types of emissions are referred to as “criteria” pollutants. Significance thresholds used in this report are from the SJVAPCD.

The SJVAPCD significance thresholds used in this report in the evaluation of criteria pollutant impacts associated with the proposed project are:

- 100 tons per year (tpy) of CO,
- 10 tpy of NO_x,
- 10 tpy of ROG,
- 27 tpy of SO_x,
- 15 tpy of PM_{10}, and
- 15 tpy of $PM_{2.5}$.

If the proposed project's criteria pollutant emissions exceed the above pollutant thresholds, the project will be considered to have a significant effect on air quality.

Methodology – Criteria Pollutants

The following describes methods used to assess project-related air quality impacts.

The Road Construction Emissions Model was used to quantify criteria pollutant and GHG emissions associated with the Oakdale River Crossing Project. The Road Construction Emissions Model is a spreadsheet-based model specifically designed to estimate criteria pollutant and GHG emissions associated with construction of roadway facilities and other linear projects. The model uses basic project information (e.g., total construction months, project type, total project area) to quantify exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips, as well as fugitive particulate matter dust. Additional information on the Road Construction Emissions Model is available at the Sacramento Metropolitan Air Quality Management District internet website (Sacramento Metropolitan Air Quality Management District 2019). Output reports from the Road Construction Emissions Model are available upon request.

Naturally Occurring Asbestos (NOA)

Naturally occurring asbestos has been identified as a toxic air contaminant (TAC) by the ARB. No quantitative significance thresholds have been set for NOA. However, the California Department of Conservation internet website provides a map that may be used as a screening- level indicator of the likelihood of NOA being present on the Proposed Project site (http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/Index.aspx). The map, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* (California Department of Conservation 2000) shows the locations considered to be subject to elevated risk of containing NOA.

If a project site is located outside of areas considered to be subject to elevated risk of containing NOA, it may be considered to have a relatively lower probability of containing NOA and, in this report, will be considered to have a less-than-significant impact. If a project site is located within an area considered to be subject to elevated risk of containing NOA, it may be considered to have an elevated probability of containing NOA and, in this report, will be considered to have a significant impact. Implementation of mitigation measures to reduce asbestos emissions during construction activities will be considered to reduce the impact to a less-than-significant level.

2.3.2 Analysis

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

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.
The following describes the results of the air quality analysis and the significance of air quality impacts of the Oakdale River Crossing Project pursuant to the thresholds established by the SJVAPCD.

Criteria Pollutant Emissions
Construction of the proposed project would result in the generation of criteria pollutant emissions. During the construction period, project-related construction activity would generate:

- 0.61 tpy of CO,
- 0.67 tpy of NO_x,
- 0.08 tpy of ROG,
- less than 0.01 tpy of SO_x,
- 0.28 tpy of PM_{10}, and
- 0.08 tpy of $PM_{2.5}$.

None of the above values would exceed the SJVAPCD significance thresholds. Therefore, this impact is considered less than significant, and no mitigation measures are required.

As noted in the *Project Description* section of this report, the Oakdale River Crossing Project would not result in a long-term change in system capacity. As a result, the project would not result in a change in long-term operational criteria pollutant emission. This impact is considered less than significant and no mitigation measures are required.

Naturally Occurring Asbestos (NOA)
The map, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* shows areas more likely to contain NOA. Soil-disturbing construction activity in these areas would result in an elevated risk of entraining NOA. The asbestos map shows the project site is located approximately 20 miles away from the nearest area considered more likely to contain NOA – in the area near State Route 108 and O'Byrnes Ferry Road.

Because of the distance between the project site and the nearest area considered more likely to contain NOA, this impact is considered less than significant. No mitigation measures are required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant with Mitigation Incorporated.

One of the most important reasons for air quality standards is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed "sensitive receptors." The term refers to specific population groups, as well as the land uses where individuals would reside for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Residential dwellings, schools, parks, playgrounds, childcare centers, convalescent homes, and hospitals are examples of sensitive land uses.

Land uses at the north side of the river includes only the Wastewater Treatment Plant which is not considered a sensitive receptor. On the south side of the river, the project, during construction, will expose residents and an adjacent church to air emissions including dust and equipment emissions during construction activities, a potentially significant impact.

The following mitigation measures are included to minimize the potential for exposing these sensitive receptors to construction dust and equipment emissions.

Mitigation Measure AQ-1: Dust Control

Throughout project construction, site clearing, grading and associated activities, the Construction Contractor shall be responsible for dust abatement including:

A. A water truck or other watering device shall be on the construction site on all working days when natural precipitation does not provide adequate moisture for complete dust control. Said watering device shall be used to spray water on the site at the end of each day and at all other intervals, as need dictates, to control dust. All activities shall be effectively controlled of fugitive dust emissions using application of water.

B. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard.

C. All land clearing, grading, earth moving, or excavation activities at the Project site shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.

D. All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance and visible dust plumes.

E. Vehicular traffic speeds on unpaved surfaces shall not exceed 10 miles per hour.

Mitigation Monitoring AQ-1: The required mitigation measure will be implemented throughout Project construction. The measure is the responsibility of the construction contractor.

Mitigation Measure AQ-2: Equipment Emissions

Throughout Project construction:

A. Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations (CCR) Title 17, Section 93114 (Compliance with Caltrans' Standard Specifications, Section 14-9).
B. On-site idling of construction equipment shall be minimized (no more than five minutes maximum);
C. Grid (electrical) power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction. Alternatively, biodiesel shall be used as an alternative fuel diesel for at least 15 percent of the construction vehicles/equipment used if there is a biodiesel station within five miles of the Project site and if the construction vehicles/equipment are able to use biodiesel without adverse effects.

Mitigation Monitoring AQ-2: The required mitigation measure will be implemented throughout Project construction. The measure is the responsibility of the construction contractor.

Mitigation Measure AQ-3 Open Burning
If any minor vegetation clearing or grubbing activities are necessary to remove non-natives; alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by the SJVAPCD. Suitable alternatives include chipping, mulching, or conversion to biomass fuel.

Mitigation Monitoring AQ-3: The required mitigation measure will be implemented during clearing and grubbing. The measure is the responsibility of the construction contractor.

Proper implementation of the preceding measures will reduce the potential impact to a level of less-than-significant.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant with Mitigation Incorporated.
The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines may be considered offensive to some individuals. Odors would be temporary (construction-related only) and would disperse with distance from the source. However, given the proximity of residences and a church, construction-generated odors could result in a temporary significant impact. Therefore, the following mitigation measure (described in the preceding section) is proposed.

Mitigation Measure AQ-2: Equipment Emissions

Proper implementation of the preceding measure will reduce the potential impact to a level of less-than-significant.

2.4 BIOLOGICAL RESOURCES

IV. BIOLOGICAL RESOURCES: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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 US Fish and Wildlife Service?	☐	☒	☐	☐
c) 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?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

2.4.1 Background and Setting

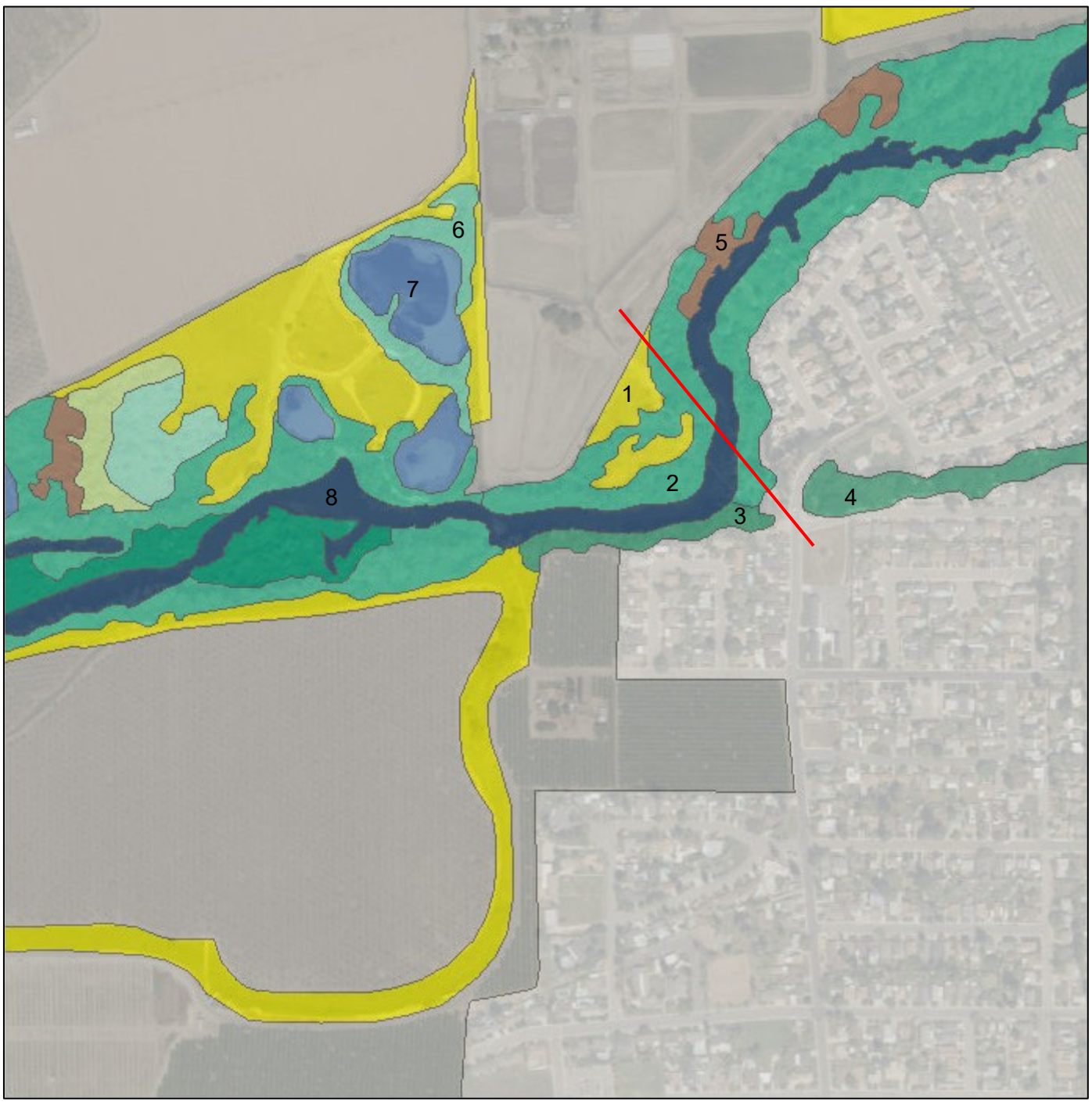
Natural resources were identified through a review of databases and species lists from the United States Fish and Wildlife Service (USFWS), California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) and CalFlora databases (December 1, 2018). **Attachment A** lists the potential for all species identified in these databases and lists to occur on site. All state and/or federally listed species identified are addressed and those with potential to occur within the biological study area (BSA) are analyzed in the following.

