



MITIGATED NEGATIVE DECLARATION

Downtown Groveland and Big Oak Flat
Sewer Collection System Improvements

April 2019

PREPARED FOR:

Groveland Community Services District
18966 Ferretti Road
Groveland, CA 95321

PREPARED BY:



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

Initial Study/Mitigated Negative Declaration
Groveland Community Services District
**Downtown Groveland and Big Oak Flat Sewer Collection System
Improvements**

Prepared for:

Groveland Community Services District
18966 Ferretti Road
Groveland, CA 95321

Contact: Peter Kampa, General Manager
(209) 962-7161, ext. 24

Prepared by:



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

Contact: Travis Crawford, AICP
(559) 840-4414

April 2019



Project Reference No. 026-1804

TABLE OF CONTENTS

CHAPTER ONE - INTRODUCTION

1.1 Project Summary	1-1
1.2 Document Format	1-1

CHAPTER TWO – PROJECT DESCRIPTION

2.1 Location	2-1
2.2 Setting and Surrounding Land Uses	2-1
2.3 Project Background	2-6
2.4 Project Description	2-6
2.5 Objectives	2-7
2.6 Other Required Approvals	2-8

CHAPTER THREE – INITIAL STUDY CHECKLIST

3.1 Environmental Checklist Form	3-1
3.2 Environmental Factors Potentially Affected	3-2
3.3 Determination	3-2

CHAPTER FOUR - MMRP

4-1

CHAPTER FIVE – PREPARERS

5-1

LIST OF FIGURES

1 – Regional Location Map	2-2
2 – Big Oak Flats Project Area	2-3
3 – White Gulch Project Area	2-4
4 – Groveland Project Area	2-5

LIST OF TABLES

1 – Proposed Project Construction Emissions	3-12
2 – Typical Construction Noise Levels	3-45
3 – Typical Construction Vibration Levels	3-46

APPENDICES

A- CalEEMod Output Files	
B- Biological Evaluation Report	
C- Cultural Resources Inventory (Confidential – under separate cover)	

Chapter 1

INTRODUCTION

INTRODUCTION

1.1 Project Summary

This document is the Initial Study/Mitigated Negative Declaration describing the potential environmental effects of implementing a series of upgrades to the Groveland Community Services District (CSD) sewer system. The CSD proposes to improve the sewer collection infrastructure in Big Oak Flat, Groveland, and the Pine Mountain Lake subdivision in Tuolumne County, California (Project). The Project will involve installing new sewer pipe, repairing or replacing existing sewer pipe, installing new manholes, and rehabilitating or modifying existing manholes. The purpose of the Project is to prevent sewer system blockages and sanitary sewer overflows and to provide adequate and reliable sewer service to District customers. The proposed Project is more fully described in Chapter Two – Project Description.

The Groveland Community Services District will act as the Lead Agency for this project pursuant to the *California Environmental Quality Act (CEQA)* and the *CEQA Guidelines*.

The Project is expected to be funded with Clean Water State Revolving Fund (CWSRF) funds administered through the California State Water Resources Control Board (Water Board). One requirement of CWSRF funding is that the CSD will be required to comply with the Water Board’s environmental requirements including CEQA-Plus. CEQA-Plus involves additional environmental analysis of certain topics to include federal thresholds, rules and regulations (for topics such as air, biology, cultural, etc.). In addition to this Mitigated Negative Declaration, the CSD is preparing a separate Environmental Package for submittal to the Water Board which includes the CEQA-Plus analysis.

1.2 Document Format

This IS/MND contains five chapters, and appendices. Section 1, Introduction, provides an overview of the project and the CEQA environmental documentation process. Chapter 2, Project Description, provides a detailed description of project objectives and components. Chapter 3, Initial Study Checklist, presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit

requirements that would reduce those impacts to a less than significant level. Chapter 4, Mitigation Monitoring and Reporting Program, provides the proposed mitigation measures, completion timeline, and person/agency responsible for implementation and Chapter 5, List of Preparers, provides a list of key personnel involved in the preparation of the IS/MND.

Environmental impacts are separated into the following categories:

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

Less Than Significant After Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less Than Significant Impact. This category is identified when the project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. “No Impact” answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (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.)

Regardless of the type of CEQA document that must be prepared, the basic purpose of the CEQA process as set forth in the CEQA Guidelines Section 15002(a) is to:

- (1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- (2) Identify ways that environmental damage can be avoided or significantly reduced.
- (3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

- (4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

According to Section 15070(b), a Mitigated Negative Declaration is appropriate if it is determined that:

- (1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
- (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

The Initial Study contained in Section Three of this document has determined that with mitigation measures and features incorporated into the project design and operation, the environmental impacts are less than significant and therefore a Mitigated Negative Declaration will be adopted.

Chapter 2

PROJECT DESCRIPTION

Project Description

2.1 Location

The proposed Project will take place in three adjacent communities; Big Oak Flat, Groveland, and Pine Mountain Lake, in western Tuolumne County (see Figure 1). The three communities are within the Groveland Community Services District (CSD or District). Big Oak Flat and Groveland lie along State Route 120 and east of State Route 49. Pine Mountain Lake is located north of State Route 120 and west of Groveland. Yosemite National Park lies approximately 23 miles southeast of the Project sites. Project elevation ranges from approximately 2800 feet to approximately 3100 feet above mean sea level. The proposed Project is located in Township 1S, Range 16E, Sections 20, 21, 23, 27, 29 and 30, MDB&M and proposed improvements are shown in Figures 2 through 4.

2.2 Setting and Surrounding Land Use

Groveland CSD is responsible for Wastewater Collection for approximately 1,500 residents of the Groveland and Big Oak Flat communities. The Wastewater Collection System includes 16 sewerage lift stations, 35 miles of gravity mains, 7 miles of force mains, a recycled water treatment plant, 2 surface storage reservoirs, and approximately 15 acres of spray fields.

The proposed Project site consists of developed and disturbed land cover including roads, residential development, and commercial development. The surrounding land cover is composed of cismontane woodland. Intermittent and ephemeral waterways are present within some of the project areas.