Site surveys were conducted by foot on the following dates: December 22, 2017, January 10, 2018, and March 17, 2018 by Amy Augustine, Augustine Planning Associates, Inc. On March 17, 2018, Monk & Associates, Inc. biologists Sarah Lynch and Christina Owens surveyed the site to characterize plant communities and assist with assessing regulatory permitting needs. **Attachment B** identifies the species encountered during field surveys.

All structures within 300 feet of the Project staging areas were surveyed for nests, whitewash, and droppings. All accessible tree cavities and burrows were investigated for signs of use. All wastewater treatment plant ponds and the pond in the adjacent park system were surveyed for birds, turtles and other aquatic species. Trees along the Stanislaus River were surveyed for nests (whether currently active or with potential to become active). All elderberry shrubs were surveyed for exit holes. Surveys were conducted using Canon Image Stabilizer 10 X 30 binoculars, Nikon D3300 digital camera (18- 55mm and 70-300mm lens), and standard field and collection supplies.

On-site vegetation is identified in **Figure 2**.

Figure 2: Project Vegetation



Source: cnddb_com. Printed from http://bios.dfg.ca.gov

Key:

1 - Mediterranean California naturalized annual and perennial grasslands

2 - *Populus fremontii* Alliance

3 - *Quercus lobata* Alliance

4 - *Quercus wislizeni* Alliance

5 - *Rubus armeniacus* - *Sesbania punicea* - *Ficus carica* semi-natural alliance

6 - *Salix gooddingii* Alliance

7 - *Lemna minor* and Relatives

8 -Open Water

——— Proposed underground sewer line

2.4.2 Analysis

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

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 with Mitigation Incorporated.

A. Listed/Candidate Species Unlikely to be Present

The following State and/or Federally Listed Species were determined *Unlikely to be Present:*

San Joaquin kit fox (*Vulpes macrotis mutica*) - SJKF

The SJKF is a federally listed endangered and California listed threatened species. The species lives in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub. Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance represent suitable habitats for kit foxes. Some agricultural areas may support these foxes. The BSA is outside (north of) the normal range of the species which is concentrated more than 20 miles southwest of the project site. No suitable den areas are present within the BSA. The nearest CNDDB record for the species is an isolated record occurring 22± miles southeast of the BSA. Due to the BSA's high level of human disturbance, residential development to the south, lack of suitable vegetation to the north, and lack of occurrence records and niche elements in the BSA, the species is not expected to occur within the BSA.

California red-legged frog (*Rana draytonii*)

The species is federally listed as threatened and is a California Department of Fish and Wildlife Species of Special Concern.

The species prefers quiet pools of streams, marshes, and occasionally ponds. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. The nearest CNDDB record for the species is in Calaveras County 30 miles north of the BSA. The WWTP does not provide suitable habitat for the species. Flows in the Stanislaus River are considered too swift to allow for successful egg-laying. The species has not been detected in slow-moving waters in the adjacent park system. The species was not detected during surveys. Based on the lack of records for the species, the lack of appropriate habitat, the species is not expected to occur within the BSA.

California tiger salamander (*Abystoma californiense*) - CTS

CTS is state and federally listed as threatened. The CTS is most commonly found in annual grassland habitat, but also occurs in the grassy understory of valley-foothill hardwood habitats, and uncommonly along stream courses in valley-foothill riparian habitats. Seasonal ponds or vernal pools are crucial for breeding. Permanent ponds or reservoirs are sometimes used as well. Adults spend most of the year in subterranean refugia, especially burrows of California ground squirrels. The nearest CNDDB record for the species is within one mile of the project site (dating to 1927 and 1975), but the species is considered to have

been extirpated from the site—likely due to urban development. Additional CNDDB records occur within 2 miles northeast of the site in grasslands.

The BSA lacks the grassland/pond/vernal pool combinations generally associated with CTS. Paved and graveled roadways on site further reduce the likelihood of CTS occurrence on site. CTS were not identified during site surveys. Suitable habitat occurs outside the project construction boundaries in association with the adjacent uplands at the park/wilderness area. However, the adjacent WWTP in the north and residential neighborhoods south of the river where construction will occur do not provide suitable habitat for the species. Therefore, no potential impacts to the species are anticipated because it is unlikely to inhabit the project construction areas.

Giant garter snake (*Thamnophis gigas)* - GGS

GGS is listed as federally threatened. The snake is primarily associated with marshes and sloughs, less with slow-moving creeks, and absent from larger rivers. It is active from mid-March until October. The nearest CNDDB record for this species is 15± miles northwest of the BSA. There are no marshes or sloughs within the BSA. The Stanislaus River is considered to be too swift to support the species. Therefore, the species is not expected to occur in the BSA due to lack of suitable habitat.

Vernal pool fairy shrimp (*Branchinecta lynchi)*

The vernal pool fairy shrimp if federally listed as threatened. It inhabits valley and foothill grasslands and vernal pools. The species prefers small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. The nearest CNDDB occurrence is 6.2± miles south of the project site. The BSA lacks grasslands and vernal pools suitable for the species. Therefore, it is unlikely to occur.

Vernal pool tadpole shrimp (*Lepidurus packardi)*

The vernal pool tadpole shrimp is federally listed as endangered. The species inhabits valley and foothill grasslands and vernal pools. The species prefers pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid. The nearest CNDDB occurrence record is less than one mile north of the project site. The BSA lacks grasslands and vernal pools/swales suitable for the species. Therefore, it is unlikely to occur.

Tricolored blackbird (*Agelaius tricolor)*

The tricolored blackbird is a proposed California endangered species and petitioned federal endangered species. It is a California Department of Fish and Wildlife Species of Special Concern, U.S. bureau of Land Management Sensitive Species and USFWS Bird Species of Conservation Concern. The species is a colonial, requires open water, protected nesting substrate and foraging area with insect prey within a few kilometers of the colony. The nearest CNDDB record is approximately 2.8 miles south of the site. Nesting substrate exists on the ponds adjacent to the project site, however, potential foraging habitat adjacent to the pond is lacking. No evidence of occupation was found during biological surveys. Therefore, it is unlikely that this species occupies the site.

B. Listed/Candidate and Special Status Species Present or Potentially Present

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) - VELB

The species is federally listed as threatened. It occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*) generally in association with riparian scrub. The insect prefers to lay eggs in elderberries 2-8 inches in diameter with some preference shown for "stressed" elderberries. Elderberry shrubs occur within the BSA at and adjacent to the WWTP. The shrubs are located outside of staging and construction areas. Direct impacts to elderberry shrubs will not occur. Of the shrubs identified, all are more than 100 feet from the proposed construction area with the exception of an elderberry shrub located 21± feet from the project staging area at the WWTP separated from the proposed staging area by a chain-link fence and perimeter roadway. The shrub did not have exit holes and stems were primarily green and not hard/woody. **Figure 3** identifies the location of the elderberry shrub within 100 feet of the proposed construction/staging area.

Figure 3: Elderberry Shrub Location

Although impacts to the shrub are not anticipated, given that the elderberry provides potential habitat for VELB, construction in the vicinity could result in a potentially significant adverse impact. The following mitigation is proposed to avoid that impact:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Construction bid packages and contractual requirements shall include a requirement for tail-gate training by the project's designated qualified biologist and cultural resource professionals. All contractors involved in site development, affected City Staff and environmental specialists will attend a mandatory Environmental Awareness Training prior to any site disturbances. The program will address proper implementation of minimization and avoidance measures contained herein including, but not limited to:

- VELB avoidance
- Turtle conservation
- Nesting birds
- Bat conservation
- Avoiding inadvertent animal trapping
- Site maintenance
- Controlling invasive species
- Construction windows
- Handling leaks and spills
- Fencing environmentally sensitive areas
- Native Oak Tree Protection measures (avoiding driplines, no equipment or materials storage in driplines, avoid cutting oak roots, avoid equipment damage to limbs, trunks, and roots of oaks trees; do not attach signs, ropes, cables or other items to trees)
- Cultural resources training to inform construction personnel of the types of cultural resources they may encounter, the laws protecting those resources, and the standard protocols to be implemented.
- Hazardous materials response

Mitigation Monitoring BIO-1/CULT-1: The required mitigation measure will be incorporated into the project bid package and contract and implemented throughout project construction. The City shall have the authority to stop work or remove any construction worker on site that has not completed training. The measure is the responsibility of the construction contractor.

Avoidance and Minimization Measure BIO-2 Valley elderberry longhorn beetle Protection

The following applies to the elderberry shrub located within 100 feet of the active construction area on the north (WWTP) side of the project.

1. All ground disturbance within 100 feet of the driplines of elderberry shrubs shall occur outside the flight period for VELB (March 15th to June 15th).

    a. Prior to ground disturbance, erect brightly colored temporary fencing (e.g., safety fencing): Along the boundary of the buffer area designated for elderberry shrub protection (20 feet from the dripline of the shrub)

b. Temporary fencing shall be maintained throughout project construction and restoration activities.