Figure 1 – Regional Location Map

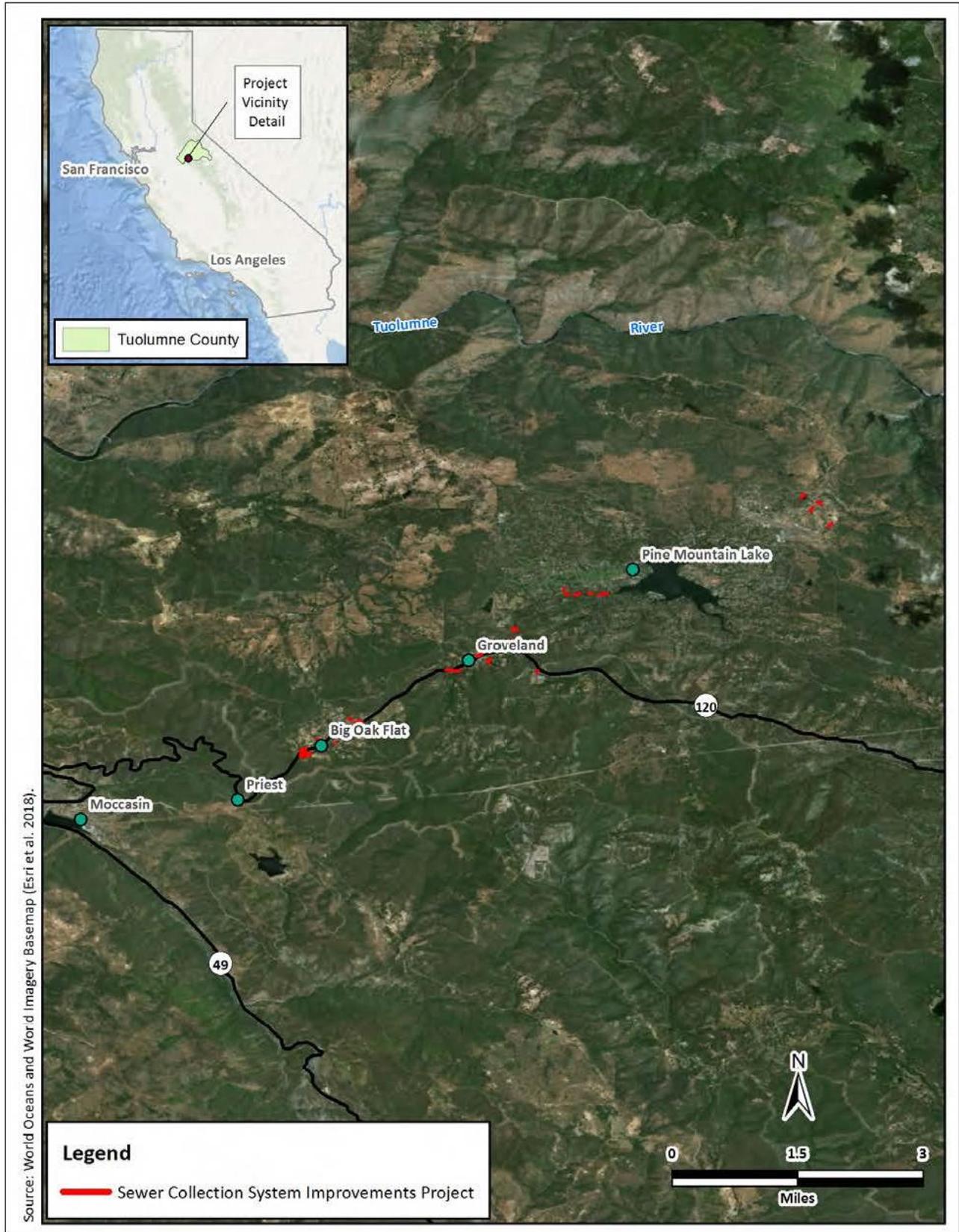


Figure 2 – Big Oak Flats Project Area

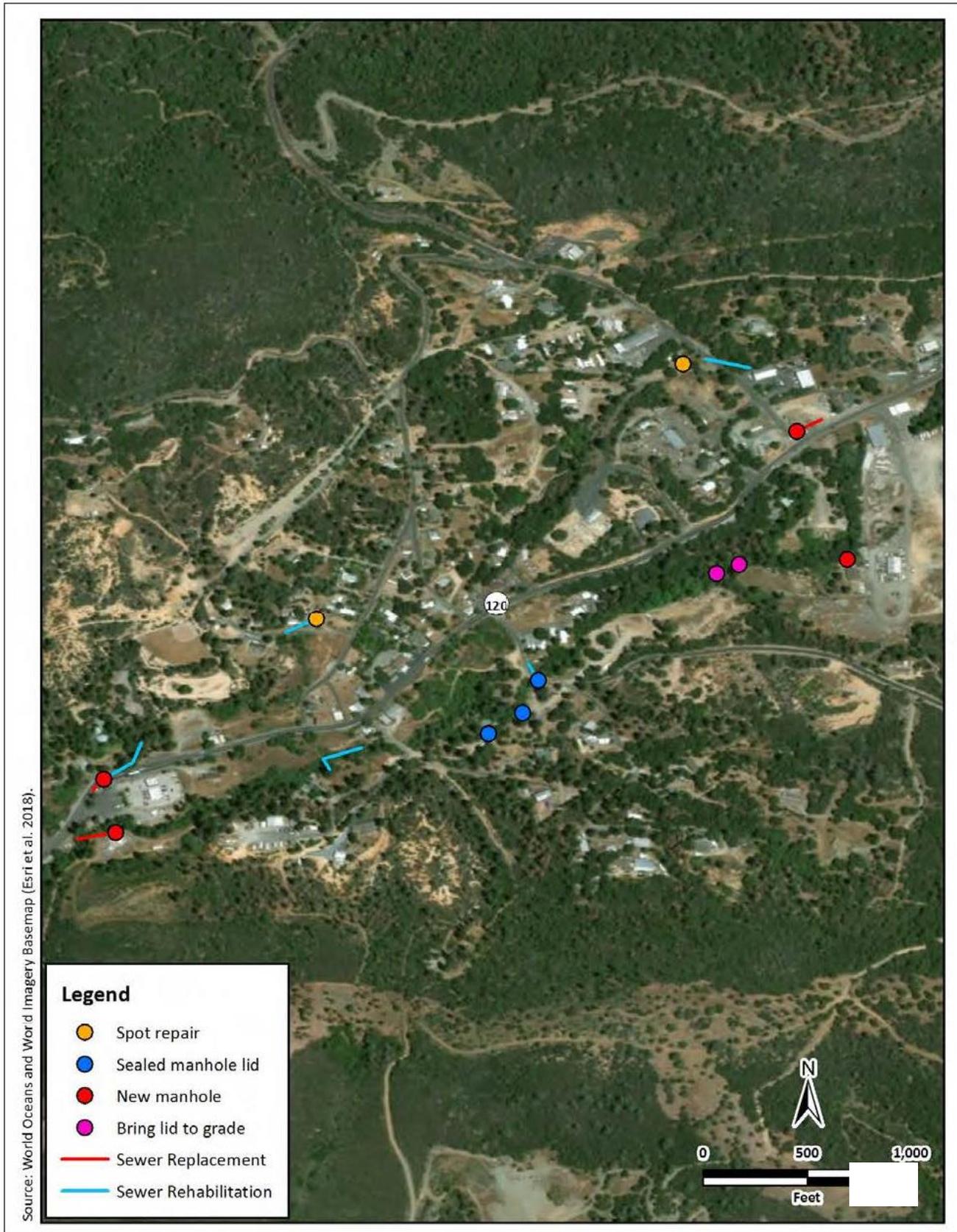


Figure 3 – Groveland Project Area

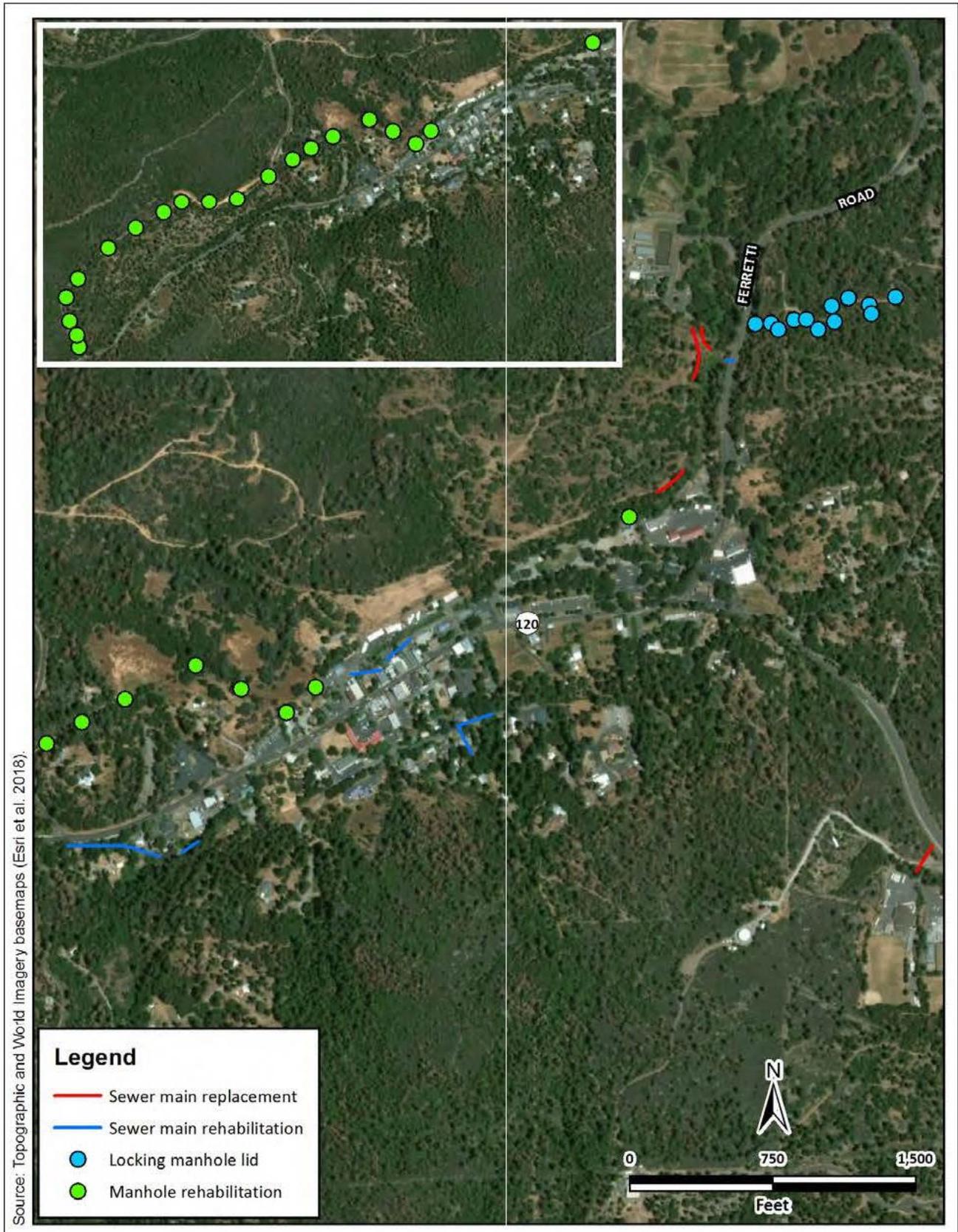
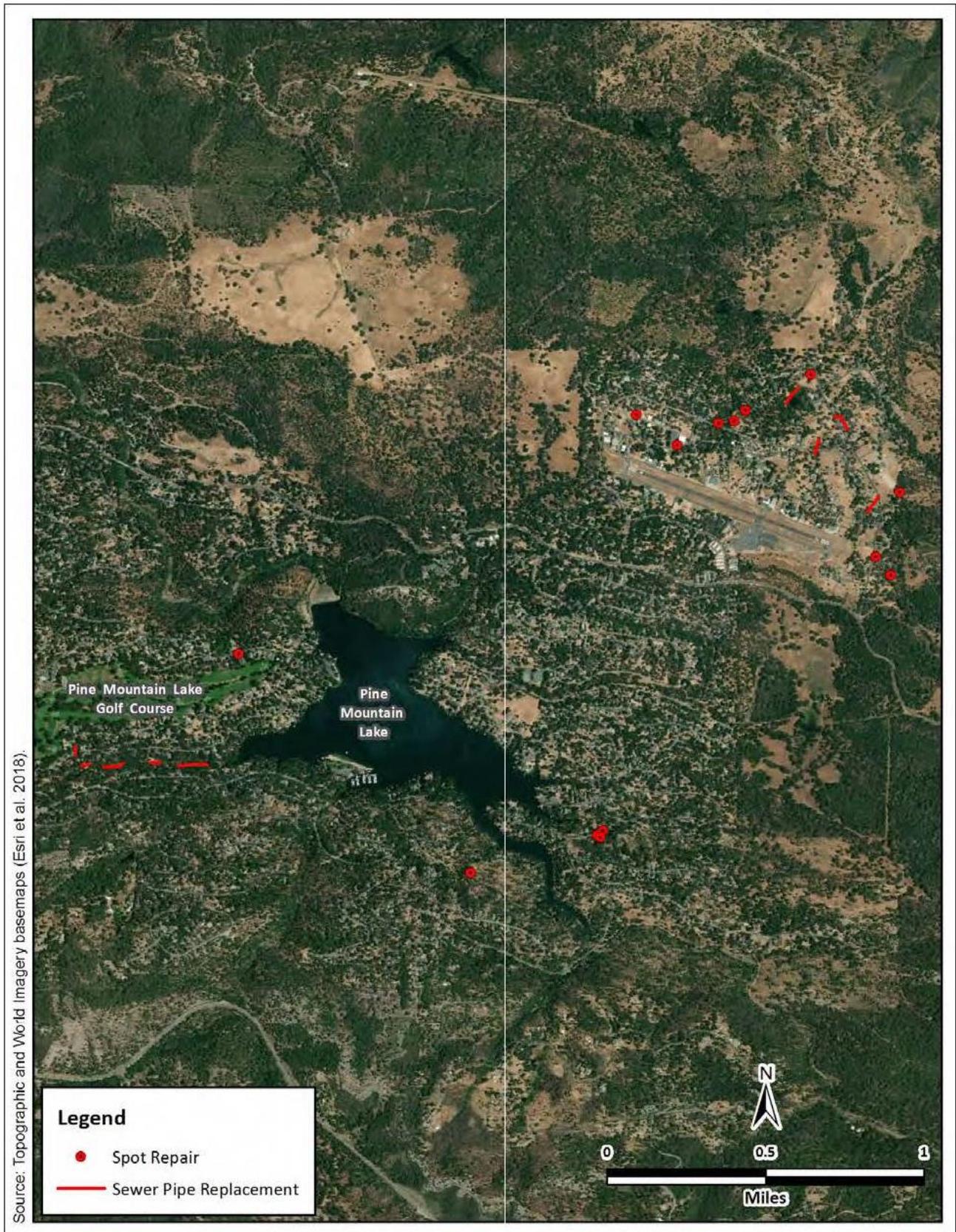


Figure 4 – Pine Mountain Lake Project Area



2.3 Project Background

The Project is needed to prevent sewer system blockages and sanitary sewer overflows and to provide adequate and reliable sewer service to District customers. The District’s existing treatment and collection system was built in 1941. Significant additions were made in 1982 and the system was last upgraded in 1990. The sewer collection system is aged and some of the older portions of the system experience blockages and require cleaning. The physical condition of some of these sewer lines is suspected to be poor, in some instances they may be beyond their life expectancy, and may need to be replaced or rehabilitated. Indicators of these conditions are failing manholes and infiltration and inflow issues in recent years. The District maintains sewer assets in accordance to industry standard practices by performing preventive maintenance on mechanical equipment and pipelines.

2.4 Project Description

An Engineering Design Report entitled “Downtown Groveland and Big Oak Flat Sewer Collection System Improvements” was prepared by AM Consulting Engineers in May 2017 to address the needed improvements. Please refer to that document for specific project characteristics. A summary of Project activities is included herein.

The Project involves sewer system improvements in Big Oak Flat, Groveland and Pine Mountain Lake.

Specifically, the Project is broken down as follows:

Sewer system improvements in **Big Oak Flat**:

- Replace approximately 455 linear feet of 6-inch sewer pipe using open trench excavation methods.
- Rehabilitate approximately 792 linear feet of 6-inch sewer pipe using trenchless cured-in-place methods.
- Perform spot repairs to resolve pipe anomalies at two locations.
- Construct new manholes.
- Bring existing manhole lids up to grade.
- Install sealed or locking manhole lids.

Sewer system improvements in **Groveland**:

- Replace approximately 408 linear feet of 8-inch sewer pipe and 258 linear feet of 6-inch sewer pipe with open trench excavation methods.
- Rehabilitate approximately 1,413 linear feet using trenchless cured-in-place methods.
- Rehabilitate and install sealed or locking manhole lids.

Sewer system improvements in **Pine Mountain Lake**:

- Replace approximately 2,715 linear feet of 6-inch sewer pipe using open trench excavation methods.
- Perform spot repairs in sections where pipe abnormalities were detected.

Construction methods

Cured-in-place method uses a flexible fiberglass fabric liner coated with a thermosetting polyester resin to form a new pipe inside an existing pipe. The liner is inserted into the existing pipe through existing manholes and cured to form a new liner. The fabric liner holds the resin in place until a tube is inserted in the pipe to be cured.

Polyvinyl chloride (PVC) pipe will be used for sewer pipe replacement work.

Installing new manholes will require: (1) excavating to the depth needed to install the new manhole to new or existing sewer main infrastructure, (2) installing the concrete manhole chamber, (3) connecting new or existing sewer mains, (4) backfill excavations, and (5) restoring the soil surface. Rehabilitating manholes will involve applying a polymer coating to the interior surface of the manhole chamber. Bringing manhole lids to grade will consist of installing a concrete riser column then restoring the soil surface to match the existing grade. Installing sealed or locking manhole lids will involve altering existing concrete collars to accommodate the new locking lids.

Project Schedule

Construction is expected to begin in February 2020 and end in August 2020.

2.5 Objectives

The primary objectives of the proposed project are as follows:

- The Groveland Community Services District primary objective is to provide adequate sewer services to its customers.
- The Groveland Community Services District seeks to prevent system blockages and sewer overflows.

- The District seeks to operate the sewer distribution system with the most cost-effective methods available that meet the District’s overall system performance and regulatory compliance requirements.

2.6 Other Required Approvals

The proposed Project will include, but not be limited to, the following regulatory requirements:

- The adoption of a Mitigated Negative Declaration by the Groveland Community Services District.
- Regional Water Quality Control Board approval.
- State Water Board approval.
- Regulatory Agency permitting for work in jurisdictional waterways:
 - CA Fish & Wildlife Streambed Alteration Agreement
 - RWQCB 401 permit
 - Army Corps of Engineers Nationwide Permit

Chapter 3

IMPACT ANALYSIS

Initial Study Checklist

3.1 Environmental Checklist Form

Project title:

Downtown Groveland and Big Oak Flat Sewer Collection System Improvements

Lead agency name and address:

Groveland Community Services District
18966 Ferretti Road
Groveland, CA 95321

Contact person and phone number:

Peter Kampa, General Manager: (209) 962-7161, ext. 24
Alfonso Manrique, PE: (559) 473-1371

Project location:

See Section 2.1

Project sponsor's name/address:

Groveland Community Services District

General plan designation:

Various, District-wide project

Zoning:

Various, District-wide project

Description of project:

See Section 2.3

Surrounding land uses/setting:

See Section 2.2

Other public agencies whose approval or consultation is required (e.g., permits, financing approval, participation agreements):

See Section 2.5

California Native American Tribal Consultation:

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun or is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The Native American Heritage Commission was contacted, requesting a contact list of applicable Native American Tribes, which was provided. Letters were provided to the listed Tribes, notifying them of the Project and requesting consultation, if desired. No further consultation was requested.

3.2 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 checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources
and Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Greenhouse Gas
Emissions | <input type="checkbox"/> Hazards &
Hazardous
Materials |
| <input type="checkbox"/> Hydrology / Water
Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural
Resources |
| <input type="checkbox"/> Utilities / Service
Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory
Findings of
Significance |

3.3 Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the

project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Peter Kampa

General Manager

Groveland Community Services District

Date

I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES

- 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?

No Impact. The proposed Project involves upgrades to a sewer collection system that will include installing underground sewer main pipelines and installing/replacing at-grade manhole lids. Views of surrounding areas will not be impacted by the project, since the majority of the finished work will be below grade. Any replacement of at-grade structures such as manholes will be similar to existing facilities and will not introduce new features that are not already common to the built environment

along the existing sewer collection system. As such, the proposed Project will not impede any scenic vistas.

Construction activities will occur over a 12-month period and will be visible from the adjacent residences, businesses and roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista, as described above. There will be *no impact*.

There are no state designated scenic highways within the vicinity of the proposed Project site.¹ California Department of Transportation Scenic Highway Mapping System identifies portions of State Routes 49 and 108 in Tuolumne County (north and west of the Project site) as being eligible for state scenic highway designation, but they are not officially designated. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. There is *no impact*.

Mitigation Measures: None are required.

- c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less than Significant Impact. The majority of the work (proposed pipelines) will be installed underground. The pipelines will not be visible once installed and thus would not degrade the existing visual character of the area. Any replacement of at-grade structures such as manholes will be similar to existing facilities and will not introduce new features that are not already common to the built environment along the existing sewer collection system. Construction activities will be seen by the residences and businesses within the immediate vicinity and by vehicles driving in the District; however, construction activities will be temporary.

As such, the proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings.

The impact will be *less than significant*.

Mitigation Measures: None are required.

¹ California Department of Transportation. California Scenic Highway Mapping System. Tuolumne County. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed August 2018.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Currently the sources of light in the project area are from building lights, the vehicles traveling along surrounding roads, and some security lighting at nearby businesses and some residences. No lighting will be associated with pipeline installation. Accordingly, the proposed Project would not create substantial new sources of light or glare. There is *no impact*.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESPONSES

- 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. The Farmland Mapping and Monitoring Program has not mapped farmland in Tuolumne County and as such, the Project does not include conversion of designated farmland to non-farmland. The proposed Project includes the installation of new and replacement sewer mains and associated appurtenances. The pipeline and associated infrastructure will largely occur within the existing right of way and will be installed underground. The purpose of the Project is to improve the existing Groveland CSD sewer infrastructure and does not have the potential to result in the conversion of farmland to non-agricultural uses or forestland uses to non-forestland.

There are no agricultural lands in the City under a Williamson Act Contract. The proposed Project does not include land under a Williamson Act Contract. No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the proposed Project.

No land conversion from farmland or forest land would occur as a result of the proposed Project. The proposed Project includes new water mains and associated hydrants and valves, largely within the existing right-of-way. All improvements will take place within an area that is built up with rural and urban uses. As such, the proposed Project does not have the potential to result in the conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is *no impact*.

Mitigation Measures: None are required.

III. AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Responses:

- a. Conflict with or obstruct implementation of the applicable air quality plan?
- b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The Tuolumne County Air Pollution Control District (TCAPCD) is designated nonattainment of state air quality standards for ozone.² Because of the region’s non-attainment status for ozone, if the project-generated emissions of either of the ozone precursor pollutants (ROG or NOx) were to exceed the TCAPCD’s significance thresholds of 100 tons per year of ROG or

² California Air Resources Board. Area Designations for State Ambient Air Quality Standards. Ozone. https://www.arb.ca.gov/desig/adm/2016/state_o3.pdf. Accessed August 2018.

NOX³, then the project uses would be considered to conflict with the attainment plan. In addition, if the project uses were to result in a change in land use and corresponding increases in vehicle miles traveled, they may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

As discussed below, predicted construction and operational emissions would not exceed the TCAPCD's significance thresholds for ROG, NO_x, PM₁₀, and PM_{2.5}. As a result, the Project uses would not conflict with emissions inventories contained in regional air quality attainment plans, and would not result in a significant contribution to the region's air quality non-attainment status. Additionally, the Project would comply with all applicable rules and regulations.

The proposed Project would generate emissions associated with the installation of pipelines and associated appurtenances, both from worker vehicle trips and from construction equipment. Construction emissions would be considered short-term and temporary emissions because construction emissions would cease following completion of installation. Following construction activities, operation of the sewer mains would be a passive process. No increase in long-term operations emissions is anticipated to occur and as such, any impacts would be less than significant.

The nonattainment pollutants for the TCAPCD is ozone. Therefore, the pollutants of concern for this impact are ozone precursors. Ozone is a regional pollutant formed by chemical reaction in the atmosphere, and the Project's incremental increase in ozone precursor generation is used to determine the potential air quality impacts.

The annual significance thresholds to be used for the Project emissions are as follows⁴:

- Reactive Organic Gases (ROG) – 1,000 lbs/day or 100 tons per year
- Oxides of Nitrogen (NO_x) – 1,000 lbs/day or 100 tons per year
- Particulate Matter (PM₁₀) – 1,000 lbs/day or 100 tons per year
- Carbon Monoxide (CO) – 1,000 lbs/day or 100 tons per year

As mentioned previously, the pipeline will not generate emissions once it is constructed. The estimated annual construction emissions are shown below. The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 8.1.0 was utilized to estimate emissions generated from project construction (the Sacramento model is a State-wide industry standard model for

³ Tuolumne County Air Pollution Control District. CEQA Thresholds of Significance.

https://www.tuolumnecounty.ca.gov/DocumentCenter/View/1072/TCAPCD_Significance_Thresholds_2?bidId=. Accessed August 2018.

⁴ Tuolumne County Air Pollution Control District. CEQA Thresholds of Significance.

https://www.tuolumnecounty.ca.gov/DocumentCenter/View/1072/TCAPCD_Significance_Thresholds_2?bidId=. Accessed August 2018.

linear projects such as pipelines). Modeling results are provided in Table 1 and the Road Construction Emissions Model output files are provided in Appendix A.

Table 1
Proposed Project Construction Emissions

Pollutant/ Precursor	Construction Emissions (tpy)	Threshold/ Exceed?
CO	4.70	100/ N
NOx	6.36	100/ N
ROG	0.59	100/ N
PM₁₀	1.42	100/ N

Any impacts would be considered *less than significant*.

Mitigation Measures: None are required.

e. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. During construction, the various diesel powered vehicles and equipment in use on-site could create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the Project site. In addition, once the Project is operational, there would be no source of odors from the Project. Therefore, the impact is *less than significant*.

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- 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 U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation. A Biological Resource Evaluation (BRE) was prepared for the proposed Project in August 2018 by Colibri Ecological Consulting, LLC (CEC). The BRE is included as Appendix B. As part of the BRE, the California Natural Diversity Data Base (CNDDDB), the California Native Plant Society’s Inventory of Rare and Endangered Plants, and the USFWS special status species lists were queried for records of special-status plant and animal species in the Project area. In addition, multiple field surveys were conducted as described herein. The results of the BRE are summarized as follows:

Environmental Setting

The Project site consists developed and disturbed land cover (commercial and residential development) surrounded by cismontane woodland. The alignment of existing and proposed new sewer infrastructure

runs below paved roads, dirt roads, residential and commercial development, and cismontane woodland land cover.

Desktop Review

As a framework for the evaluation and reconnaissance surveys, CEC obtained an official USFWS species list for the Project (USFWS 2018). In addition, CEC searched the California Natural Diversity Data Base (CNDDB, CDFW 2018) and the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2018) for records of special-status plant and animal species in the Project area. Regional lists of special-status species were compiled using USFWS, CNDDB, and CNPS database searches confined to the Groveland 7.5-minute United States Geological Survey (USGS) topographic quad, which encompasses the Project site, and the eight surrounding quads (Buckhorn Peak, Coulterville, Duckwall Mountain, Jawbone Ridge, Moccasin, Penon Blanco Peak, Standard, and Tuolumne). Local lists of special status species were compiled using CNDDB records from within 5 miles of the Project site. Species for which the Project site does not provide habitat were eliminated from further consideration. CEC also reviewed aerial imagery from Google Earth and other sources, USGS topographic maps, and relevant literature.

Reconnaissance Survey

CEC Staff Scientists Joe Medley and Kristofer Robison conducted field reconnaissance surveys of the Project site on 4-5 April, 10-11 April, 30 April, and 14-15 May 2018. The Project site and a 50-foot buffer surrounding the Project site was walked and thoroughly inspected to evaluate and document the potential for the site to support federally or state-protected resources. All plants except those under cultivation or planted in residential areas and all animals (vertebrate wildlife species) observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes, streams, and other waters using methods described in the *Wetlands Delineation Manual* and regional supplement (USACE 1987, 2008).

A total of 112 plant species (72 native and 40 nonnative) were found during reconnaissance surveys (Table 2 of Appendix B). Two amphibian species, 33 bird species, and four mammal species were also detected (Table 2 of Appendix B).

Multiple Project work locations were within 50 feet of intermittent and ephemeral streams that are hydrologically connected to the Tuolumne River, a navigable waterway under the regulatory jurisdiction of the USACE, the RWQCB, and the CDFW. The Project will likely impact jurisdictional waterways at three locations: one in Big Oak Flat, where work could involve open trench excavation across Rattlesnake Creek, and two in Pine Mountain Lake, where open trench excavation could be needed across an unnamed intermittent stream and an unnamed ephemeral stream.

Effects Determinations

Critical Habitat

The BRE concludes the Project will have no effect on critical habitat as no critical habitat has been designated or proposed in the survey area.

Special-Status Species

Bald eagle, northwestern pond turtle, and western red bat were identified in the desktop review as having potential to occur on or near the Project site due to the presence of habitat in the survey area:

- Bald eagle requires large trees near water bodies for nesting. Suitable trees were present near Pine Mountain Lake. Therefore, the BRE concludes the Project may affect but is not likely to adversely affect bald eagle.
- Northwestern pond turtle uses aquatic habitats such as creeks, streams, or irrigation ditches for movements and foraging and adjacent upland areas for egg laying. The Project site is adjacent to and crosses multiple drainages that could support this species. Therefore, the BRE concludes the Project may affect but is not likely to adversely affect northwestern pond turtle.
- Western red bat uses trees, tree cavities, and peeling bark for roosting. Because several riparian trees that qualify as habitat will likely be removed to facilitate sewer pipe installation activities, the BRE concludes the Project may affect but is not likely to adversely affect this species.

Additionally, the BRE concludes that the Project will have no effect on other special-status species due either to the lack of habitat for such species in the survey area or for some plants because they were found to be absent during appropriate seasonal surveys.

Migratory Birds

The BRE concludes the Project may affect but is not likely to adversely affect nesting migratory birds.

Regulated Habitats

The BRE concludes the Project may affect and is likely to adversely affect three regulated habitats.

These habitats consist of intermittent and ephemeral streams under the regulatory jurisdiction of the USACE, the RWQCB, and the CDFW. As such, Clean Water Act Section 404 permits and 401 certifications as well as California Fish and Game Code Section 1602 notifications are being prepared for impacts at these work locations. However, the project will have no effect on federally protected wetlands or other regulated habitats under CEQA-Plus purview as no such habitats were found in the survey area.

Direct and Indirect Impacts

The Project could have a substantial, direct adverse effect on bald eagle. Bald eagle requires large trees within about one mile of large, open water bodies for nesting. The Project site is within one mile of Pine Mountain Lake, the nearest water body that could support nesting by this species. Although the two trees, both Pacific willow (*Salix lasiandra*), that may need to be removed to facilitate Project construction are too small to support nesting, construction-related disturbance could result in the incidental loss of reproduction. Therefore, the BRE recommends that Mitigation Measure BIO-1 (below) be included in the conditions of approval to reduce the potential impact to a less-than significant level.

The Project could also have a substantial, direct adverse effect on northwestern pond turtle, a native reptile designated by the CDFW as a Species of Special Concern. Northwestern pond turtle uses a variety of aquatic habitats including streams, creeks, ponds, lakes, and canals for shelter, foraging, and basking and lays its eggs in upland areas adjacent to these aquatic habitats. Because the Project will involve excavation and staging in and adjacent to multiple sections of intermittent and ephemeral streams that could support this species at some time during the year, incidental loss of animals or eggs could occur. Therefore, the BRE recommends that Mitigation Measure BIO-2 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

The Project could also have a substantial, direct adverse effect on western red bat, a native bat species designated by the CDFW as a Species of Special Concern. Western red bat uses trees for roosting and pupping habitat. This species often uses trees on the edges of streams, open fields, and urban areas, approximately 2-40 feet above ground level (Zeiner et al. 1988-1990). Because the Project may require that riparian trees be removed at two work locations, incidental loss of animals or young from these trees could occur. Therefore, the BRE recommends that Mitigation Measure BIO-3 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

Mitigation Measures:

BIO-1: Protect nesting bald eagle.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through July.
2. If it is not possible to schedule construction between August and January, preconstruction surveys for nesting bald eagles shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates (large trees) within 0.5-miles of the impact areas in Pine Mountain Lake for nests. If an active nest is found

close enough to the construction area to be disturbed by Project activities, the qualified biologist in consultation with the CDFW shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting eagles, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

BIO-2: Protect northwestern pond turtle.

1. To the extent practicable, construction in and adjacent to intermittent and ephemeral streams shall be scheduled to occur when these streams are dry (approximately mid-July through October) to avoid the possibility of northwestern pond turtle being present at the worksite.
2. If it is not possible to schedule construction between August and October, preconstruction surveys for northwestern pond turtle shall be conducted by a qualified biologist to determine if turtles are occupying streamside worksites. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all sections of stream within 300 feet of planned work activities, including adjacent upland areas, for turtles and nests; northwestern pond turtle nests in upland areas within several hundred feet of water in the spring, typically during the months of April and May. If a turtle or nest is found within 300 feet of the worksite, a qualified biological monitor shall remain on site during construction to ensure that no turtles or turtle nests are impacted by work activities. Any turtle found on or adjacent to the worksite shall be allowed to leave on its own.

BIO-3: Protect western red bat.

1. To the extent practicable, construction shall be scheduled to avoid the birthing and pupping season for western red bat, which extends from May through August.
2. If it is not possible to schedule construction between September and April, preconstruction surveys for roosting bats shall be conducted by a qualified biologist to ensure that no active maternal colonies will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential colony substrates in and immediately adjacent to the impact areas for maternity roosts. If an active maternity roost is found close enough to the construction area to be disturbed by work activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the colony. If work cannot proceed without disturbing the colony, work may need to be halted or redirected to other areas until young are able to fly or the colony has otherwise failed for non-construction related reasons.

The Project will impact two intermittent streams, Rattlesnake Creek in Big Oak Flat and an unnamed stream in Pine Mountain Lake. Both support white alder (*Alnus rhombifolia*) and Pacific willow, two species of native riparian tree. In both cases, work activities will involve excavating an open trench across the stream to replace the existing sewer pipeline. This work could impact four white alders in Big Oak Flat (two 4-inch diameter at breast height [DBH], one 3-inch DBH, and one 2-inch DBH) and two Pacific willows in Pine Mountain Lake (two 8-inch DBH). Work activities will also impact Himalayan blackberry (*Rubus armeniacus*), a nonnative vine, along Rattlesnake Creek in Big Oak Flat. Based on the abundance of this plant species in the local area and at this location, including on and adjacent to the impact area, recolonization after Project completion is expected to occur naturally and probably within one growing season. Therefore, the BRE concludes that Project related impacts to Himalayan blackberry will be negligible, don't meet the threshold of significance, and consequently require no mitigation. However, to mitigate potential impacts to white alder and Pacific willow at these two drainages, the BRE recommends that Mitigation Measure BIO-4 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

BIO-4: Mitigate impacts to riparian vegetation.

1. To the extent practical, avoid impacting white alder and Pacific willow trees.
 2. If impacts to white alder and Pacific willow trees are unavoidable, the District shall implement the tree replacement and maintenance requirements detailed in the Streamed Alteration Agreement issued by the CDFW for the Project. Those requirements are likely to involve replacing trees with a DBH of 4 inches or greater that are damaged or removed by replanting native species at a 3:1 ratio (replaced to lost) and ensuring a performance criterion of 70 percent survival of tree plantings for a minimum period of five consecutive years, including up to three years with supplemental irrigation and a minimum of two years without such assistance.
- c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. No wetlands were present in the proposed Project area and as such, there would be *no impacts* associated with the proposed improvements.

Mitigation Measures: None are required.

- 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. No marine or estuarine fishery resources or migratory routes to and from anadromous fish spawning grounds were present in the survey area. The streams in the survey area do not contain the perennial or prolonged flows necessary to support fish. In addition, no EFH, defined by the Magnuson-Stevens Act as those resources necessary for fish spawning, breeding, feeding, or growth to maturity, were present in the survey area.

The Project has the potential to impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act and California Fish and Game Code. Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by the CDFW. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant impact if the species is particularly rare in the region. Construction activities such as excavation, trenching, water main or water valve installation, and mobilizing or demobilizing construction equipment that disturb a nesting bird on the site or immediately adjacent to the construction zone could constitute a significant impact.

The BRE recommends that Mitigation Measure BIO-5 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

BIO-5: Protect nesting birds.

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

- 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?

No Impact. There are no local policies or ordinances that the Project will conflict with. Additionally, there are no adopted local, regional, or state habitat conservation plans adopted for the area. As such, there is *no impact*.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RESPONSES

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to §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 Impact With Mitigation. A Confidential Supplemental Historic Property Identification Report (Report) was prepared for the proposed Project in January 2019 by the California State Water Resources Control Board. The 2019 Report was an update to a Cultural Resources Assessment for the Proposed Groveland CSD Sewer Collection System Project by Sierra Valley Cultural Planning (2016). The Supplemental 2019 Report includes changes/additions to the project as well as additional/updated cultural resource information.