2. Throughout construction activities:

a. No dumping of trash or other material may occur within 20 feet of elderberry shrubs. Any trash or other foreign material found deposited within this buffer area shall be removed within 10 working days of discovery.
b. No insecticides, no herbicides, no fertilizers or other chemicals shall be used that might harm the beetle or its host plant shall be used within 100 feet of any elderberry bush.

Mitigation Measure BIO-2 shall not apply if VELB is delisted pursuant to the federal endangered species act prior to (or during) project construction.

Proper implementation of the preceding measures is expected to minimize or avoid impacts to VELB to a level of less-than-significant.

Reptiles

Western pond turtle *(Emys marmorata) - WPT*

The WPT is a U.S. Forest Service Sensitive species and a Priority 3 CDFW Species of Special Concern. It is also a U.S. BLM Sensitive Species in the southern portion of its range and has been petitioned for listing under the federal endangered species act (where it remains under review since 2015). The species is not listed pursuant to either the state or federal endangered species acts. The species is not a fully protected animal pursuant to Fish and Game Code Sections 3511, 4700, 5050 and 5515. No WPTs were identified during surveys in the BSA.

WPTs occur in a broad range of habitats include flowing streams, permanent lakes, ponds, reservoirs, settling ponds, marshes and other wetlands. The species may remain active year-round; however, this tends to occur only in the southern part of its range. WPTs require upland habitat suitable for nesting and overwintering. The species can persist, at least over moderate periods of time, in modified habitats with high human traffic (i.e. wastewater treatment ponds).

Western pond turtles mate throughout the spring, summer, and fall. Nesting usually occurs in the spring or early summer normally within 300 feet of water, but may be located up to 1500 feet from water. Eggs hatch in the fall in the northern range and hatchlings often remain in the nest through the first winter. Soils for nesting must be loose enough to allow for excavation with disturbances infrequent enough to avoid nest disturbance. (Thomson, 2016).

No WTPs were identified during surveys. Surveys conducted in late March 2018 occurred during warm weather when WTPs would have been expected to be active. None were identified. The nearest CNDDB record for the species is 2.5± miles northeast of the project area in a man-made lake and man-made pond. Because suitable habitat exists for the species within the BSA (the WWTP ponds and Stanislaus River riparian habitat with sandy banks), the potential exists for the species to be present in the BSA staging areas and along ingress and egress routs to the construction area (although the species is unlikely to occur in the proposed areas of disturbance).

To ensure that no turtles are nesting near the proposed construction or staging areas or access roads to those areas, the following minimization and avoidance measures are included:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-3: Preconstruction Survey/Relocation for Western Pond Turtles

Within 48 hours of commencing site disturbances, the City, or its representative, shall have a qualified biologist survey for and, if present, relocate any non-nesting western pond turtles from the project site. If found on site in locations where harm to the turtle may occur from project activities, the turtle first will be given the opportunity to leave the site on its own if the turtle actively is in the process of attempting to leave the site and is likely to successfully do so within the hour in the opinion of the qualified biologist. Otherwise, the qualified biologist will relocate the turtle outside the work area to habitat upstream (if located near the river) or to the adjacent wildland park pond off-site (if found in on-site WWTP ponds). [California Code of Regulations, Title 14, Division 1, Chapter 5, Subsection 40(b)][1].

Proper implementation of the preceding is expected to minimize or avoid impacts to the species to a level of less than significant.

Fisheries

Delta smelt (*Hypomesus transpacificus*)

Delta smelt are federally listed as threatened pursuant to the federal endangered species act and endangered pursuant to the state endangered species act. They occupy rivers and tributaries of the Sacramento-San Joaquin Delta. No CNDDB records for the species are found in Stanislaus County. However, due to their existence within the Sacramento-San Joaquin Delta system, the species is considered potentially present in the BSA, a tributary of the Sacramento-San Joaquin Delta system.

Steelhead – Central Valley Distinct Population Segment - DPS (*Oncorhynchus mykiss iridueus pop. 11*)

Steelhead trout are a unique species. Individuals develop differently depending on their environment. All steelhead trout hatch in gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Some stay in fresh water all their lives and are called rainbow trout. Steelhead trout that migrate to the ocean typically grow larger than the ones that stay in freshwater. They then return to freshwater to spawn. Unlike Pacific salmon, steelhead do not necessarily die after spawning and may return to spawn multiple years. Steelhead post-spawning survival rates vary considerably between populations but are generally quite low. Most California steelhead spawn from December through April. The Central Valley DPS steelhead are federally listed as threatened pursuant to the federal endangered species act. The species occupies flowing

[1] Pursuant to California Fish and Game Code Title 14, Subsection 40(b) the capture, temporary collection, or temporary possession of native amphibians done to avoid mortality or injury in connection with lawful activities is permitted and such live capture and release of native amphibians done to avoid death or injury may occur with the permission of the CDFW. Because WPTs are not listed species pursuant to the state or federal endangered species act, neither an incidental take permit nor consultation beyond securing permission from CDFW to capture and release the individuals, is required.

waters of the Sacramento/San Joaquin Rivers including the Stanislaus River as it flows through Oakdale from the Goodwin Dam.

Central Valley Chinook salmon (*Oncorhynchus tshawytscha*)
Central Valley Chinook salmon Evolutionary Significant Units (ESU) includes fall-run and late fall-run salmon on the Stanislaus River. This ESU is considered a National Marine Fisheries species of concern and a candidate for listing as Threatened under the federal endangered species act. The species spawns in the Stanislaus River as it flows through Oakdale from the Goodwin Dam.

Hardhead (*Mylopharodon conocephalus*)
The hardhead is a CDFW Species of Special Concern and United States Forest Service Sensitive species. Hardhead are often found at low to mid-elevations in relatively undisturbed habitats of larger streams (including rivers). Hardhead spawn in the spring, mainly in April and May. A CNDDB record for the species occurs within the Stanislaus River within the BSA. Therefore, the species is expected to occur within the BSA.

Evaluation of impacts to fisheries
In-stream work is not proposed. Horizontal direction drilling (HDD) will be used to install the pipelines under the river floor ranging from approximately 15-50 feet below the river bottom. HDD construction begins with directionally drilling a small diameter pilot hole, then reaming the pilot hole to a diameter suitable for installing the pipelines. Then the pipeline is pulled back into the enlarged hole (i.e., pull back). The potential impacts to fisheries associated with noise and/or vibrations from this process are uncertain.

Resource agencies typically set in-water work windows to avoid or minimize the effects of construction on fish species. The in-water work windows represent the periods with the least potential for a species, or a particular life history stage of a species, to be present in areas that might be affected by a project. Common work windows in California relate to the migratory patterns of salmon, steelhead, and other migratory species. Although the specific timing can vary by location, species, and life stage of concern, in-water work windows for salmonids typically are outside the principal migration periods, which generally extend from October through June (Caltrans, *Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish* July 2015). Smolts typically migrate downstream in spring, and most adults migrate upstream in late summer to winter.

Therefore, as necessary to ensure that noise and vibrations associated with installing the underground and under-river pipeline will not impact salmon or steelhead spawning, the following mitigation measure, recommended by Caltrans, *Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish* (July 2015) and pursuant to consultations with USFWS[2], are proposed:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-4: Work Window for Fisheries
Project construction activities involving drilling, reaming, and pull-back will occur outside the critical spawning period for steelhead and salmon (i.e., work may occur June 1st through September 30th).

[2] J.D. Wickert – USFWS e-mail dated December 3, 2018

In addition to noise and vibrations, leaks or spills during construction could affect water quality. The HDD process involves pumping drilling fluids continuously to the drilling tool during all phases of the installation process to transport drilled spoils, reduce friction, and stabilize the hole. Drilling fluids consist of a mixture of water, bentonite, and/or polymers. The generated soil cuttings are mixed with the injected drilling fluids to create a slurry that is removed from the bore using a drilling fluid induced pressure gradient. The fluid does not meet the criteria of a hazardous waste, as defined by the USEPA. Bentonite is non-toxic and commonly used in farming practices, but it has the potential to impact plants, fish and their eggs if discharged to waterways in significant quantities. While leaks are not common, they could occur--a potentially significant adverse impact on water quality. Similarly, erosion from construction and staging areas could enter the river and adversely impact water quality Therefore, the following mitigation measures are proposed:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-5: Spills and Leaks
Prior to commencing construction, the contractor shall submit to the California Department of Fish and Wildlife and the City and gain approval of an HDD Inadvertent Return Assessment, Preparedness, Prevention and Contingency Plan (i.e., Emergency Response Fracture Plan) and maintain all necessary equipment on site to implement the plan throughout construction involving pipe installation.

Avoidance and Minimization Measure BIO-6: Install Barrier /Silt Fencing to Protect Water Quality
Prior to implementing staging, construction, or ground disturbing activities:

Install temporary silt fencing, fiber rolls, or equivalent erosion and sediment control devices along the southern boundary of the southern construction area (between the construction area and the river) and along the northern boundary of the construction area (between the construction area and the river) as necessary to protect water quality. Silt fencing or other materials, as required, will be installed consistent with the applicable water quality requirements specified in the Project's Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP). Fencing or other erosion control materials or devices shall be shown on the final construction documents. These areas will be monitored by the project manager throughout construction.