The Report included: (1) a records search at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System to identify previously recorded cultural resources and prior studies in the APE and surrounding 0.5-mile radius of the APE; (2) a search of the Native American Heritage Commission’s (NAHC) Sacred Lands File for known sacred resources and request for contact information for individuals and tribal representatives who may

have information about the Project; (3) desktop archival research; (4) an archaeological and built environment pedestrian survey of the APE; (5) an National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligibility evaluation of a historical archaeological site; and (6) a buried site sensitivity assessment.

Summary of findings:

Records Search Results

A records search (CCIC File No. 10116 O) was completed on June 20, 2018 by staff of the Central California Information Center (CCIC) of the CHRIS, included in Roper 2016, was supplemented with a records search with a half mile buffer around the Pine Mountain Lake APE. In total, 11 previous studies have been conducted in portions of the APE and thirty-five additional investigations have been conducted within a half mile of the APE (Figure 8). Six resources are recorded within or adjacent to the APE, and there are seventy-one previously recorded resources within one half mile of the APE.

Two resources in the APE are California Historic Landmarks (CHL), No. 406 Big Oak Flat and CHL No. 446 Groveland. Both were designated landmarks in 1949 before more stringent rules applied to the designation of state landmarks. Therefore, they are not listed on the California Register of Historical Resources (CRHR) and have not been formally recorded and evaluated for listing.

Native American Consultation

The State Water Board requested a Sacred Lands File search and contact list from the Native American Heritage Commission (NAHC). The NAHC responded on November 2, 2018, stating there are no recorded sacred lands in the APE and provided a list of tribes and individuals to contact. Project notification letters were sent to three tribes and individuals on the contact list provided by the NAHC, including Chicken Ranch Rancheria of Me Wuk Indians, Tuolumne Band of Me-Wuk Indians, and Washoe Tribe of Nevada and California.

Follow-up phone calls were placed to the remaining contacts on December 12, 2018 by Johanna Marty of the State Water Board. Ms. Marty spoke with Bailey Hunter of the Chicken Ranch Rancheria of Me Wuk Indians who confirmed receipt of the notification letter and stated she would call back if the Tribe had any concerns about the project. Darrel Cruz, Tribal Historic Preservation Officer for the Washoe Tribe of Nevada and California said he would defer to the Tuolumne Band of Me-Wuk Indians as the project is outside of Washoe Territory and followed up with an email to confirm. A message was left with the Tuolumne Band of Me-Wuk Indians. No further responses have been received. Documentation of Native American outreach and consultation is provided in the Report.

Field Methodology

Field inspections of the Big Oak Flat portion of the APE took place on November 29, 2017 by State Water Board archaeologists Kevin Marti and Will Norton. Field inspection of the Groveland and Pine Mountain Lake portions of the APE took place on August 29 and 30, 2018 and were performed by State Water Board archaeologists Kevin Marti and Johanna Marty. Parallel transects spaced at 10 meters were walked across the entire APE. One new resource, a stacked rock feature, was found during survey below Upper Skyridge Drive and recorded as Temp Site 8109-210-T01.

Description of Findings

Both of the prehistoric sites noted in the record search (P-55-001036 and P-55-001867) were not found in the APE. The prehistoric site P-55-001036/CA-TUO-5, is noted on a map as the possible location of a site discussed in a 1925 unpublished manuscript. No evidence of any site was observed in the area denoted on the map during field survey. The bedrock mortar site (P- 55-001867) was relocated and found to have been mis-plotted by the Information Center. The actual location, based on the site record and field verification, is shown in the site record update included in the Report.

The two CHLs, Groveland and Big Oak Flat, are within the APE and will be treated as eligible for listing on the NRHP for the purposes of this project only as formal recordation and evaluation is out of scope.

The APE crosses three historic-era mining sites (P-55-007727, P-55-000721, Temp # 8109- 210-T01). In Big Oak Flat (Figure 9), site P-55-7727 is composed of a mined drainage with tailings and features associated with sluice mining. In the Groveland APE area, site P-55-000721, also designated CA-TUO-3816H, is a collection of mining related features. Near the Pine Mountain Lake APE (Figure 11), Temp # 8109-210-T01 is a segment of embankment of stacked field stone on the edge of an un-named drainage.

Previous and current studies identified two California State Landmarks (CHLs) in the APE that will be treated as historic properties for purposes of this project. The State Water Board has applied the criteria of adverse effect (36 CFR Section 800.5[a][1]) to the two CHLs. The State Water Board has applied the criteria of adverse effect and has found that the Undertaking will not have an adverse effect on historic properties pursuant to 36 CFR Section 800.5(b).

Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner’s authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant

(MLD) to inspect the site and provide recommendations for the proper and dignified treatment of the remains and associated grave artifacts.

Although unlikely given the highly disturbed nature of the site and the records search did not indicate the presence of such resources, subsurface construction activities associated with the proposed Project could potentially disturb previously undiscovered human burial sites. Accordingly, this is a potentially significant impact. The California Health and Safety Code Section 7050.5 states that if human remains are discovered on-site, no further disturbance shall occur until the Tuolumne County Coroner has made a determination of origin and disposition. If the Coroner determines that the remains are not subject to his or her authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC. The NAHC shall identify the person or persons it believes to be the “most likely descendant” (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resource Code Section 5097.98.

Although considered unlikely subsurface construction activities could cause a potentially significant impact to previously undiscovered human burial sites, however compliance with regulations would reduce this impact to less than significant.

No other cultural resources were identified within the APE as a result of this study. Therefore, it is unlikely that the proposed action will have an effect on important archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. In the unlikely event that buried archaeological deposits are encountered within the project area, the finds must be evaluated by a qualified archaeologist. Should human remains be encountered, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

Unidentified cultural resources could be uncovered during proposed Project construction which could result in a potentially significant impact; however, implementation of Mitigation Measure CUL-1 would ensure that significant impacts remain *less than significant with mitigation incorporation*.

Mitigation Measures:

CUL-1: In the event that archaeological remains are encountered at any time during development or ground-moving activities within the entire Project area, all work in the vicinity of the find should be halted until a qualified archaeologist can assess the discovery and take appropriate actions as necessary.

VI. ENERGY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RESPONSES

- a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed Project involves improvements to the existing sewer collection system. During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Title 24 Building Energy Efficiency Standards would provide guidance on construction techniques for the plant house to maximize energy conservation and it is expected that contractors and the City have a strong financial incentive to use recycled materials and products originating from nearby sources in order to reduce materials costs. As such, it is anticipated that materials used in construction and construction vehicle fuel energy would not involve the wasteful, inefficient, or unnecessary consumption of energy.

Operational Project energy consumption would be minimal, as the pipelines do not require energy once they are installed. Operational energy would also be consumed during each vehicle trip associated with the proposed use for maintenance or otherwise.

As discussed in Impact XVII – Transportation/Traffic, the proposed Project would not generate on-going daily vehicle trips, other than for maintenance. The length of these trips and the individual vehicle fuel

efficiencies are not known; therefore, the resulting energy consumption cannot be accurately calculated. Adopted federal vehicle fuel standards have continually improved since their original adoption in 1975 and assists in avoiding the inefficient, wasteful, and unnecessary use of energy by vehicles.

As discussed previously, the proposed Project would be required to implement and be consistent with existing energy design standards at the local and state level, such as Title 24. The Project would also be subject to energy conservation requirements in the California Energy Code and CALGreen for the new plant house. Adherence to state code requirements would ensure that the Project would not result in wasteful and inefficient use of non-renewable resources due to building operation.

Therefore, any impacts are *less than significant*.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

	Less than Significant		
Potentially Significant Impact	With Mitigation Incorporation	Less than Significant Impact	No Impact

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

ii. Strong seismic ground shaking?

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

iii. Seismic-related ground failure, including liquefaction?

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

iv. Landslides?

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

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

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

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

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

adopted Uniform Building Code creating substantial direct or indirect 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

RESPONSES

a-i. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The proposed Project site is not located within a designated Alquist-Priolo Earthquake Fault zone or a seismically active zone.⁵; thus, the risk of surface fault ruptures within the area is low. Any impacts would be *less than significant*.

Mitigation Measures: None are required.

⁵ California Department of Conservation. California Geological Survey. CGS Information Warehouse: Regulatory Maps. <http://maps.conservation.ca.gov/cgs/informationwarehouse/>. Accessed August 2018.

- a (ii-iv). Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, liquefaction or landslides?

Less than Significant Impact. The proposed Project site is not in an area recognized for severe seismic ground shaking, landslides or liquefaction.⁶ Additionally, the project does not include the construction of substantial structures that would expose people or structures to adverse effects involving rupture of a known earthquake fault. Impacts would be *less than significant*.

Mitigation Measures: None are required.

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

Less than Significant Impact. The proposed Project site has a varied topography, but does not include any Project features that would result in soil erosion or loss of topsoil. Most of the project components will be located below grade. Once construction is completed, the pipeline trenches will be returned to pre-construction conditions and will not result in soil erosion greater than existing conditions. Therefore, the impact is *less than significant*.

Mitigation Measures: None are required.

- 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?

Less than Significant Impact. As described in Impact VI (aii-aiv), the potential for landslides, liquefaction, settlement or other seismically related hazards is low. As such, any impacts will be *less than significant*.

Mitigation Measures: None are required.

- d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less than Significant Impact. As described above, the potential for hazard from landslide and liquefaction in the project area is low. Therefore, the potential for liquefaction induced lateral spreading is also low. Causes of soil instability include, but are not limited to, withdrawal of

⁶ Ibid.

groundwater, pumping of oil and gas from underground, liquefaction, and hydro-compaction.⁷ The proposed Project does not include the on-site withdrawal of groundwater and the project site is not located in an area that has been subjected to activities that might cause soil instability. Because the project site has not been subject to activities that may cause soil instability, the risk of subsidence or collapse is expected to be low. Any impacts would be *less than significant*.

Mitigation Measures: None are required.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less Than Significant Impact. The Project itself is a sewer collection system project. The proposed Project would not generate wastewater requiring disposal. No septic tanks or alternative waste water disposal systems are included in the proposed Project. The project has been designed to work with the soil types in the District. Therefore, there would be a *less than significant impact*.

Mitigation Measures: None are required.

- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Paleontological resources are the fossilized remains of plants and animals and associated deposits. The Society of Vertebrate Paleontology has identified vertebrate fossils, their taphonomic and associated environmental indicators, and fossiliferous deposits as significant nonrenewable paleontological resources. Botanical and invertebrate fossils and assemblages may also be considered significant resources.

CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) §15126.4 (a)(1)). California Public Resources Code §5097.5 (see above) also applies to paleontological resources.

There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction

⁷ USGS. California Water Science Center. Land Subsidence: Cause & Effect. https://ca.water.usgs.gov/land_subsidence/california-subsidence-cause-effect.html. Accessed August 2018.

activities. Implementation of Mitigation Measure CUL-1 would require inadvertently discovery practices to be implemented should previously undiscovered paleontological resources be located. As such, impacts to undiscovered paleontological resources would be *less than significant*.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:

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

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

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

Responses:

- 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?

Less than Significant Impact. The proposed Project would generate exhaust-related GHG emissions during construction resulting from construction equipment operation, material haul and delivery trucks, and by trips by construction worker vehicles. Construction-related GHG emissions would occur for approximately twelve months and would cease following completion of the Project. The proposed Project is not a land-use development project that would generate vehicle trips and is not a roadway capacity increasing project that could carry additional VMT. Therefore, the proposed Project would not result in a net increase in operational GHG emissions. As such, the proposed Project would not interfere or obstruct implementation of an applicable GHG emissions reduction plan. The proposed Project would be consistent with all applicable local plans, policies, and regulations for reducing GHG emissions. Any impacts related to GHG emissions would be *less than significant*.

Mitigation Measures: None are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Less than Significant			
Potentially Significant Impact	With Mitigation Incorporation	Less than Significant Impact	No Impact	

response plan or emergency evacuation plan?

- g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

Responses:

- 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?

Less than Significant Impact. While trenching and construction activities may involve the limited transport, storage, use or disposal of hazardous materials, such as the fueling/servicing of construction equipment onsite, the activities would be short-term or one-time in nature and would be subject to federal, state, and local health and safety regulations.

Long-term operation of the proposed Project would involve little or no hazardous materials. Once operational, the pipelines are sealed and will not emit hazardous materials. Since the Project is intended to improve the existing deteriorated sewer system, it is assumed to have a positive impact by reducing the number of pipeline breaks/leaks or other issues that may result in the release of hazardous materials.

With implementation of the proposed Project, there are no reasonably foreseeable upset and accident conditions that would create a significant hazard to the public due to the release of hazardous materials. Impacts are considered *less than significant*.

Mitigation Measures: None are required.

- 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 Impact. Some spot repairs to the sewer system may occur within one-quarter mile of Big Oak Flat school, which is located approximately 1,000 feet south of SR 120 off of School Street. As previously described, long-term operation of the proposed Project would involve little or no hazardous materials. Once operational, the pipelines are sealed and will not emit hazardous materials. Since the Project is intended to improve the existing deteriorated sewer system, it is assumed to have a positive impact by reducing the number of pipeline breaks/leaks or other issues that may result in the release of hazardous materials.

Mitigation Measures: None are required.

- 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. The proposed Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.⁸ The nearest location is a closed mine site located at the corner of Cedar and Elm Streets in Tuolumne, over ten miles to the north. The State Emergency Response Unit conducted the removal of approximately 100 cubic yards of arsenic, mercury, and lead contaminated soil, and the removal of 80 cubic yards of mine debris and brush. Cleanup status is certified as of 6/30/1999. The project is not impacted by the facility and as such, there is *no impact*.

Mitigation Measures: None are required.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. Some project components (pipeline installation and spot repairs) will occur within 2 miles of the Pine Mountain Lake Airport located northeast of Pine Mountain Lake, approximately 3 miles from downtown Groveland. As previously described, the Project does not include any above-grade structures and as such has *a less than significant impact* on any airport operations.

⁸ California Department of Toxic Substance Control. EnviroStor. <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=groveland>
Accessed August 2018.

Mitigation Measures: None are required.

- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Pipeline installation will be temporary in nature and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. Construction schedules pertaining to pipelines within roadways will be coordinated with sheriff/fire/emergency services. Adequate emergency access will be maintained at all times. As such, any impacts will be *less than significant*.

Mitigation Measures: None are required.

- g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

No Impact. Implementation of the Project would not change the degree of exposure to wildfires because no new housing or businesses will be constructed. Therefore, there is *no impact*.