Avoidance and Minimization Measure BIO-7: Erosion Control Plan/Best Management Practices (BMPs) to Protect Water Quality (Including NOI/NPDES/SWPPP)

a) The Contractor shall prepare an Erosion Control Plan for implementation for any construction to take place between October 15 and May 15 of any year. In the absence of such an approved plan, all construction shall cease on or before October 15, except that necessary to implement erosion control measures. If necessary, the plan shall be submitted to the City for review and approval.

b) Submit to the State Water Resources Control Board Storm Water Permitting Unit, a Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit - California's National Pollution Discharge Elimination System (NPDES)

general permit for construction related storm water discharges for the disturbance of one acre or more. Disturbances of less than one acre may also require an NOI for coverage under the NPDES General Permit for construction-related storm water discharge and the State Water Resources Control Board Permitting Unit shall be contacted for determination of permit requirements. Commercial and Industrial developments may require an NOI even if less than one acre is to be disturbed. Obtain coverage or an exemption from these requirements. [Federal Water Pollution Control Act, Section 401, California Clean Water Act]. The permit may include preparation of a Stormwater Pollution Prevention Plan (SWPPP)

c) All necessary erosion and siltation controls will be in place during all construction activity associated with the proposed project. A Stormwater Pollution Prevention Plan (SWPPP) consistent with best management practices (BMPs) will be in place during the entire project to ensure that construction activities adjacent to the Stanislaus River will not result in sediment transport into the creek and thus, the stormdrain system. Erosion control measures including hay bales, wildlife-friendly hay wattles, and silt fencing will be installed between the work area and the river. No work will occur 24 hours before or 24 hours after a storm event. There will be no vehicle passage or operation, vehicle parking, or materials storage below top of bank (TOB), except as otherwise permitted by the resource agencies.

Proper implementation of the preceding is expected to minimize or avoid impacts to water quality and fisheries species to a level of less than significant.

Birds

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The migratory bird species protected by the Act are listed in 50 CFR 10.13. Most bird species are protected pursuant to the MBTA. Some birds have additional protections under state and federal laws.

The following USFWS bird species of conservation concern are identified in **Attachment A** as having the potential to occur within the project boundaries.

Nuttall's woodpecker

The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. It is a common, permanent resident of low-elevation riparian deciduous and oak habitats. This species was not identified during surveys; however, other species of woodpecker that often occur in similar habitat were identified during surveys. The site contains suitable habitat for the species.

Common yellowthroat *Geothylypis trichas-sinuosa*

The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. It mostly breeds and winters in wet meadow, fresh emergent wetland, and saline emergent wetland habitats; also breeds in valley foothill riparian, and occasionally in desert riparian, annual grassland, and perennial grassland habitats. The species was not identified during site surveys; however, valley foothill riparian habitat provides potential suitable habitat for the species.

Song sparrow *Melospiza melodia*
The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. It is a common resident of most of California. Prefers riparian, fresh or saline emergent wetland, and wet meadow habitats. Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation. In winter in much of northern California, it may be found far from water, in open habitats with thickets of shrubs or tall herbs. Usually avoids densely wooded habitats, except along forest edges. The species was not identified during surveys; however, the BSA contains suitable habitat for the species and it may be present.

Spotted towhee *Pipilo maculatus clementae*
The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. Spotted towhees are common residents throughout California except at high elevations in the Sierra Nevada and lowlands of southern deserts. They are found in chaparral and other shrub habitats and in open stands of riparian, hardwood, hardwood-conifer, and lower-elevation conifer habitats. The species occupies relatively tall, dense stands of shrubs and riparian thickets with accumulations of leaf litter and humus. The species was found at numerous locations within the project boundaries during surveys.

Oak titmouse *Baeolophus inornatus*
The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. It is a common resident in a variety of habitats, but is primarily associated with oaks and occurs in valley oak woodlands and valley foothill riparian habitats. The species' range encircles San Joaquin Valley onto the western slope of the Sierra Nevada. While not observed during surveys, the species is could occupy the BSA's oak woodlands.

Wrentit *Chamaea fasciata*
The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. A common, characteristic resident of California chaparral habitat, it also frequents shrub understory of coniferous habitats from the coast to lower regions of mountains throughout California. The species was not identified during site surveys, however shrub understory could support the species, although it is unlikely to breed in the BSA. The project site is located within the species' winter range and, therefore, has the potential to occur in the BSA.

Yellow-billed magpie *Pica nuttalli*
The species is a USFWS Bird Species of Conservation Concern. No CNDDB records for the species occur in the area. It is a common, yearlong resident of the Central Valley. Inhabits valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, orchard vineyard, cropland, pasture, and urban habitats. While not observed during surveys, the species has a high likelihood of occupying the BSA's croplands, riparian, orchard and urban habitats.

In addition to the special status bird species noted above, other bird species protected pursuant to the Migratory Bird Treaty Act could or do occur in the BSA (See **Attachment B** for species identified on site during surveys). To minimize or avoid potential disturbances to nesting and/or breeding bird species protected pursuant to the MBTA, the following is proposed:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-8: Preconstruction Surveys Birds
To avoid impacts to nesting birds and raptors, pre-construction nesting bird surveys for active nests of raptors and migratory birds within and in the vicinity of the project site will be conducted by a qualified biologist in accordance with CDFW guidelines within 15 days prior to the start of construction if construction (including equipment staging, site preparation, vegetation removal, grading, excavation and other project-related construction activities) commences during the nesting season (February 1st through August 31st). If no active nests are detected, construction activities may proceed. No trees will be removed except that the two oaks specifically identified herein may be trimmed.

If an active nest is located during pre-construction surveys, the construction activities shall be restricted as necessary to avoid disturbance of the nest until the nesting cycle is completed. Restrictions may include establishment of non-disturbance nest protection buffers around any active nest as prescribed by a qualified biologist. Typically, passerine buffers under all circumstances would be a minimum of 50 feet and raptor nests a minimum of 100 feet, but buffers could be substantially greater as determined by a qualified biologist. The buffer should be demarcated via the installation of orange construction fencing where the buffer intersects the project site. Disturbance within the buffer shall be postponed until it is determined by the qualified biologist that the young have fledged and have attained sufficient flight skills to leave the area or that the nesting cycle has otherwise completed.

Proper implementation of the preceding is expected to minimize or avoid impacts to the species to a level of less than significant.

Bats
The following bat species have the potential to occur within the BSA (see **Attachment A**):

Western red bat (*Lasiurus blossevillii*)
The western red bat is a CDFW_ Species of Special Concern and is identified by the Western Bat Working Group as a high-risk species. The bat roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. It prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. It occupies riparian forests and woodlands. A CNDDB record for the species occurs within 4 miles of the BSA. Based on the presence of riparian forest and a nearby record, the species has the potential to occur within the BSA.

***Hoary bat* (*Lasiurus cinereus*)**
The hoary bat is a moderate risk species as identified by the Western Bat Working Group. It is the most widespread North American bat. Breeding habitat includes all woodlands and forests with medium to large-size trees and dense foliage. The species requires water. It roosts in dense foliage of medium to large trees. It feeds primarily on moths. A CNDDB record records the species along the Stanislaus River within 6 miles of the project site. Based on the presence of appropriate roosting habitat, the presence of water and an occurrence record along the Stanislaus River in the general area, the species has the potential to occur within the BSA.

Yuma myotis (*Myotis yumanensis*)
The bat is a U.S. Bureau of Land Management Sensitive species and a low-to-moderate risk species per the Western Bat Working Group. The species prefers open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies occur in caves, mines, buildings or crevices. The species occupies riparian forests and woodlands. A CNDDB record for the species occurs within 4 miles of the BSA. Based on the presence of riparian forest, a river providing foraging habitat and a nearby CNDDB record, the species has the potential to occur within the BSA.

For the preceding bat species, the following measures are proposed to minimize potential impacts to the species.

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-9: Preconstruction Surveys Suitable Bat Roosting (or Nursery) Areas & Provisions for Protection, if Identified

- 15 days or less before commencing ground-disturbing activities between April and September of the construction year, a qualified biologist will survey snags, trees, rock crevices and other suitable cavities and structures in the BSA for roosting bats or bat nurseries.

- If bats are not found and there is no evidence of bat use, construction may proceed.

If bats are found or evidence of use by bats is present, CDFW shall be consulted for guidance on measures to avoid or minimize disturbance to the colony or nursery. Subject to CDFW approval, measures may include excluding bats from roosts before construction begins.

Avoidance and Minimization Measure BIO-10: Hours of Construction.
Project construction shall be limited to 7:00 a.m. to 7:00 p.m. unless an emergency situation exists or during the HDD operation when construction must continue to avoid creating hazardous situations associated with starting and stopping work.

Proper implementation of the preceding is expected to minimize or avoid impacts to these and other bird species to a level of less than significant.

Species – General
The proposed project is expected to involve construction materials including pipes and open trenching. Common and special status wildlife species may inhabit or use construction materials as cover and smaller species may fall into trenches and become trapped. To ensure the protection of both wildlife and construction workers, the following provisions are included to avoid injuries related to inadvertently trapping wildlife:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-11: Avoid Inadvertent Animal Trapping During Construction

To avoid inadvertently trapping special status or common animal species during construction, all excavated steep-walled holes or trenches more than two feet deep shall be covered at the end of each working day with plywood or similar material, or provided with one or more escape ramps constructed of earth fill or wooden planks, or equivalent, at each end of the trench. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped animal is discovered, the contractor shall place an escape ramp or other appropriate structure to allow the animal to escape. Alternatively, the contractor shall contact the project biologist or California Department of Fish and Wildlife for assistance. Similarly, stored pipes or other materials providing potential cover for animals will be inspected prior to installation or use to ensure that they are unoccupied.

Proper implementation of the preceding is expected to minimize or avoid impacts to common and special status species to a level of less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

c) 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?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant with Mitigation Incorporated

Oak woodlands

Riparian oak woodlands border the Stanislaus River. These oak woodlands will not be disturbed by the proposed project. Two oak trees border residential development on the south bank of the project area. One is a dead oak and may be removed. The other is a large live oak with branches overhanging the existing siphon structure. Because the inverted siphon structure will be relocated to the vacant lot (at the church) located away from these trees, removing the oaks is not anticipated; however, some minor trimming may occur as necessary to allow for re-routing existing pipelines to the proposed inverted siphon on the vacant lot at the church. If necessary, mitigation to offset potential oak removal will be implemented as follows:

Mitigation Measure BIO 12:

Two live oak trees shall be replanted on the WWTP site for any oak tree removed in association with the project.

Disturbances within the riparian oak woodlands bordering the Stanislaus River are not anticipated. However, the following minimization measure will be implemented to ensure that construction team members are aware of standard BMPs for protecting oaks.

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Proper implementation of the preceding is expected to minimize or avoid impacts to oak woodlands to a level of less than significant.

Wetlands and Other Waters

No fill of wetlands, the river, or other waters of the United States or alterations within the banks of the river is proposed or anticipated in conjunction with the proposed Project. However, the introduction of machinery and construction materials to the site has the potential to introduce non-native invasive species. To ensure that runoff from site construction does not indirectly impact water quality in the river and to ensure that new non-native invasive species are not introduced into the riparian habitat, the following measures are included:

Avoidance and Minimization Measure BIO-13: Minimize the Spread of Invasive Plant Species

Throughout project construction:

- All hay, straw, hay bales, straw bales, seed, mulch or other material used for erosion control on the project site shall be free of noxious weed[3] seeds and propagules (Food and Agriculture Code Sections 6305, 6341 and 6461).

- All equipment brought to the project site shall be thoroughly cleaned of all dirt and vegetation prior to entering the site to prevent importing noxious weeds and shall be cleaned of all dirt and vegetation prior to exiting the site to prevent exporting noxious weeds. (Food and Agriculture Code Section 5401).

All material brought to the site, including rock, gravel, road base, sand, and topsoil, shall be free of noxious weeds[4] and propagules. (Food and Agriculture Code Sections 6305, 6341 and 6461).

Proper implementation of the preceding is expected to minimize or avoid impacts to wetlands and other waters to a level of less than significant.

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?

No Impact. Neither a Habitat Conservation Plan (HCP) nor a Natural Community Conservation Plan (NCCP) exists for the area within the Project boundaries or the vicinity. Therefore, no impacts associated with such will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

3 Noxious weeds are as defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of Regulations and the California Quarantine Policy – Weeds (Food and Agriculture Code, Sections 6305, 6341, and 6461).

4 Ibid.

2.5 CULTURAL RESOURCES and TRIBAL CULTURAL RESOURCES

V. CULTURAL RESOURCES. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 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 dedicated cemeteries?	☐	☒	☐	☐

V. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) 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:	☐	☒	☐	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public ResourcesCode section 5020.1(k), or	☐	☒	☐	☐
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, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

2.5.1 Background and Setting

A cultural resources study was prepared for this Project and previously incorporated by reference as follows:

Patrick, Ian with contributions from Judith Marvin. Patrick GIS Group, Inc. March 2018. *Draft Oakdale Wastewater Treatment Plant River Crossing Alignment Project, Stanislaus County California*.

The scope of work included a records search at the Central California Information Center of the California Historical Resource Information System (CCaIC), archival research, Native American coordination, pedestrian survey, and preparation of the cited report. The study was conducted in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 USC 470) and the implementing regulations set forth in 36 CFR 60 and 36 CFR 800 in satisfaction of California Environmental Quality Act (CEQA) requirements.

The current Wastewater Treatment Plant (WWTP) consists of 40 acres first constructed in the mid-1960s. The facility has undergone improvement projects in 1984, 1990, 2000, and most recently in 2009. The plant first consisted of headworks, two oxidation lagoons, a secondary clarifier, sludge drying beds, and percolation ponds for disposal. The WWTP currently consists of a head works with screen and grit chamber, two Biolac aeration basins, two secondary clarifiers, a filter pump station, cloth disk filters, UV disinfection channels, two sludge dewatering presses, sludge drying beds, and percolation ponds.

Seventy miles of gravity sewers ranging from 4-inch to 27-inch diameter, with eleven pump stations and eleven low pressure force mains, service designated areas and collect at five major trunk sewers in the collection system. The trunk sewers are named based on the main street that they are located on. All of the trunk sewers connect near the beginning of the River Crossing, at the intersection of Kimball Street and Oak Avenue and terminate at the WWTP across the river. The 18-inch River Crossing is suspended across the Stanislaus River by a utility bridge with concrete pier supports. According to historical drawings, this River Crossing was constructed in the mid to late 1970's. Two 6-inch rigid steel electrical conduits owned by the Modesto Irrigation District (MID) are also supported by the utility bridge across the river. These electrical conduits were installed in 2003. Raw wastewater conveyed across the Stanislaus River by the River Crossing is routed through a 21-inch electromagnetic flowmeter to the headworks structure. The headworks facility was constructed in 2003.

2.5.2 Analysis

a) Cause a substantial adverse change in the significance of a historical resource as defined in the Government Code, State CEQA Guidelines Section 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated.

The records search at the CCaIC identified four previously conducted cultural resources investigations within a one-quarter mile radius of the parcel. In addition, three studies bisect the project area. One previously recorded cultural resource, the former Oakdale Wastewater Treatment Facility built in 1949 (P-50-001807), was identified within the one-quarter mile radius; no resources were noted within the project area. P-50-001807 consists of a cluster of buildings constructed in 1949. The facility served as the location of the treatment plant until it was abandoned in 1968 when the new facility was constructed. Three extant features included a structure, digester, and western clarifier in addition to debris.

Lisa Westwood, in 2000, evaluated P-50-001807 as potentially eligible for special consideration in local planning, but not eligible for state or federal listing. Survey confirmed the current project will not adversely affect the resource. No features of the new WWTP facility which date to the 1960s construction will be impacted. Therefore, no further archaeological work is recommended and no potentially significant impacts to cultural resources are anticipated.

Patrick GIS Group, Inc. (Patrick GIS) conducted an archaeological pedestrian survey of the project area on February 2, 2018. No cultural resources were observed in the project area. A few areas near the river were impassable due to dense thickets of blackberry bushes. Auger holes were placed near the project centerline, on both the north and south river terraces, as well as the supplemental survey coverage area due to limited access caused by dense vegetation near the river. The auger holes were generally shallow due to dense river cobble deposits. A total of eleven augers were dug, four on the south side of the river and seven on the north side, which all resulted in negative results for cultural resources. Therefore, impacts to cultural resources are not anticipated.

Despite efforts to identify cultural resources, there remains a possibility that resources may be encountered. For example, implementation of future project activity may entail earth disturbing construction which could expose buried, subsurface cultural resources—a potentially significant adverse impact. To minimize this potential impact, the following mitigation measures are proposed:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Mitigation Measure CULT-2: Unanticipated Cultural Resource Discoveries
If a cultural resource is discovered during construction activities, the construction contractor shall comply with the following provisions:

A. The person discovering the cultural resource shall notify the City of Oakdale or the project's designated qualified cultural resource professional by telephone within 4 hours of the discovery or the next working day if the department is closed.

B. When the cultural resource is located outside the area of disturbance, the project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource and construction activities may continue during this process. On parcels of two or more gross acres, the area of disturbance includes building pads, driveways or utility lines, grading and vegetation removal areas, plus 100 feet.

C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by site's designated qualified cultural resource professional may continue. The project's designated qualified cultural resource professional shall be allowed to conduct an evaluative survey to evaluate the significance of the cultural resource.

D. When the cultural resource is determined to be not significant, the project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the project's designated qualified professional.

E. When a resource is determined to be significant, the resource shall be avoided with said resource having boundaries established around its perimeter by the project's designated qualified cultural resource professional or a cultural resource management plan shall be prepared by the project's designated qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on

the resource. The project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the project's designated qualified cultural resource professional. All further activity authorized by this permit shall comply with the cultural resources management plan.

For the purposes of implementing this measure, a "qualified cultural resource professional" is an individual (e.g., historian or archaeologist) meeting the Secretary of the Interior's Qualification Standards.

A "cultural resource" is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Stanislaus County, the State of California, or the nation which is 50 years of age or older or has been listed on or is eligible for listing on the National Register of Historic Places, the California Register of Cultural Resources, or any local register. Examples of prehistoric resources may include: stone tools and manufacturing debris; milling equipment such as bedrock mortars, portable mortars, and pestles; darkened or stained soils (midden) that may contain dietary remains such as shell and bone; as well as human remains. Historic resources may include: burial plots; structural foundations; mining spoils piles and prospecting pits; cabin pads; and trash scatters consisting of cans with soldered seams or tops, bottles, cut (square) nails, and ceramics.

Mitigation Monitoring CULT-2: The required mitigation measure will be implemented throughout project construction. The measure is the responsibility of the City with input from the project's designated qualified cultural resource professional, if necessary.

Mitigation Measure CULT-3: Human Remains

If human remains, burial, cremation of other mortuary feature are uncovered during construction activities; upon discovery, secure the location, do not touch or remove remains and associated artifacts; do not remove associated spoils or go through them; document the location and keep notes of activity and correspondence. All work within 100 feet of the discovery shall stop until the County Coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission to obtain the Most Likely Descendent (MLD) and follow state law (PRC 5097.9 et seq. and Health and Safety Code 7050.5(c)-7054.1 and 8100 et seq.). No further work or disturbance shall occur within 100 feet until all of the preceding actions, as applicable to the discovery, are implemented and completed. Preserve associated spoils without further disturbance, do not touch or remove remains or associated artifacts, document the location and maintain notes of activity and correspondence. Preservation *in situ* is the preferred treatment of human remains and associated burial artifacts. [Public Resources Code Sections 5097.94, 5097.98 and Health and Safety Code Section 7050.5(c) and Section 15064.5 of the California Code of Regulations implementing the California Public Resources Code, Sections 21000-21177]

Mitigation Monitoring CULT-3: The required mitigation measure will be implemented throughout project construction. The measure is the responsibility of the City's construction contractor.

Mitigation Measure CULT-4: Project Scope Changes

If the project develops beyond the scope and project description as described herein, further archaeological study and an addendum to this study may be required.

Mitigation Monitoring CULT-4: The required mitigation will be assessed pre-construction during plan reviews and throughout project construction by site visits conducted by cultural resource monitoring. The measure is the responsibility of the City.