Mitigation Measures: None are required.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Result in substantial erosion or siltation on- or off- site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. The proposed Project includes improvements to the sewer infrastructure system. The Project does not include any expansion of wastewater treatment facilities or processes that would result in the production of chemicals or substances that would adversely impact local water quality. The Project is intended to rehabilitate/replace a deteriorating sewer collection system. The Project will not result in any additional water releases that could potentially impact groundwater or water quality. Construction activities near creeks and streams could potentially impact water quality due to runoff, or changes in streambeds. However, all activities will be conducted under the requirements and restrictions of the regulatory permits that will be required for the Project (most notably the RWQCB 401/404 permit which ensures appropriate measures are taken to preserve water quality). Best Management Practices pertaining to stormwater runoff from construction activities will also be enforced. Refer to Section IV – Biological Resources for information pertaining to regulatory permits and water quality. The State Water Resources Control Board will have ultimate review and approval of the upgraded system, thereby ensuring adequate water quality standards. There are no aspects of the Project that would result in changes to waste discharge requirements. Any impacts would be *less than significant*.

Mitigation Measures: None are required.

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The Project is an upgrade to the existing sewer collection system and will not use additional groundwater beyond what is already being used by the District. Additionally, the proposed Project will not significantly interfere with groundwater recharge as it will introduce minimal amounts of impermeable surfaces. As such, any impacts to groundwater supplies will be *less than significant*.

Mitigation Measures: None are required.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. result in substantial erosion or siltation on- or offsite;
 - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. impede or redirect flood flows?

Less than Significant Impact. The proposed improvements to the existing community sewer system will introduce minimal non-permeable surfaces such as concrete and other at-grade small structures such as manholes. The pipelines and other improvements will be installed underground within the existing road right-of-way, or other easements and will not alter any existing drainage patterns.

Construction activities near creeks and streams could potentially impact drainage patterns or changes in streambeds. However, all activities will be conducted under the requirements and restrictions of the regulatory permits that will be required for the Project (most notably the Streambed Alteration Agreement and the RWQCB 401/404 permit which ensures appropriate measures are taken to preserve water quality). Best Management Practices pertaining to stormwater runoff from construction activities will also be enforced. Refer to Section IV – Biological Resources for information pertaining to regulatory permits and water quality.

Any impacts would be *less than significant*.

Mitigation Measures: None are required.

- d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?
- e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The Project is not within a regulatory floodway or within a base floodplain (100 year) elevation. In addition, the Project does not include any housing or structures that would be subject to flooding either from a watercourse or from dam inundation. There are no bodies of water near the site that would create a potential risk of hazards from seiche, tsunami or mudflow. The project will not conflict with any water quality control plans or sustainable groundwater management plan. Therefore, there are *no impacts*.

Mitigation Measures: None are required.

XI. LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- a. Physically divide an established community?
- b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project is located largely within the existing streetscape within the Groveland Community Services District, as presented in Figures 2 – 4. The construction of the water lines and appurtenances would not cause any land use changes in the surrounding vicinity nor would it divide an established community. Once construction is completed, disturbed ground will be restored. The proposed Project involves improvements to the existing sewer infrastructure system and does not conflict with any land use plans, policies or regulations. *No impacts* would occur as a result of Project implementation.

Mitigation Measures: None are required.

XI. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- 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?

No Impact. The proposed Project includes improvements to the existing sewer infrastructure system. Construction will take place within the existing streetscape and not in an area with known mineral resources. Therefore, there is *no impact*.

Mitigation Measures: None are required.

XII. NOISE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Responses:

- a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. The nearest sensitive receptors to the proposed Project would be the residences along the existing pipeline alignment, as presented in Figures 2-4. Project construction would involve temporary, short-term noise sources including site preparation and installation of the pipeline and site cleanup work is expected to last for approximately one year. Construction-related short-term, temporary noise levels would be higher than existing ambient noise levels in the Project area, but is temporary and would not occur after construction is completed.

Operations-related noise would be similar to existing conditions. The pipelines themselves do not emit noise, nor do the related improvements such as those to the manholes. As such, any impacts to sensitive receptors would be less than significant.

During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 2, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

Table 2
Typical Construction Noise Levels

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time. Most residents recognize this reality and expect to hear construction activities on occasion.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project is earthmoving activities associated installing pipelines and installing equipment.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day.⁹ Table 3 describes the typical construction equipment vibration levels.

Table 3
Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Authority threshold for the nearest sensitive receptors.

As such, any impacts resulting from an increase in noise levels or from groundborne noise levels is *less than significant*.

Mitigation Measures: None are required.

- c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Some project components (pipeline installation and spot repairs) will occur within 2 miles of the Pine Mountain Lake Airport located northeast of Pine Mountain Lake, approximately 3 miles from downtown Groveland. However, as previously described, the Project does not include any above-grade structures or other features that would result in any permanent changes that would have an impact to or from noise associated with the Airport.

Mitigation Measures: None are required.

⁹ Transit Noise and Vibration Impact Assessment. Final Report No. FTA-VA-90-1003 prepared for the U.S. Federal Transit Administration by Harris Miller Miller & Hanson Inc., May 2006. Page 7-5. http://www.rtd-fastracks.com/media/uploads/nm/14_Section_38_NoiseandVibration_Part3.pdf. Accessed February 2019.

XIV. POPULATION AND HOUSING

Would the project:

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Responses:

- a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact. There are no new homes or businesses associated with the proposed Project, nor would Project implementation displace people or housing. The proposed Project is needed to improve existing sewer collection facilities. There is a *less than significant impact*.

Mitigation Measures: None are required.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Responses:

- 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?

No Impact. The proposed Project would improve the existing community sewer system. The proposed Project would not directly or indirectly induce population growth and the Groveland Community Services Fire Department would continue to provide service to the site. There is *no impact*.

Police Protection?

No Impact. The proposed Project will continue to be served by the Tuolumne County Sheriff Station. No additional police personnel or equipment is anticipated. There is *no impact*.

Schools, Parks, Other Public Facilities?

No Impact. The proposed Project would not increase the number of residents in the District, as the Project does not include residential units. Because the demand for schools, parks, and other public facilities is driven by population, the proposed Project would not increase demand for those services. As such, the proposed Project would result in *no impacts*.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- 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?

No Impact. The proposed Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The Project would have *no impact* to existing parks.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/ TRAFFIC

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--------------------------------------	---	------------------------------------	--------------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Responses:

- a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d. Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project would not cause a substantial increase in traffic, reduce the existing level of service, create any additional congestion at any intersections, or be inconsistent with CEQA Guidelines Section 15064.3. The construction of pipelines and appurtenances will not generate any additional traffic (beyond construction-related traffic trips) and as such, level of service standards would not be exceeded. There are no components of the proposed Project that would

increase hazards due to a geometric design feature. As traffic due to construction activities would be temporary in nature, the proposed Project would not cause a substantial increase in traffic or result in inadequate emergency access. Construction schedules pertaining to pipelines within roadways will be coordinated with sheriff/fire/emergency services. Adequate emergency access will be maintained at all times.

Once installed, the new pipelines and manholes would not generate significant additional traffic trips per day, other than as needed for periodic maintenance. The Project would not conflict with a program plan, ordinance, or policy addressing the circulation system and as such, impacts would be *less than significant*.

Mitigation Measures: None are required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

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

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 Resources Code section 5020.1(k), or

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

Responses:

- a). Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- 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 Resources Code 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 Impact. In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The State Water Board requested a Sacred Lands File search and contact list from the Native American Heritage Commission (NAHC). The NAHC responded on November 2, 2018, stating there are no recorded sacred lands in the APE and provided a list of tribes and individuals to contact. Project notification letters were sent to three tribes and individuals on the contact list provided by the NAHC, including Chicken Ranch Rancheria of Me Wuk Indians, Tuolumne Band of Me-Wuk Indians, and Washoe Tribe of Nevada and California.

Follow-up phone calls were placed to the remaining contacts on December 12, 2018 by Johanna Marty of the State Water Board. Ms. Marty spoke with Bailey Hunter of the Chicken Ranch Rancheria of Me Wuk Indians who confirmed receipt of the notification letter and stated she would call back if the Tribe had any concerns about the project. Darrel Cruz, Tribal Historic Preservation Officer for the Washoe Tribe of Nevada and California said he would defer to the Tuolumne Band of Me-Wuk Indians as the project is outside of Washoe Territory and followed up with an email to confirm. A message was left with the Tuolumne Band of Me-Wuk Indians. No further responses have been received. Documentation of Native American outreach and consultation is provided in the Confidential Report.

Therefore, there is a *less than significant impact*.

Mitigation Measures: None are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Responses:

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The proposed Project includes improvements to the District’s existing sewer collection system, the results of which would not exceed any wastewater treatment requirements set by the Regional Water Quality Control Board. The Project does not include any expansion of wastewater treatment facilities or processes. The Project is intended to rehabilitate/replace a deteriorating sewer collection system. The environmental impacts of the proposed project are discussed within this document.

Mitigation Measures: The Project will require multiple mitigation measures as identified throughout this document.

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. The proposed Project includes improving the existing sewer collection system. No new water supplies would be required as a result of this Project. There is *no impact*.

Mitigation Measures: None are required.

- c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

Less Than Significant Impact. The proposed Project includes improvements to the District’s existing sewer collection system, the results of which would not require additional wastewater treatment capacity. The Project does not include any expansion of wastewater treatment facilities or processes. The Project is intended to rehabilitate/replace a deteriorating sewer collection system.

Mitigation Measures: None are required.

- d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Proposed Project construction and operation will generate minimal amounts of solid waste. The proposed Project will not generate waste on an on-going basis and will comply with all federal, state and local statutes and regulations related to solid waste. Any impacts will be *less than significant*.

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Responses:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in areas that have been developed with urban uses within a forested area. The proposed Project includes improvements to the District’s existing sewer collection system, which will include underground pipelines and at-grade manholes. There is no increased risk or on-going risk of wildfire beyond existing conditions associated with the Project.

As such, any wildfire risk to the project structures or people would be *less than significant*.

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

Responses:

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to *less than significant*.

- 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)?

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is *less than significant*.

- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to *less than significant*.

Chapter 4

MITIGATION MONITORING & REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Groveland Community Services District – Downtown Groveland and Big Oak Flat Sewer Collection System Improvements. The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled “Party Responsible for Implementing Mitigation,” names the party responsible for carrying out the required action. The third column, “Implementation Timing,” identifies the time the mitigation measure should be initiated. The fourth column, “Party Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the Groveland CSD to ensure that individual mitigation measures have been monitored.

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
Biological Resources				
<p>BIO-1: Protect nesting bald eagle.</p> <ol style="list-style-type: none"> 1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through July. 2. If it is not possible to schedule construction between August and January, preconstruction surveys for nesting bald eagles shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates (large trees) within 0.5-miles of the impact areas in Pine Mountain Lake for nests. If an active nest is found close enough to the construction area to be disturbed by Project activities, the qualified biologist in consultation with the CDFW shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting eagles, work may need to be halted or redirected to other 	Groveland CSD	Prior to and/or during construction	Groveland CSD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<p>areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.</p>				
<p>BIO-2: Protect northwestern pond turtle.</p> <ol style="list-style-type: none"> 1. To the extent practicable, construction in and adjacent to intermittent and ephemeral streams shall be scheduled to occur when these streams are dry (approximately mid-July through October) to avoid the possibility of northwestern pond turtle being present at the worksite. 2. If it is not possible to schedule construction between August and October, preconstruction surveys for northwestern pond turtle shall be conducted by a qualified biologist to determine if turtles are occupying streamside worksites. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all sections of stream within 300 feet of planned work activities, including adjacent upland areas, for turtles and nests; northwestern pond turtle nests in upland areas within several hundred 	<p>Groveland CSD</p>	<p>Prior to and/or during construction</p>	<p>Groveland CSD</p>	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<p>feet of water in the spring, typically during the months of April and May. If a turtle or nest is found within 300 feet of the worksite, a qualified biological monitor shall remain on site during construction to ensure that no turtles or turtle nests are impacted by work activities. Any turtle found on or adjacent to the worksite shall be allowed to leave on its own.</p>				
<p>BIO-3: Protect western red bat.</p> <ol style="list-style-type: none"> 1. To the extent practicable, construction shall be scheduled to avoid the birthing and pupping season for western red bat, which extends from May through August. 2. If it is not possible to schedule construction between September and April, preconstruction surveys for roosting bats shall be conducted by a qualified biologist to ensure that no active maternal colonies will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential colony 	<p>Groveland CSD</p>	<p>Prior to and/or during construction</p>	<p>Groveland CSD</p>	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<p>substrates in and immediately adjacent to the impact areas for maternity roosts. If an active maternity roost is found close enough to the construction area to be disturbed by work activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the colony. If work cannot proceed without disturbing the colony, work may need to be halted or redirected to other areas until young are able to fly or the colony has otherwise failed for non-construction related reasons.</p>				
<p>BIO-4: Mitigate impacts to riparian vegetation.</p> <ol style="list-style-type: none"> 1. To the extent practical, avoid impacting white alder and Pacific willow trees. 2. If impacts to white alder and Pacific willow trees are unavoidable, the District shall implement the tree replacement and maintenance requirements detailed in the Streamed Alteration Agreement issued by the CDFW for the Project. Those requirements are likely to involve replacing trees with a DBH of 4 inches or greater that are damaged or 	Groveland CSD	Prior to and/or during construction	Groveland CSD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<p>removed by replanting native species at a 3:1 ratio (replaced to lost) and ensuring a performance criterion of 70 percent survival of tree plantings for a minimum period of five consecutive years, including up to three years with supplemental irrigation and a minimum of two years without such assistance.</p>				
<p>BIO-5: Protect nesting birds.</p> <ol style="list-style-type: none"> 1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August. 2. If it is not possible to schedule construction between September and January, preconstruction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact 3. areas for nests. If an active nest is found close 	<p>Groveland CSD</p>	<p>Prior to and/or during construction</p>	<p>Groveland CSD</p>	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
<p>enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.</p>				
<p>Cultural Resources</p>				
<p>Measure CUL-1</p> <p>In the event that archaeological remains are encountered at any time during development or ground-moving activities within the entire Project area, all work in the vicinity of the find should be halted until a qualified archaeologist can assess the discovery and take appropriate actions as necessary.</p>	<p>Groveland CSD</p>	<p>Prior to and/or during construction</p>	<p>Groveland CSD</p>	

Chapter 5

PREPARERS

LIST OF PREPARERS

Crawford & Bowen Planning, Inc.

- Travis Crawford, AICP, Principal Environmental Planner
- Emily Bowen, LEED AP, Principal Environmental Planner

AM Consulting Engineers

- Alfonso Manrique, PE
- Angela Costanzo

Colibri Ecological Consulting, LLC.