Proper implementation of these mitigation measures will reduce the potential impact to a level of less-than-significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. The site does not include unique geologic features. No surface evidence of paleontological resources was observed. However, because subsurface excavations could occur, the potential to discover subsurface paleontological resources could occur. Therefore, the following mitigation measure is included to ensure evaluation and appropriate handling, study, and curation of unanticipated subsurface paleontological discoveries.

Mitigation Measure:

Mitigation Measure CULT-5: Paleontological Resources
If paleontological resources are encountered during Project construction and no paleontological monitor is present, all ground disturbing activities within 50 feet of the find shall be redirected to other areas until a qualified paleontologist (as determined by the City) can be contacted to evaluate the find and make recommendations. If determined significant pursuant to CEQA and Project activities cannot avoid the paleontological resources, a paleontological evaluation and monitoring plan shall be implemented.

Adverse impacts to significant paleontological resources shall be mitigated, which may include monitoring, data recovery and analysis, a final report, and the curation of all fossil material to a paleontological repository, museum, or academic institution, as appropriate. Upon completion of Project ground-disturbing activities, a report documenting methods, findings, and recommendations shall be prepared and submitted to the paleontological repository.

Mitigation Monitoring CULT-5: The required mitigation measure will be implemented throughout Project construction. The measure is the responsibility of the construction contractor and qualified paleontologist.

Proper implementation of this measure will result in a less-than-significant impact to paleontological resources.

d) 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 i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public ResourcesCode section 5020.1(k), or 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, the lead agency shall consider the significance of the resource to a California Native American tribe

Less than Significant with Mitigation Incorporated
Patrick GIS initiated coordination with the Native American community on December 18, 2017, submitting a formal request to the California Native American Heritage Commission (NAHC) for a Sacred Lands File search. The NAHC responded on December 21, 2017 with negative results for known cultural resources near the parcel and a list of local Native American tribal representatives.

E-mails describing the project were sent on January 16, 2018 to individuals on the Native American Contact List provided by the NAHC. Hardcopy letters and maps were sent on January 26, 2018. Three responses were received. Tule River and the Southern Sierra Miwuk Nation emails were not valid and undeliverable. During a follow up phone call on February 14, 2018 to Lois Martin, of the Southern Sierra Miwuk, she provided the phone number for the new chairperson, William Leonard. A phone message was left on the main office line for Mr. Leonard. A follow up email was sent to Mr. Leonard on February 14 after receiving the correct email from the office answering machine, as no email address was provided by the NAHC. A follow up phone call and voicemail were left for Tule River on February 14 at the phone number provided.
Debra Grimes (Calaveras Mi-Wuk) requested on January 22, 2018 to be removed from the NAHC list for this project, as it is not her ancestral area. Tiger Paulk, of the California Valley Miwok Tribe, responded on February 15, 2018 expressing that they be notified of any cultural discoveries. He also requested that any artifacts or burial remains be repatriated on site.

Patrick GIS conducted an archaeological pedestrian survey of the project area on February 2, 2018. No cultural resources were observed in the project area. A few areas near the river were impassable due to dense thickets of blackberry bushes. Auger holes were placed near the project centerline, on both the north and south river terraces, as well as the supplemental survey coverage area due to limited access caused by dense vegetation near the river. The auger holes were generally shallow due to dense river cobble deposits. A total of eleven augers were dug, four on the south side of the river and seven on the north side, which all resulted in negative results for cultural resources. Therefore, impacts to prehistoric resources are not anticipated.

Despite efforts to identify cultural resources, there remains a possibility that resources may be encountered. For example, implementation of future project activity may entail earth disturbing construction which could expose buried, subsurface cultural resources—a potentially significant adverse impact. To minimize this potential impact, the following mitigation measures are proposed:

Mitigation Measure BIO-1/CULT-1 Environmental Awareness Training

Mitigation Measure CULT-2: Unanticipated Cultural Resource Discoveries

Mitigation Measure CULT-3: Human Remains

Mitigation Measure CULT-4: Project Scope Changes

Proper implementation of these mitigation measures will reduce the potential impact to a level of less-than-significant.

2.6 GEOLOGY AND SOILS

VI. GEOLOGY AND SOILS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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:	☐	☐	☐	☒
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.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
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?	☐	☐	☐	☒

2.6.1 Background and Setting

The project area is situated on terraces adjacent to the Stanislaus River. The terraces have seen multiple episodes of flooding and soil deposition. Four soil types exist within the project area (**Figure 4**).

Figure 4: Soil Map (USDA NRCS 2018)

Soil properties are as follows:

Soil code	Soil Name	Characteristics
HbA	Hanford fine sandy loam	Prime farmland if irrigated, well drained, slight erosion potential, very low runoff, parent material: igneous rock
TuA	Tujunga loamy sand	Prime farmland if irrigated, somewhat excessively drained, slight erosion potential, negligible runoff, parent material granite
Tx	Terrace escarpments	Excessively drained, very high runoff
131	Columbia sandy loam	Occasionally flooded; somewhat poorly drained, slight erosion potential, very low runoff, parent materials: igneous, metamorphic and sedimentary rock

2.6.2 Analysis

a) 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.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Less Than Significant with Mitigation Incorporated. Per the City of Oakdale General Plan DEIR (July 2012) hereinafter "DEIR", no portion of the City of Oakdale is in an Earthquake Fault Zone. The nearest is along the Oragalita fault in the Diablo Range in the extreme southwestern portion of the County. The proposed sewerline is not located in a Fault-Rupture Hazard Zone as established by the Alquist-Priolo Earthquake Fault Zoning Act (Hart, 1994)/Division of Mines and Geology Special Publication 42, therefore ground rupture from faulting is not considered a significant hazard.

Pursuant to the DEIR, the probable maximum intensity of groundshaking in the Planning Area is considered to be VII on the Modified Mercalli Intensity Scale (i.e., damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken).

Pursuant to the DEIR, only the Tujunga sands within the Planning Area present the likelihood of liquefaction because all the other soils contain mixtures of finer and coarser sediments that enhance the cohesiveness and strength of the soils. Tujunga soils exist at the southern project boundary presenting a potentially significant adverse impact to the stability of the pipeline.

Pursuant to the DEIR, only the steep banks of the Stanislaus River would be subject to landslides, mudslides, or rockfalls induced by seismic activity or excessive rainfall. Portions of the project pipeline will pass within and through the banks of the Stanislaus River presenting a potentially significant adverse impact to the stability of the pipeline.

To reduce these impacts to a level of less-than-significant, the following mitigation measure is required:

Mitigation Measure GEO-1 Soil Testing
Prior to initiating construction, a geotechnical investigation shall be conducted and a geotechnical design report shall be prepared by a licensed geotechnical engineer. Recommendations and design criteria presented in the report shall be used in the design of the Project.

Additionally, the following measures will be incorporated into the design: designing the alignment to avoid adverse soil conditions, such as gravel layers; using steep angles to get through problematic soils faster and installing a conductor casing.

Mitigation Monitoring GEO-1: The required mitigation measure will be implemented prior to initiating Project construction. The measure is the responsibility of the City.

Proper implementation of the preceding is expected to reduce the potential risk to a level of less-than-significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated. As noted, on-site soils have a slight erosion potential. Temporary construction activities associated with the Project may disturb soils and result in loss of topsoil and soil erosion, a potentially significant adverse impact. The following mitigation measure (detailed in the Biological Resources Section) is proposed.

Avoidance and Minimization Measure BIO-7: Erosion Control Plan/Best Management Practices (BMPs) to Protect Water Quality (Including NOI/NPDES/SWPPP)

The measure requires preparation and implementation of an Erosion Control Plan and submittal of a Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit - California's National Pollution Discharge Elimination System (NPDES) general permit for construction related storm water discharges for the disturbance of one acre or more.

Proper implementation of this measure will reduce potential impacts related to soil erosion and loss of topsoil to a level of less-than-significant.

c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant with Mitigation Incorporated.

The proposed project does not include typical foundation construction. For the purposes of this analysis, soil characteristics related to shallow excavations, including those for utility lines, were evaluated.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented

pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high-water table, flooding, and ponding may restrict the period when excavations can be made.
Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Rating class terms indicate the extent to which the soils are limited by all of the soil features. Site soil ratings indicate that: Hanford, Tujunga and Columbia soils are classified as "somewhat limited" indicating that the soils have features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected.

In addition, pursuant to the City of Oakdale General Plan Draft EIR (July 2012), the Columbia soils located between the Stanislaus River and River Road in the northwest portion of the Planning Area (i.e., the northern project boundaries) are expansive.

Compliance with UBC soil testing standards and application of relevant design considerations from the geotechnical design report to ensure the project is properly designed to withstand expansive soils is, therefore required pursuant to the following mitigation measure previously described:

Mitigation Measure GEO-1 Soil Testing

Proper implementation of the preceding is expected to reduce the potential risk to a level of 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?

No Impact. The Project involves installing a sewerline, therefore, no septic tanks are proposed. Therefore, no impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.7 GREENHOUSE GAS EMISSIONS

VII. GREENHOUSE GAS EMISSIONS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

2.7.1 Background and Setting

Construction of the Oakdale River Crossing Project would generate combustion emissions from various sources. During site preparation and construction, GHGs would be emitted from construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Construction activities would contribute to the total annual GHG emissions in the State.

Neither the SJVAPCD nor the California Air Resources Board (ARB) has issued quantitative thresholds for construction related GHG emissions for CEQA. To identify the significance of long-term operational GHG emissions impacts, the SJVAPCD specifies the use of Best Performance Standards (BPS) – measures that would reduce GHG emissions. However, the SJVAPCD has not released a set of BPS for short-term construction related GHG emissions.

In the absence of clear thresholds, guidance, or BPS for construction related GHG emissions, the project would instead adhere to a suite of best practices extracted from the existing literature to achieve a less than significant impact on GHG emissions.