- Jeff Davis

Appendices

Appendix A

Air Emission Output Tables

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Groveland CSD Downtown Groveland and Big Oak Flat Sewer Collect														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	1.37	11.09	14.54	10.63	0.63	10.00	2.65	0.57	2.08	0.02	2,205.34	0.59	0.03	2,227.76
Grading/Excavation	6.64	50.87	75.07	13.34	3.34	10.00	5.11	3.03	2.08	0.10	9,883.20	2.88	0.10	9,986.48
Drainage/Utilities/Sub-Grade	4.02	32.47	39.97	12.02	2.02	10.00	3.96	1.88	2.08	0.06	5,772.76	1.23	0.06	5,821.89
Paving	1.93	18.79	18.08	1.12	1.12	0.00	1.01	1.01	0.00	0.03	2,875.77	0.76	0.04	2,905.22
Maximum (pounds/day)	6.64	50.87	75.07	13.34	3.34	10.00	5.11	3.03	2.08	0.10	9,883.20	2.88	0.10	9,986.48
Total (tons/construction project)	0.59	4.70	6.36	1.42	0.30	1.12	0.51	0.27	0.23	0.01	874.58	0.23	0.01	883.19

Notes: Project Start Year -> 2019
 Project Length (months) -> 12
 Total Project Area (acres) -> 2
 Maximum Area Disturbed/Day (acres) -> 1
 Water Truck Used? -> No

Phase	Total Material Imported/Exported Volume (yd ³ /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	0
Grading/Excavation	0	0	0	0	920	0
Drainage/Utilities/Sub-Grade	0	0	0	0	680	0
Paving	0	0	0	0	520	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Groveland CSD Downtown Groveland and Big Oak Flat Sewer Collect														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.02	0.15	0.19	0.14	0.01	0.13	0.03	0.01	0.03	0.00	29.11	0.01	0.00	26.68
Grading/Excavation	0.35	2.69	3.96	0.70	0.18	0.53	0.27	0.16	0.11	0.01	521.83	0.15	0.01	478.35
Drainage/Utilities/Sub-Grade	0.19	1.50	1.85	0.56	0.09	0.46	0.18	0.09	0.10	0.00	266.70	0.06	0.00	244.01
Paving	0.04	0.37	0.36	0.02	0.02	0.00	0.02	0.02	0.00	0.00	56.94	0.02	0.00	52.18
Maximum (tons/phase)	0.35	2.69	3.96	0.70	0.18	0.53	0.27	0.16	0.11	0.01	521.83	0.15	0.01	478.35
Total (tons/construction project)	0.59	4.70	6.36	1.42	0.30	1.12	0.51	0.27	0.23	0.01	874.58	0.23	0.01	801.22

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Appendix B

Biological Report

Biological Resource Evaluation

Downtown Groveland and Big Oak Flat Sewer Collection System Improvements

Tuolumne County, California



PREPARED FOR:

Groveland Community Services District
18966 Ferretti Road
Groveland, CA 95321

PREPARED BY:

Colibri Ecological Consulting, LLC
9493 N Fort Washington Road, Suite 108
Fresno, CA 93730
www.colibri-ecology.com



August 2018

Contents

1.0	Introduction.....	1
1.1	Background.....	1
1.2	Project Description	1
1.3	Project Location	2
1.4	Purpose and Need of Proposed Project.....	7
1.5	Consultation History	7
1.6	Regulatory Framework	7
1.6.1	Federal Requirements	7
1.6.2	State Requirements.....	9
3.0	Methods	11
2.1	Desktop Review	11
2.2	Reconnaissance Survey.....	11
2.3	Effects Analysis and Significance Criteria.....	11
2.3.1	Effects Analysis.....	11
2.3.2	Significance Criteria.....	12
3.0	Results	14
3.1	Desktop Review	14
3.2	Reconnaissance Survey.....	25
3.2.1	Land Use and Habitats.....	25
3.2.2	Plant and Animal Species Observed	28
3.2.3	Nesting Birds and the Migratory Bird Treaty Act.....	34
3.2.4	Regulated Habitats	34
4.0	Environmental Impacts.....	35
4.1	Effects Determinations	35
4.1.1	Critical Habitat.....	35
4.1.2	Special-Status Species	35
4.1.3	Migratory Birds.....	35
4.1.4	Regulated Habitats	35

4.2	Significance Determinations	36
4.2.1	Direct and Indirect Impacts	37
4.2.2	Cumulative Impacts	41
4.2.3	Unavoidable Significant Adverse Impacts	41
5.0	Literature Cited.....	42

Figures

Figure 1.	Site vicinity map.	3
Figure 2.	Big Oak Flat Project site map.....	4
Figure 3.	Groveland Project site map.....	5
Figure 4.	Pine Mountain Lake Project site map.....	6
Figure 5.	CNDDDB occurrence map.	15
Figure 6.	Photograph of the Project site showing the location of an existing sewer alignment below a paved surface surrounded by commercial development in Groveland.	26
Figure 7.	Photograph of the Project site showing a manhole along a dirt road surrounded by cismontane woodland.....	26
Figure 8.	Photograph of the Project site showing a concrete manhole collar in a residential area, surrounded by nonnative landscaping and native oak trees.	27
Figure 9.	Photograph of the Project site showing the location of an existing sewer alignment in cismontane woodland.....	27

Tables

Table 1.	Special-status species, their listing status, habitat requirements, and potential to occur on or near the Project site.	16
Table 2.	Plant and animal species observed during the reconnaissance surveys.	28

Appendixes

Appendix A. Official lists of threatened and endangered species and critical habitats.....43
Appendix B. CNDDDB occurrence records.....51
Appendix C. CNPS plant list.....58

Executive Summary

The Groveland Community Services District (District) proposes to improve the sewer collection infrastructure in Big Oak Flat, Groveland, and the Pine Mountain Lake subdivision in Tuolumne County, California. The Project will involve installing new sewer pipe, repairing or replacing existing sewer pipe, installing new manholes, and rehabilitating or modifying existing manholes. The purpose of the Project is to prevent sewer system blockages and sanitary sewer overflows and to provide adequate and reliable sewer service to District customers.

The District will obtain financing for the project from the Clean Water State Revolving Fund (CWSRF). The CWSRF is a state and federal partnership that helps ensure safe drinking water. It is administered by the State of California and partially funded by the United States Environmental Protection Agency. Consequently, the Project must not only meet environmental documentation and review requirements under the California Environmental Quality Act (CEQA) but must meet such requirements with respect to certain federal laws and regulations as well. This state and federal review process is known as CEQA-Plus.

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

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

We concluded the Project could affect three special-status species and nesting migratory birds, but effects can be reduced to less-than-significant levels with mitigation. The Project will also adversely affect regulated habitats, but these effects can also be reduced to less-than-significant levels with mitigation.

Abbreviations

Abbreviation	Definition
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
CWSRF	Clean Water State Revolving Fund
DBH	Diameter at Breast Height
DPS	Distinct Population Segment
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
FE	Federally listed as Endangered
FESA	Federal Endangered Species Act
FP	Fully Protected
FT	Federally listed as Threatened
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
PVC	Polyvinyl Chloride
SE	State-listed as Endangered
SSSC	State Species of Special Concern
ST	State-listed as Threatened
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

1.1 Background

The Groveland Community Services District (District) proposes to improve the sewer collection infrastructure in Big Oak Flat, Groveland, and the Pine Mountain Lake subdivision. The District will obtain financing for this sewer improvement project (Project) from the Clean Water State Revolving Fund (CWSRF). The CWSRF is administered by the State Water Resources Control Board and partially funded by a capitalization grant from the United States Environmental Protection Agency (EPA). Due to this federal nexus, issuing funds from the CWSRF constitutes a federal action, one that requires the EPA to determine whether the proposed action may affect federally protected resources. The Project must therefore comply with requirements of both the California Environmental Quality Act (CEQA) and certain federal environmental laws and regulations. This state and federal review process is known as CEQA-Plus.

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

1.2 Project Description

The Project includes sewer system improvements in three areas:

1. Big Oak Flat.
2. Groveland.
3. Pine Mountain Lake.

Sewer improvements in Big Oak Flat will involve (1) replacing approximately 455 linear feet of 6-inch sewer pipe using open trench excavation methods, (2) rehabilitating approximately 792 linear feet of 6-inch sewer pipe using trenchless cured-in-place pipe (CIPP) methods, (3) performing spot repairs to resolve pipe anomalies at two locations, (4) constructing new

manholes, (5) bringing existing manhole lids up to grade, and (6) installing sealed or locking manhole lids.

Sewer improvements in Groveland will involve (1) replacing approximately 408 linear feet of 8-inch sewer pipe and 258 linear feet of 6-inch sewer pipe with open trench excavation methods, (2) rehabilitating approximately 1413 linear feet using CIPP methods, and (3) rehabilitating and installing sealed or locking manhole lids.

Sewer improvements in Pine Mountain Lake will involve (1) replacing approximately 2715 linear feet of 6-inch sewer pipe using open trench excavation methods and (2) performing spot repairs in sections where pipe abnormalities were detected.

CIPP uses a flexible fiberglass fabric liner coated with a thermosetting polyester resin to form a new pipe inside an existing pipe. The liner is inserted into the existing pipe through existing manholes and cured to form a new liner. The fabric liner holds the resin in place until a tube is inserted in the pipe to be cured.

Polyvinyl chloride (PVC) pipe will be used for sewer pipe replacement work.

Installing new manholes will require: (1) excavating to the depth needed to install the new manhole to new or existing sewer main infrastructure, (2) installing the concrete manhole chamber, (3) connecting new or existing sewer mains, (4) backfill excavations, and (5) restoring the soil surface. Rehabilitating manholes will involve applying a polymer coating to the interior surface of the manhole chamber. Bringing manhole lids to grade will consist of installing a concrete riser column then restoring the soil surface to match the existing grade. Installing sealed or locking manhole lids will involve altering existing concrete collars to accommodate the new locking lids.

1.3 Project Location

The Project is in and adjacent to Big Oak Flat, Groveland, and the Pine Mountain Lake subdivision of Groveland in Tuolumne County, California (Figure 1). The Project site consists of developed and disturbed land cover (roads and residential and commercial development) surrounded by cismontane woodland (Figures 2, 3, and 4).

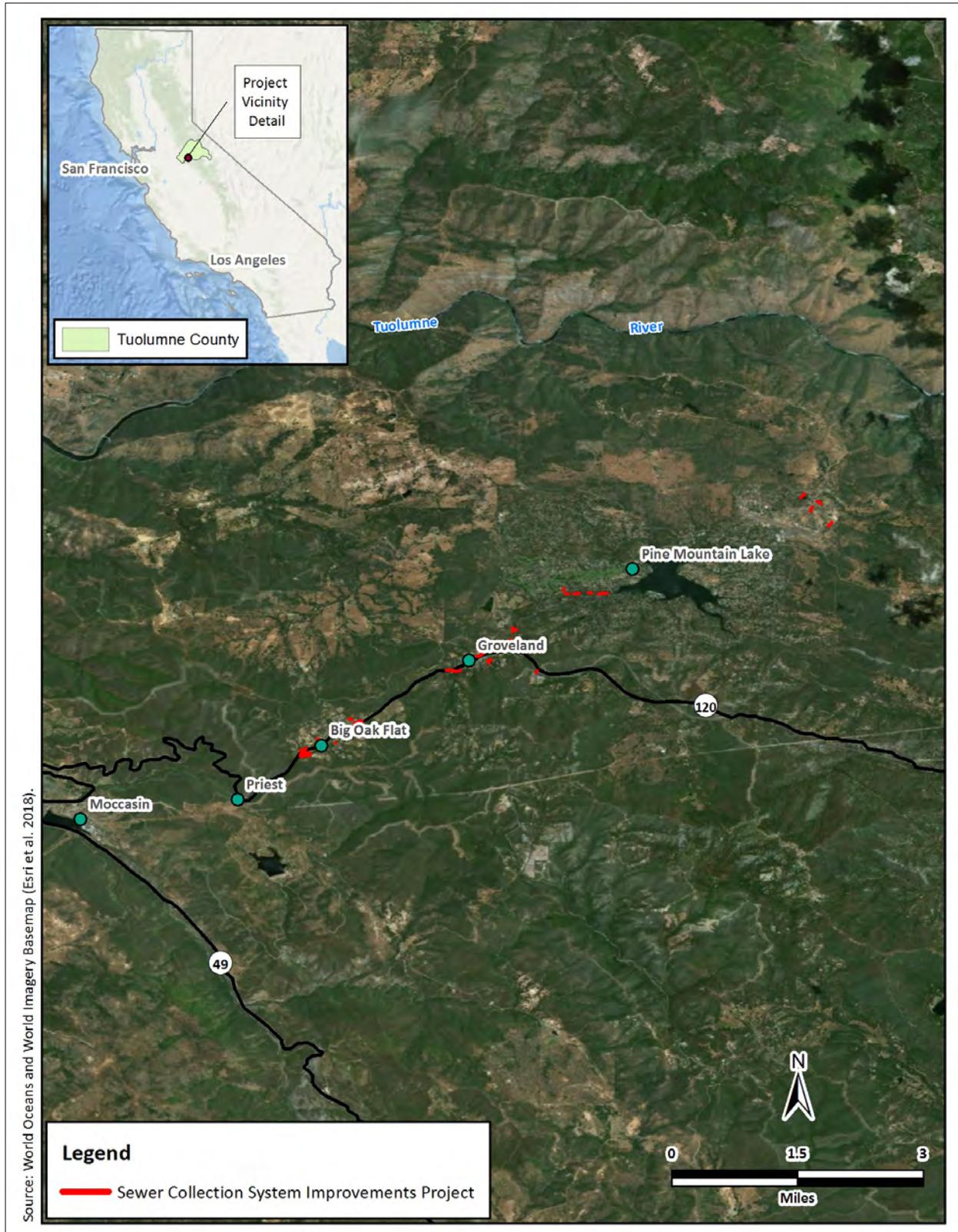


Figure 1. Site vicinity map.

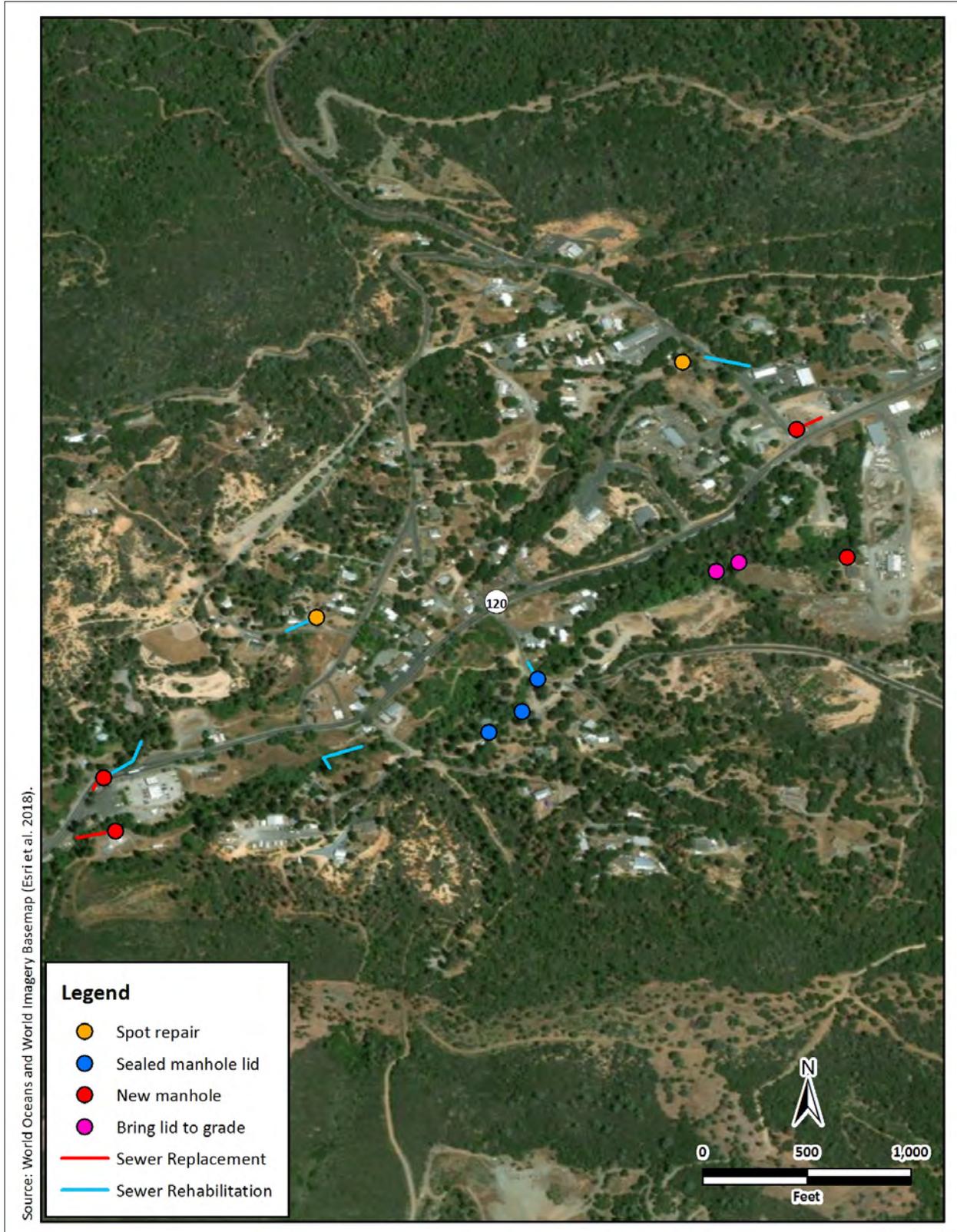


Figure 2. Big Oak Flat Project site map.

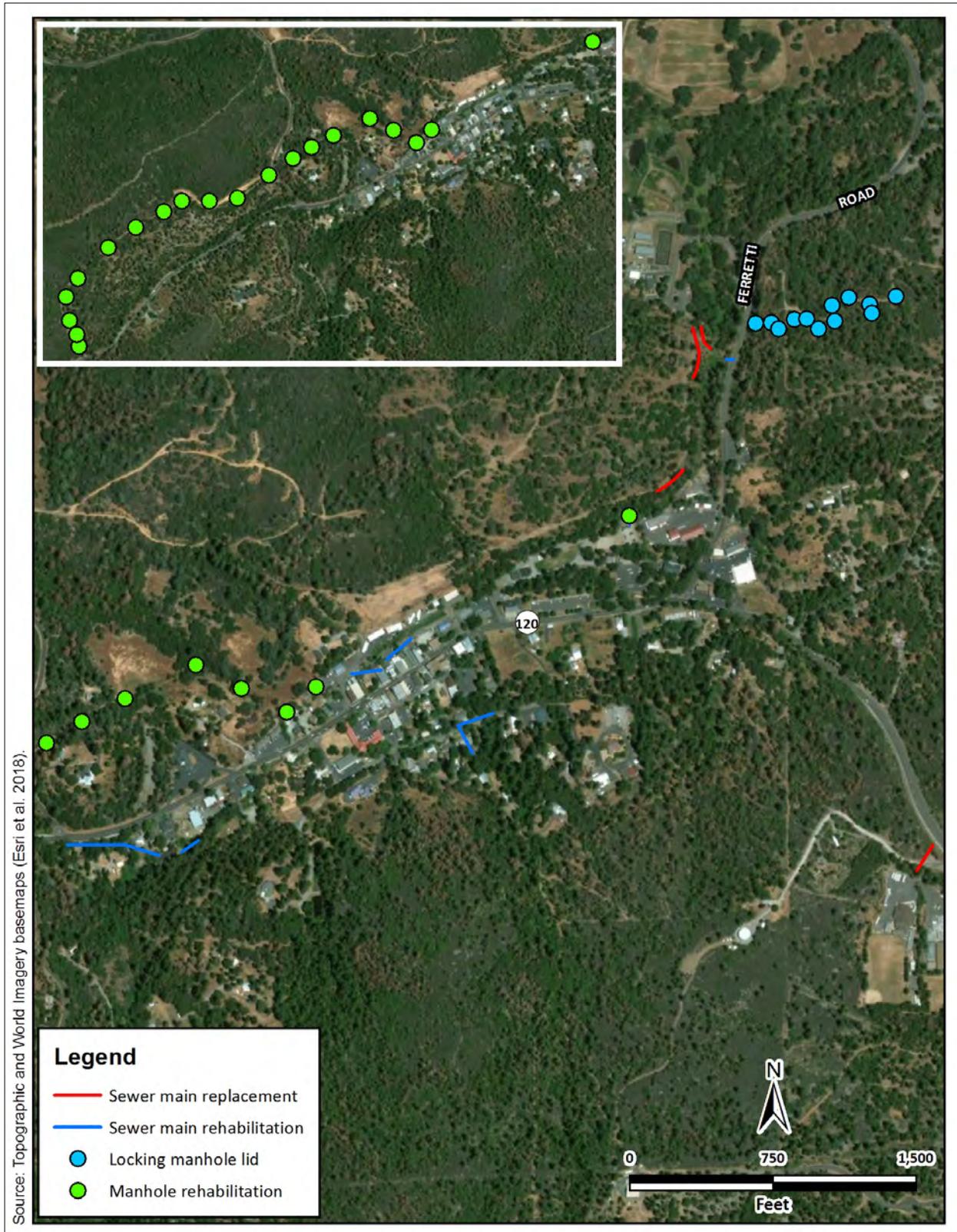


Figure 3. Groveland Project site map.

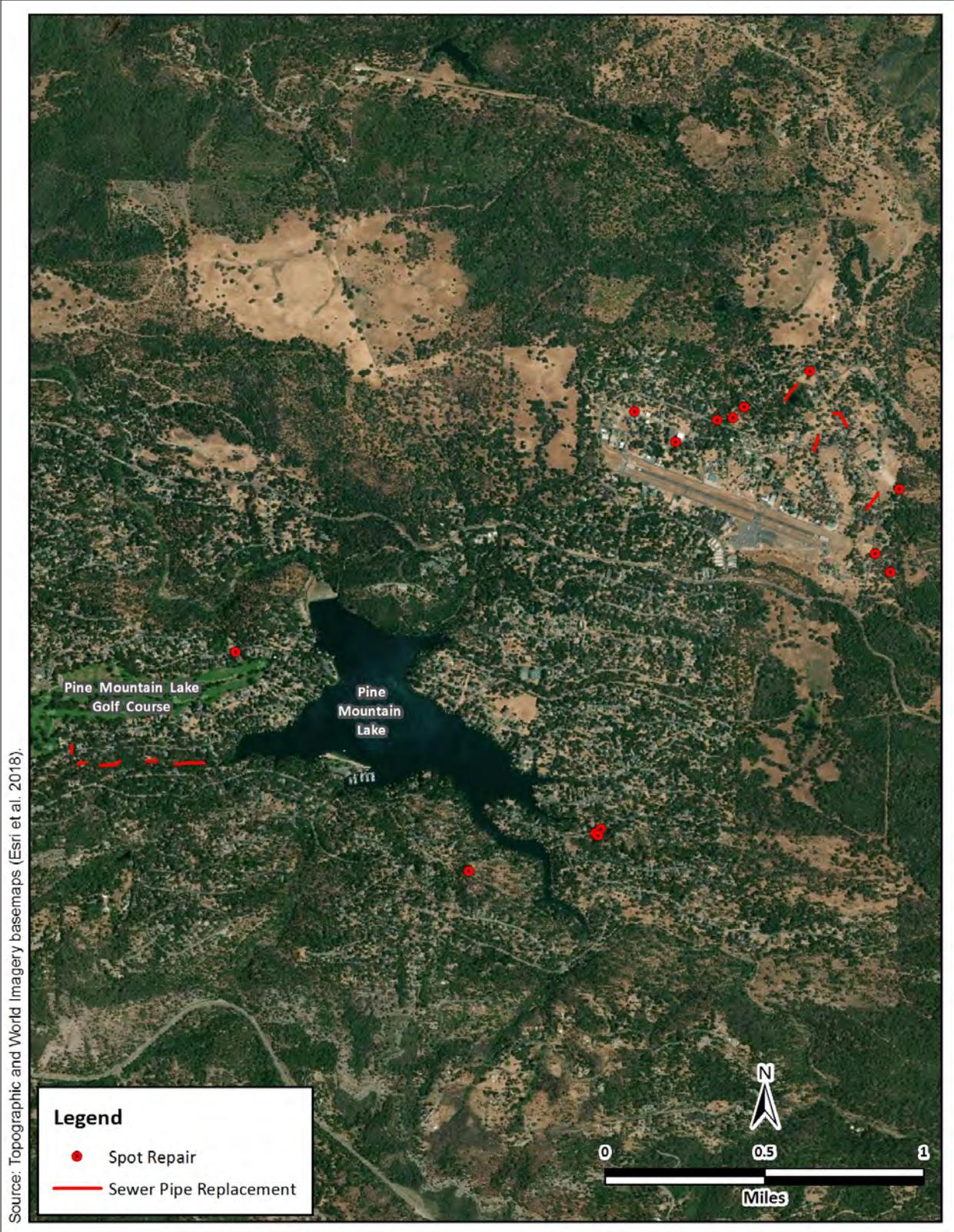


Figure 4. Pine Mountain Lake Project site map.

1.4 Purpose and Need of Proposed Project

The purpose of this Project is to improve the sewer collection infrastructure in Big Oak Flat, Groveland, and the Pine Mountain Lake subdivision. The Project is needed to prevent sewer system blockages and sanitary sewer overflows and to provide adequate and reliable sewer service to District customers.

1.5 Consultation History

Lists of all species listed or proposed for listing as threatened or endangered and all designated or proposed critical habitat under the FESA that could occur near the Project site were obtained by Colibri Staff Scientist Kristofer Robison from the United States Fish and Wildlife Service (USFWS) website (<https://ecos.fws.gov/ipac/>) on 16 April 2018 (Appendix A).

1.6 Regulatory Framework

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

1.6.1 Federal Requirements

Federal Endangered Species Act. The USFWS and the National Oceanographic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) enforce the provisions stipulated in the Federal Endangered Species Act of 1973 (FESA, 16 USC Section 1531 et seq.). Threatened and endangered species on the federal list (50 Code of Federal Regulations [CFR] 17.11 and 17.12) are protected from take unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present on the Project site and determine whether the proposed project may affect such species. Under the FESA, habitat loss is considered an impact to a species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species that is listed or proposed for listing under the FESA or result in the destruction or adverse modification of critical habitat proposed or designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation.

Migratory Bird Treaty Act. The federal Migratory Bird Treaty Act (MBTA) (16 United States Code [USC] §703, Supp. I, 1989) prohibits killing, possessing, trading, or other forms of take of

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

United States Army Corps of Engineers Jurisdiction. Areas meeting the regulatory definition of “waters of the United States” (jurisdictional waters) are subject to the jurisdiction of the United States Army Corps of Engineers (USACE) under provisions of Section 404 of the Clean Water Act (1972) and Section 10 of the Rivers and Harbors Act (1899). These waters may include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, etc.), all impoundments of waters otherwise defined as waters of the United States, tributaries of waters otherwise defined as waters of the United States, the territorial seas, and wetlands adjacent to waters of the United States (33 CFR part 328.3). Ditches and drainage canals where water flows intermittently or ephemerally are not regulated as waters of the United States. Wetlands on non-agricultural lands are identified using the *Corps of Engineers Wetlands Delineation Manual* and related Regional Supplement (USACE 1987 and 2008). Construction activities, including direct removal, filling, hydrologic disruption, or other means in jurisdictional waters are regulated by the USACE. The placement of dredged or fill material into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of state water quality certification pursuant to Section 401 of the Clean Water Act. The State Water Resources Control Board is the state agency (together with the Regional Water Quality Control Boards) charged with implementing water quality certification in California.

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

Magnuson-Stevens Fishery Conservation and Management Act. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (Public law 94-265; Statutes at Large 90 Stat. 331; 16 U.S.C. ch. 38 § 1801 et seq.) establishes a management system for national marine and estuarine fishery resources. This legislation requires that all federal agencies consult the NMFS regarding all actions or proposed actions permitted, funded, or undertaken that may adversely affect “essential fish habitat (EFH).” EFH is defined as “waters and substrate necessary

to fish for spawning, breeding, feeding, or growth to maturity.” The Magnuson-Stevens Act states that migratory routes to and from anadromous fish spawning grounds are considered EFH. The phrase “adversely affect” refers to any impact that reduces the quality or quantity of EFH. Federal activities that occur outside of EFH, but which may have an impact on EFH must also be considered. The Act applies to salmon species, groundfish species, highly migratory species such as tuna, and coastal pelagic species such as anchovies.

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

1.6.2 State Requirements

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

California Environmental Quality Act. The California Environmental Quality Act (CEQA) of 1970 (Subsections 21000–21178) requires that CDFW be consulted during the CEQA review process regarding impacts of proposed projects on special-status species. Special-status species are defined under CEQA Guidelines subsection 15380(b) and (d) as those listed under FESA and CESA and species that are not currently protected by statute or regulation but would be considered

rare, threatened, or endangered under these criteria or by the scientific community. Therefore, species that are considered rare or endangered are addressed in this biological resource evaluation regardless of whether they are afforded protection through any other statute or regulation. The California Native Plant Society (CNPS) inventories the native flora of California and ranks species according to rarity (CNPS 2017). Plants with Rare Plant Ranks 1A, 1B, 2A, or 2B are considered special-status species under CEQA.