In 2009, EPA's Sector Strategies Program produced a report analyzing construction related GHG emissions titled *Potential for Reducing Greenhouse Gas Emissions in the Construction Sector* (U.S. Environmental Protection Agency 2009). The report identifies fossil fuel combustion, primarily from construction equipment, and fuel use from purchased electricity as the two major sources of GHG emissions in the construction industry, with approximately three-quarters of GHG emissions from the construction sector resulting from diesel, gasoline, and natural gas combustion. Therefore, strategies to reduce GHG emissions from construction projects should focus on reducing fossil fuel consumption by construction equipment.

Methodology

The following describes methods used to assess project-related greenhouse gas emissions.

The Road Construction Emissions Model was used to quantify GHG emissions associated with the Oakdale River Crossing Project. The Road Construction Emissions Model is a spreadsheet-based model specifically designed to estimate GHG emissions associated with construction of roadway facilities and other linear projects. The model uses basic project information (e.g., total

construction months, project type, total project area) to quantify exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips, as well as fugitive particulate matter dust. Additional information on the Road Construction Emissions Model is available at the Sacramento Metropolitan Air Quality Management District internet website (Sacramento Metropolitan Air Quality Management District 2019). Output reports from the Road Construction Emissions Model are available upon request.

2.7.2 Analysis

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant with Mitigation Incorporated.
Neither the SJVAPCD nor ARB has issued quantified CEQA significance thresholds for construction related GHG emissions. However, Section 15064.4 of the *State CEQA Guidelines* states,

"A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project."

In response to Section 15064.4 of the *State CEQA Guidelines*, GHG emissions related to the Oakdale River Crossing Project were quantified for this letter report. Consistent with procedures recommended by the SJVAPCD (http://www.valleyair.org/ISR/Documents/ISR_faq_rc.pdf), the emissions due to construction of the Oakdale River Crossing Project were estimated using the Road Construction Emissions Model.

Construction of the proposed project would generate 108.37 metric tons of CO_2e emissions during the construction period.

Construction of the Oakdale River Crossing Project would generate combustion emissions, including GHG emissions, a potentially significant adverse impact pursuant to the thresholds established herein. Implementation of **Mitigation Measure GHG-1**, below, would reduce the contribution of GHG emissions during the construction period of the Oakdale River Crossing Project to a level of less-than-significant.

Mitigation Measure GHG-1: To the extent feasible and to the satisfaction of the City of Oakdale, the following measures shall be incorporated into the design and construction of the Oakdale River Crossing Project:

A. On-site idling of construction equipment shall be minimized (no more than five minutes maximum);

B. Biodiesel shall be used as an alternative fuel diesel for at least 15 percent of the construction vehicles/equipment used if there is a biodiesel station within five miles of the Project site and if the construction vehicles/equipment are able to use biodiesel without adverse effects;

C. At least 10 percent of the building material used for the proposed project shall be local (i.e., "local" shall be defined as building materials secured within 43±

miles of the Project site consistent with Caltrans' standard for reducing vehicle miles traveled by 15% of the average 50 miles traveled to secure building materials) to the extent feasible; and

D. At least 50 percent of construction waste or demolition materials shall be recycled to the extent feasible.

Implementation of Mitigation Measure GHG-1 would reduce the contribution of GHG emissions during construction. Impacts would be less than significant with mitigation incorporated.

Mitigation Monitoring GHG-1: The required mitigation measure will be implemented throughout Project construction. The measure is the responsibility of the construction contractor.

As noted in the *Project Description* section of this report, the Oakdale River Crossing Project would not result in a long-term change in system capacity. As a result, the project would not result in a change in long-term operational GHG emission. This impact is considered less than significant and no mitigation measures are required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact.
Neither the SJVAPCD nor ARB has issued quantified CEQA significance thresholds for construction related GHG emissions. However, Section 15064.4 of the *State CEQA Guidelines* states:

"A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project."

In response to Section 15064.4 of the *State CEQA Guidelines*, GHG emissions related to the Oakdale River Crossing Project were quantified as described in the preceding section. Therefore, the proposed project is in compliance with applicable plans, policies and regulations adopted for the purposes of reducing emissions of greenhouse gases.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.8 HAZARDS AND HAZARDOUS MATERIALS

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

2.8.1 Background and Setting

Hazardous materials include flammable, reactive, corrosive, or toxic substances that, because of these properties, pose potential harm to the public or environment.

Materials associated with the operation of the proposed project are required to be handled, stored, transported, and disposed of according to a framework of federal, state and local regulations.

Regulatory bodies include, but are not limited to, the California Environmental Protection Agency, Department of Toxic Substances Control, Calaveras County Environmental Health,

U.S. and California Department of Transportation and the California Division of Occupational Safety and Health.

2.8.2 Analysis

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

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?

Less than significant with mitigation. The project involves installing a sewer line beneath the Stanislaus River. As previously described, in conjunction with the sewer line installation process, drilling fluids are continuously pumped to the drilling tool during all phases of the installation process to transport drilled spoils, reduce friction, and stabilize the hole. Drilling fluids consist of a mixture of water, bentonite, and/or polymers. The generated soil cuttings are mixed with the injected drilling fluids to create a slurry that is removed from the bore using a drilling fluid induced pressure gradient. The fluid does not meet the criteria of a hazardous waste, as defined by the USEPA. Bentonite is non-toxic and commonly used in farming practices, but it has the potential to impact plants, fish and their eggs if discharged to waterways in significant quantities. While leaks are not common, they could occur--a potentially significant adverse impact on water quality. Therefore, the following mitigation measures are proposed as previously described in the Biological Resources section of this study:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-5: Spills and Leaks

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?

No Impact. A review of the California Department of Toxic Substances Control (DTSC) database, EnviroStor, which lists hazardous materials sites complied pursuant to California Government Code Section 65962.5; GeoTracker, which provides information on Leaking Underground Storage Tanks (LUST) and other cleanup sites; and EPA's Toxic Release Inventory (EPCRA TRI) databases identified no hazardous materials sites within 1000 feet of the project area.

Based on the preceding, no impacts associated with known hazardous material sites are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?

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?

No Impact. The Project is not located within the boundaries of an Airport Land Use Plan or private airstrip and involves installing a subsurface structure. Therefore, no impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact with Mitigation.
Once construction is completed, the Project will not interfere with the movement of people or materials along emergency access or evacuation routes; therefore, it will not physically interfere with an adopted emergency response or evacuation plan.

However, during construction, some road sections and/or lanes may be temporarily closed or detours put in place to avoid construction areas. Emergency responders may be delayed in reaching various areas in the community due to blocked roadways, a potentially significant adverse impact. The following measure is proposed to minimize that impact.

Mitigation Measure HAZ-1 (Traffic Access Management Plan)
Prior to commencing work within public roadways, the Contractor will prepare (to the City's satisfaction), and throughout project construction will implement, a traffic access management plan to maintain emergency ingress, egress, and daily traffic flows throughout the Project boundaries. The access management plan should address public notification of upcoming construction, anticipated road closures, and detours (e.g., mailers in invoices, publication in local newspaper, website notices, postings along streets to be closed, electronic message boards). The City will coordinate road closures with the fire and police departments to ensure that emergency ingress and egress is addressed prior to and during street closures.

Mitigation Monitoring HAZ-1: The traffic access management plan will be prepared prior to initiating project construction and implemented throughout project construction. The measure is the responsibility of the construction contractor in consultation with the City.

Proper implementation of the preceding measure will reduce the potential impact to emergency access to a level of less than significant.

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?

No Impact. The Project involves installing a sewer line beneath a river. Therefore, due to the size, nature and location of the proposed project, impacts associated with wildland fires are not anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.9 HYDROLOGY AND WATER QUALITY

IX. HYDROLOGY AND WATER QUALITY. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 would 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 stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

2.9.1 Background and Setting

All active construction will occur outside of the Stanislaus River floodplain except for subsurface borings and pipe installation which will be initiated and controlled from locations outside of the Stanislaus River floodplain.

2.9.2 Analysis

a) Violate any water quality standards or waste discharge requirements?
f) Otherwise substantially degrade water quality?

Less Than Significant with Mitigation Incorporated.
Temporary construction activities associated with Project construction may temporarily disturb soils and result in loss of topsoil and soil erosion. Runoff could carry eroded soils into the Stanislaus River thereby degrading water quality, a potentially significant adverse impact. In addition, the National Pollution Discharge Elimination System (NPDES) stormwater program is administered by the California Regional Water Quality Control Board and regulates such discharges to reduce non-point source pollutants associated with runoff relative to construction activities.

Also, as previously described, in conjunction with the sewer line installation process, drilling fluids consisting of a mixture of water, bentonite, and/or polymers. could leak during construction--a potentially significant adverse impact on water quality.

Based on the preceding, the following mitigation measures, as detailed in the Biological Resources Section are proposed:

Avoidance and Minimization Measure BIO-1/CULT-1: Environmental Awareness Training

Avoidance and Minimization Measure BIO-5: Spills and Leaks

Avoidance and Minimization Measure BIO-6: Install Barrier /Silt Fencing to Protect Water Quality

Avoidance and Minimization Measure BIO-7: Erosion Control & Best Management Practices (BMPs) to Protect Water Quality (Including NOI/NPDES/SWPPP)

Proper implementation of these measures is expected to minimize the potential impacts of the project on water quality to a level of less-than-significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would 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)?

No Impact. The proposed Project will install a sewerline beneath the Stanislaus River. No water use is proposed or anticipated for the long-term operations of the project. Therefore, based on the nature of the proposed Project, no impact, will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?*

No Impact. No drainages patterns will be altered by the project. The sewerline will be installed beneath the Stanislaus River. All staging and construction activities will occur outside of the banks of the river. Drilling, widening and pulling pipe beneath the river bottom will occur well below the river floor. Therefore, no substantial alteration to existing drainage patterns and no impacts associated with such alterations will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?

No Impact. The proposed project will be primarily underground and does not propose the introduction of new, impermeable surfacing. Therefore, no impacts will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?

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?

j) Cause inundation by seiche, tsunami, or mudflow?

No Impact. No housing is proposed in conjunction with the proposed Project, therefore no impacts associated with placing housing in a flood hazard area are anticipated.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel# 06099C0190E (effective date September 26, 2008), identifies the Project boundaries outside of the Stanislaus River floodway as a Flood Zone X 0.2% Annual Flood Hazard and, within the Stanislaus River floodway as a Zone AE with base flood elevations ranging between 104 and 106.18 feet above mean sea level.

The proposed sewer line will be located beneath the river. Therefore, it will not introduce new structures within the flood zone. Because the line will be beneath the river bottom, inundation and flooding are not a threat to the line. Given the location of the existing line suspended above the river, the proposed undergrounding of the sewer line has the potential to significantly reduce the potential for sewer pipeline damage during a flood. Based on the nature and location of the proposed Project, no impact is anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.10 LAND USE AND PLANNING

X. LAND USE AND PLANNING. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 community conservation plan?	☐	☐	☐	☒

2.10.1 Background and Setting

Existing land uses within and adjacent to the Project are shown in **Figure 1** and include:

Table 3: Surrounding Land Uses

Direction	Land Use
North	Agricultural
Northwest	Agricultural
West	USACE Oakdale Recreation Area
East	Agricultural
South	Stanislaus River
Southeast	Residential
Southwest	Agricultural

2.10.2 Analysis

a) Physically divide an established community?

No Impact. The Project involves installation of a sewerline below ground. Therefore, no impact is anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

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?

No Impact. The project area is located within the boundaries encompassed by the City of Oakdale General Plan. The General Plan specifically calls for:

PF-2.5 Redundant Pipe System. Explore implementation of a redundant pipe system across the Stanislaus River for the transmission of wastewater to the wastewater treatment plant.

The Project will implement this program.

Based on the preceding, the proposed project is consistent with the City of Oakdale General Plan and no potentially significant adverse impacts associated with the Project will occur as a result of a conflict with regulation of an applicable plan adopted for the purpose of mitigating an environmental impact.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. Neither an HCP nor an NCCP exists in the Project boundaries or the vicinity. Therefore, no impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.11 MINERAL RESOURCES

XI. MINERAL RESOURCES. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

2.11.1 Background and Setting

Pursuant to the California Department of Conservation Division of Mines and Geology *Mineral Land Classification of Stanislaus County, CA* Special Report 173 (1993), the following data related to mineral resources is known for the site:

The northern portion of the site is located within an area classified as MRZ-2b:

> *Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic. Further exploration work and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a.*

Specifically, the site is MRZ-2b sg(C5) – an area of inferred concrete grade sand and gravel. This determination is based on the area having been mined since the early 1900s. Immediately west of the project boundaries is the site of the former Oakdale Gravel Pit/Standard Rock Company. During the early and mid-1910s, mining operations in and adjacent to this site occurred within the active Stanislaus River channel and on adjacent terraces (possibly including the project site). Standard Rock Company mined this site from 1947-1955 using bucket line dredges to excavate aggregate to a depth of 70 feet below the water table. The deposit included 60% sand and 40% gravel and oversized material. The sand and gravel were used for concrete products and road aggregate. The site has since been reclaimed by the U.S. Army Corps of Engineers and is now the Corps' Oakdale Recreation Area. Ponds adjacent to the western boundary of the Oakdale WWTP within the Oakdale Recreation Area are a remnant of the former mine.

2.11.2 Analysis

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?

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?

Less Than Significant Impact. The project boundaries within the MRZ-2b zone include a WWTP adjacent to (and possibly formerly a part of) a former sand and gravel mine. Therefore, many of the resources that existed in the immediate area already have been extracted. In addition, the construction of a sewer line beneath the river does not preclude potential future

mining in the area should economic factors make it economically realistic to attempt to excavate additional sand and gravel materials from the site. Therefore, no impacts associated with mineral resources are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.12 NOISE

XII. NOISE -- Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne 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?	☐	☒	☐	☐
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 expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

2.12.1 Background and Setting

The Project site is surrounded to the north by an existing WWTP. To the south and surrounding the construction and staging area in the southern portion of the site are numerous residences and a church that could be susceptible to ongoing construction noise and vibrations.

2.12.2 Analysis

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?

b) Result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

c) Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

No impact. The sewerline will be underground. The operation of the sewerline is not expected to be detectable given its underground location and the existing ambient noise generated by WWTP operations and residential uses. Therefore, no impact is anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Less Than Significant with Mitigation Incorporated. Long-term operation of the proposed Project is not expected to increase noise above existing ambient noise levels. However, ground-borne vibrations and ground-borne noise will temporarily increase during construction – a temporary and potentially significant adverse impact. Therefore, the following mitigation measure, as described in the Biological Resources Section limiting hours of construction, is proposed.

Avoidance and Minimization Measure BIO-10: Hours of Construction.

Proper implementation of the preceding measure is expected to minimize the temporary increase in noise levels associated with Project construction to a level of less-than-significant.

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 expose people residing or working in the Project area to excessive noise levels?*

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?

No Impact. The Project is not located within an airport land use plan or in the vicinity of a private airstrip. Therefore, no impact is anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.13 POPULATION AND HOUSING

XIII. POPULATION AND HOUSING. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.13.1 Background and Setting

The proposed project will replace an existing sewerline that currently spans the Stanislaus River

2.13.2 Analysis

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)?

No Impact.
The project involves placing a 3-barrel inverted siphon below-ground to replace the existing line suspended above the Stanislaus River. Therefore, no population growth related to the project will occur.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. No residences will be demolished and no people will be relocated in conjunction with the proposed Project. Therefore, no significant adverse impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.14 PUBLIC SERVICES

XIV. PUBLIC SERVICES.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

2.14.1 Background and Setting

The City of Oakdale provides fire and law enforcement, sewer and water, and park services to the project area. Numerous school districts serve the City. Magnolia Elementary and Fair Oaks Elementary Schools are the nearest schools to the project site located 0.42± and 0.49± mile, respectively, southeast and southwest of the project site.

2.14.2 Analysis

a) Substantial adverse physical impact associated with the provision of new or physically altered government facilities, need for new or physically altered government 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?

No Impact. The replacement sewerline will not increase demand for fire protection, police protection, schools, parks or other public facilities.

2.15 RECREATION

XV. RECREATION.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
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?	☐	☐	☐	☒

2.15.1 Background and Setting

The Oakdale Recreation Area, a regional park facility operated by the US Army Corps of Engineers along the Stanislaus River, borders the project site immediately to the southwest.

2.15.2 Analysis

a) 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?

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

The proposed replacement sewerline will eliminate the potential for a break that could contaminate the waters of the Stanislaus River and negatively impact the adjacent recreational facilities. Therefore, no direct impact is anticipated. Instead, potentially beneficial impacts are anticipated because the project helps ensure the ongoing operations of the adjacent recreation area.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

2.16 TRANSPORTATION

XVI. TRANSPORTATION/TRAFFIC. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

2.16.1 Background and Setting

2.16.2 Analysis

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?

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?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact.
The project involves placing an above-river sewer line below-ground and will not permanently alter transportation facilities. The project does not occur near an airport and will, therefore, not change air traffic patterns. Therefore, no impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable.

e) Result in inadequate emergency access?
No permanent changes to access will occur as a result of placing the sewer line below-ground. During construction, some road sections and/or lanes be temporarily closed or detours put in place to avoid construction areas. Emergency responders may be delayed in reaching various areas in the community due to blocked roadways, a potentially significant adverse impact. The following measure detailed in the Hazardous Materials Section of this study is proposed to minimize that impact.

Mitigation Measure HAZ-1 (Traffic Access Management Plan)

Proper implementation of the preceding measure will reduce the potential impacts on emergency access to a level of less than significant.

2.17 UTILITIES AND SERVICE SYSTEMS

XVII. UTILITIES AND SERVICE SYSTEMS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

2.17.1 Background and Setting

2.17.2 Analysis

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

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?*

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?*

d) *Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?*

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 provide existing commitments?*

f) *Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?*

g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

No Impact. Due to the size, nature and location of the replacement sewer line project, it will not require water treatment, will not generate wastewater, will not generate storm water runoff and will not generate solid waste. Instead, the project will help safeguard the operations of the sewer line by ensuring that the undergrounded system is not accessible to those that may seek to sabotage the facility. Therefore, no impacts are anticipated.

Mitigation Measure: None required.
Mitigation Monitoring: Not applicable

2.18 MANDATORY FINDINGS OF SIGNIFICANCE

XIX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

2.18.1 Analysis

a) 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 Incorporated. As detailed in this study, the proposed Project will not have a significant effect on the environment and will not result in any of the impacts requiring a mandatory finding of significance provided the mitigation measures identified herein are properly implemented and maintained as described in the Biological and Cultural Resources sections of this study. The mitigation monitoring and reporting plan and its identified mitigation measures as identified herein applicable to Biological and Cultural Resources, if properly implemented and maintained, will reduce the identified potential impacts to biological and cultural resources to a level of less-than-significant.

b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

No Impact. As identified in the preceding study, no cumulatively adverse impacts have been identified for the project.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. As described herein, the proposed Project will not result in any substantial adverse effects on human beings either directly or indirectly except for temporary noise increases during project construction. **Mitigation Measure BIO-10**, limiting the hours of construction, will reduce that potential impact associated with temporary noise increases to a level of less-than-significant.

Mitigation Measures:
A list of Mitigation Measures anticipated for any future site development is included in **Attachment C** of this report and will be employed to minimize any impacts which might result from future development of the project site.

Determination

Based on the information contained in the Initial Study, including incorporation of mitigation measures identified herein, there is no substantial evidence that the project will have a significant adverse effect on the environment. Therefore, approval of the proposed project will not result in significant adverse impacts on either the natural or cultural environment provided the mitigation measures discussed herein are properly implemented and maintained.

Environmental Coordinator, City of Oakdale

Date

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United States Geological Survey – Oakdale 7.5 Minute Quadrangle Map

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