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

CEQA also requires consultation with local policies, ordinances, or regulations protecting biological resources that could be affected by the Project. In Tuolumne County (County), native oak trees are protected under Chapter 9.24 of the Tuolumne County Ordinance Code, whereby the County established procedures and penalties for premature removal of native oak trees as defined in Chapter 9.24.030.

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

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

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

3.0 Methods

2.1 Desktop Review

As a framework for the evaluation and reconnaissance surveys, we obtained an official USFWS species list for the Project (USFWS 2018, Appendix A). In addition, we searched the California Natural Diversity Data Base (CNDDDB, CDFW 2018) and the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2018) for records of special-status plant and animal species in the Project area (Appendixes B and C). Regional lists of special-status species were compiled using USFWS, CNDDDB, and CNPS database searches confined to the Groveland 7.5-minute United States Geological Survey (USGS) topographic quad, which encompasses the Project site, and the eight surrounding quads (Buckhorn Peak, Coulterville, Duckwall Mountain, Jawbone Ridge, Moccasin, Penon Blanco Peak, Standard, and Tuolumne). Local lists of special-status species were compiled using CNDDDB records from within 5 miles of the Project site. Species for which the Project site does not provide habitat were eliminated from further consideration. We also reviewed aerial imagery from Google Earth and other sources, USGS topographic maps, and relevant literature.

2.2 Reconnaissance Survey

Staff Scientists Joe Medley and Kristofer Robison conducted field reconnaissance surveys of the Project site on 4-5 April, 10-11 April, 30 April, and 14-15 May 2018. The Project site and a 50-foot buffer surrounding the Project site was walked and thoroughly inspected to evaluate and document the potential for the site to support federally or state-protected resources. All plants except those under cultivation or planted in residential areas and all animals (vertebrate wildlife species) observed within the survey area were identified and documented. The survey area was evaluated for the presence of regulated habitats, including lakes, streams, and other waters using methods described in the *Wetlands Delineation Manual* and regional supplement (USACE 1987, 2008).

2.3 Effects Analysis and Significance Criteria

2.3.1 Effects Analysis

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

species, (7) cumulative effects of the Project and any future activities in the area, and (8) the potential to mitigate any adverse effects.

Factors considered in evaluating the effects of the Project on migratory birds included the potential for the Project to result in (1) mortality of migratory birds or (2) loss of migratory bird nests containing viable eggs or nestlings.

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

2.3.2 Significance Criteria

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

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

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

- 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 CDFW or USFWS.
- 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 CDFW or USFWS.
- 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.

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

3.0 Results

3.1 Desktop Review

The official species list for the Project site (USFWS 2018, Table 1, Appendix A) included three species listed as threatened or endangered under the FESA. Those species include the threatened Delta smelt (*Hypomesus transpacificus*), the threatened California red-legged frog (*Rana draytonii*), and the threatened California tiger salamander (*Ambystoma californiense*), none of which is expected to occur on or within 50 feet of the Project site (Table 1). As identified in the official species list (USFWS 2018, Appendix A), the Project site does not occur in designated or proposed critical habitat.

Searching the CNDDDB (CDFW 2018) for records of special-status species from the Groveland 7.5-minute USGS topographic quad and the eight surrounding quads produced 220 records of 50 species (Table 1, Appendix B). Of those species, 26 are known from within 5 miles of the Project site (Table 1, Figure 5). Of those 26, the state-listed as endangered and fully protected bald eagle (*Haliaeetus leucocephalus*) and two CDFW-designated species of special concern, northwestern pond turtle (*Actinemys marmorata*) and western red bat (*Lasiurus blossevillii*), could occur on or within 50 feet of the Project site based on the presence of habitat for these species. All other species either do not have a special-status designation (Otherwise Rare or Unknown Species), have no potential to occur on or within 50 feet of the Project site due to lack of habitat, or were found to be absent (some plants) based on results of appropriate seasonal surveys (Table 1).

Searching the CNPS rare and endangered plant inventory (CNPS 2018) for records from within the Groveland 7.5-minute USGS topographic quad and the eight surrounding quads produced records of 32 species (Table 1, Appendix C). None of these species are expected on or within 50 feet of the Project site either due to the lack of habitat or because they were found to be absent based on results of appropriate seasonal surveys (Table 1).

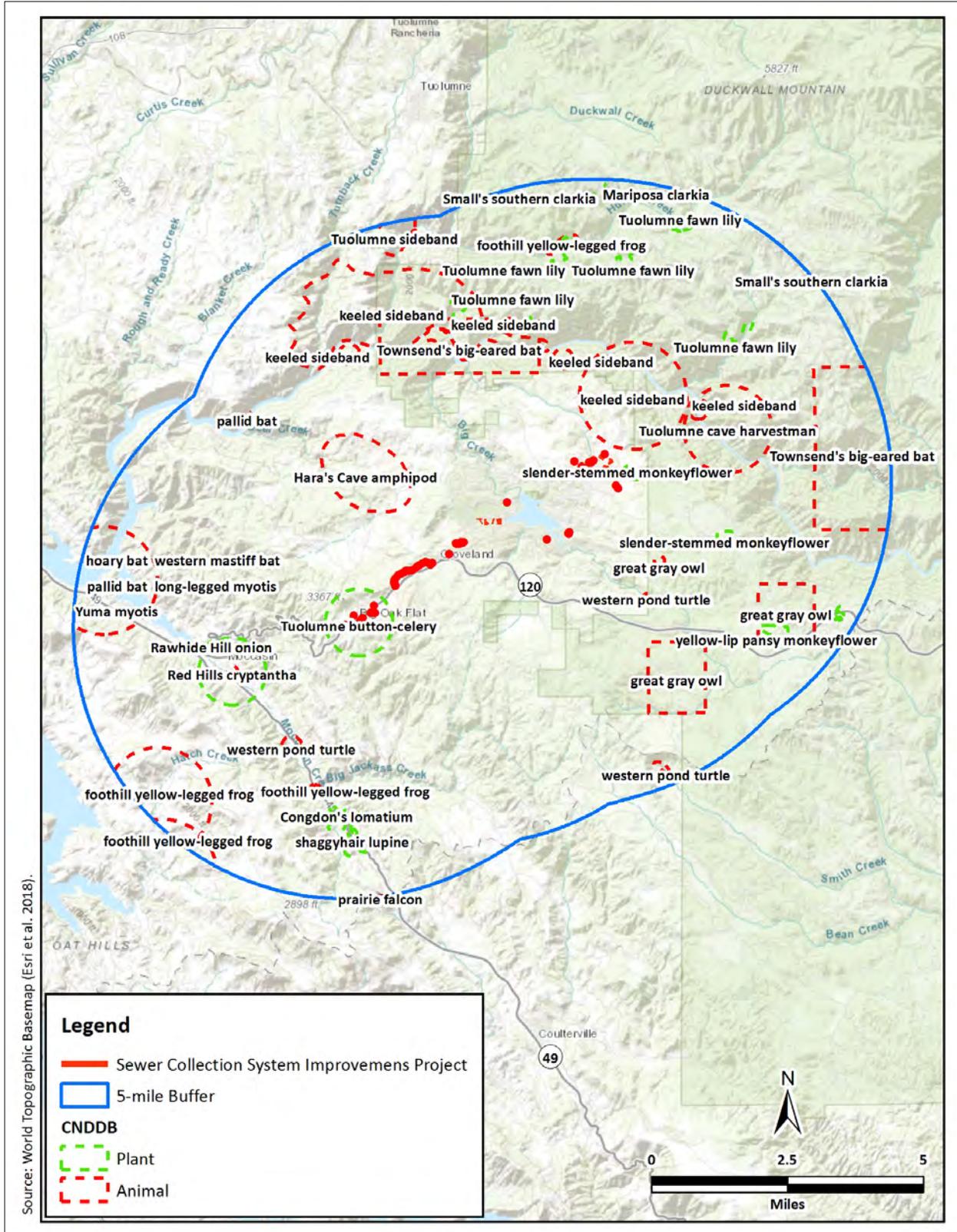


Figure 5. CNDDDB occurrence map.

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

Species	Status ¹	Habitat	Potential to Occur ²
Federally and State-Listed Endangered or Threatened Species			
Hartweg's golden sunburst (<i>Pseudobahia bahiifolia</i>)	FE, SE, 1B.1	Cismontane woodland and valley and foothill grassland.	None. No records from within 5 miles. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Layne's ragwort (<i>Packera layneae</i>)	FT, SR, 1B.1	Chaparral and cismontane woodland, often with serpentine soil.	None. Habitat lacking; no records from within 5 miles. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	FT	Elderberry (<i>Sambucus</i> sp.) plants in the Central Valley with stems > 1 inch diameter at ground level.	None. No records from within 5 miles; Project site outside current known range of this species.
Delta smelt (<i>Hypomesus transpacificus</i>)	FT, FE	Saline river channels and tidally influenced sloughs.	None. Habitat lacking; no connectivity with suitable habitats.
California red-legged frog (<i>Rana draytonii</i>)	FT, SSSC	Creeks, ponds, and marshes for breeding; burrows for upland refuge.	None. Habitat lacking; Project site outside current known range of this species.
Foothill yellow-legged frog (<i>Rana boylei</i>)	SCT	Shallow, partly shaded perennial streams and riffles with rocky substrate.	None. Habitat lacking; no suitable perennial stream within survey area.
Limestone salamander (<i>Hydromantes brunus</i>)	ST, FP	Limestone outcrops, caverns, talus, or rock fissures in foothill pine and chaparral along the Merced River and its tributaries.	None. Habitat lacking; Project site outside current known range of this species.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	SE, FP	Large, old-growth trees or snags near water.	Moderate. Suitable nest trees but no known

Species	Status ¹	Habitat	Potential to Occur ²
			active nests near Project site in Pine Mountain Lake.
Great gray owl (<i>Strix nebulosa</i>)	SE	Meadow edges in mixed conifer forest, red fir forest, or cismontane woodland in Central California.	None. Habitat lacking; no suitable meadows within 500 feet.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE, SE	Riparian corridors with a dense, shrubby understory.	None. Habitat lacking; survey area does not include a dense-shrubby riparian corridor.
Sierra Nevada yellow-legged frog (<i>Rana sierrae</i>)	FE, ST	Perennial waters including lakes, ponds, and meadow streams in the Sierra Nevada between 1000 and 12,000 feet elevation.	None. Habitat lacking; no perennial waters within survey area.
Sierra Nevada red fox (<i>Vulpes Vulpes necator</i>)	FC, ST	High elevation montane woodland and conifer forest.	None. Habitat lacking; the Project site is in a low elevation cismontane woodland.
State Species of Special Concern			
San Joaquin roach (<i>Lavinia symmetricus symmetricus</i>)	SSSC	Tributaries of the San Joaquin River south of and including the Cosumnes River.	None. Habitat lacking; no connectivity with suitable habitat.
Northwestern pond turtle (<i>Actinemys marmorata</i>)	SSSC	Ponds, rivers, marshes, streams, and irrigation ditches, usually with aquatic vegetation. Need basking sites and suitable upland habitat for egg laying.	Moderate. Rattlesnake Creek and other intermittent drainages in the survey area provide habitat for this species.
Burrowing owl (<i>Athene cunicularia</i>)	SSSC	Grassland and upland scrub with friable soil; some agricultural or other developed and disturbed areas with ground squirrel burrows.	None. Habitat lacking; the Project site is in a low elevation cismontane woodland.

Species	Status ¹	Habitat	Potential to Occur ²
Pallid bat (<i>Antrozous pallidus</i>)	SSSC	Rock outcrops for roosting and a variety of foraging habitats.	None. No potential roosting habitat in survey area; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Spotted bat (<i>Euderma maculatum</i>)	SSSC	Rock crevices, cliffs, and caves for roosting; feeds almost exclusively on moths.	None. No potential roosting or foraging habitat; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SSSC	Open buildings, caves, or mines for roosting and a variety of habitats including cismontane woodland and low elevation conifer forest for foraging.	None. No potential roosting habitat in survey area; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Western mastiff bat (<i>Eumops perotis californicus</i>)	SSSC	Crevices in cliff faces and rock outcrops, for roosting and a variety of habitats including cismontane woodland and low elevation conifer forest for foraging.	None. No potential roosting habitat in survey area; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Western red bat (<i>Lasiurus blossevillii</i>)	SSSC	Primarily in trees from sea level to elevations supporting mixed-conifer forest for roosting and foraging.	Moderate. Suitable roosting trees and foraging areas within 50 feet of the Project site. Any potential for

Species	Status ¹	Habitat	Potential to Occur ²
			occurrence over the Project site while foraging is negligible; work will occur during the day, when this species would be roosting in trees.
Otherwise Rare or Uncertain Status Species			
Crotch bumble bee (<i>Bombus crotchii</i>)	CNDDDB	Various habitats with <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> as food plants.	Moderate. Several <i>Eschscholzia</i> plants were found near the Project site.
Hara's cave amphipod (<i>Stygobromus harai</i>)	CNDDDB	Caves, mine tunnels, and springs in Central California.	None. Habitat lacking; Project site is outside current known range of this species.
Keeled sideband (<i>Monadenia circumcarinata</i>)	CNDDDB	Steep limestone outcrops and talus slopes in the Tuolumne River canyon.	None. Habitat lacking; Project site is outside current known range of this species.
Tuolumne cave harvestman (<i>Banksula tuolumne</i>)	CNDDDB	Tuolumne Crystal Cave in Tuolumne County.	None. Habitat lacking; Project site is outside current known range of this species.
Tuolumne sideband (<i>Monadenia tuolumneana</i>)	CNDDDB	Steep limestone outcrops and talus slopes in the Tuolumne River canyon.	None. Habitat lacking; Project site is outside current known range of this species.
Wengerors' cave amphipod (<i>Stygobromus wengerorum</i>)	CNDDDB	Subterranean groundwater habitats and caves in Mariposa County.	None. Habitat lacking; Project site is outside current known range of this species.
Western pearlshell (<i>Margaritifera falcate</i>)	CNDDDB	Freshwater rivers, streams, and creeks.	Low. Recent flooding likely made conditions unsuitable for this species.
Yosemite Mariposa sideband (<i>Monadenia yosemitensis</i>)	CNDDDB	Riparian forest of the Merced River and its tributaries.	None. Habitat lacking; Project site is outside

Species	Status ¹	Habitat	Potential to Occur ²
			current known range of this species.
Oak titmouse (<i>Baeolophus inornatus</i>)	CNDDDB	Oak woodland or cismontane woodland.	Present. This species was detected in the survey area.
Prairie falcon (<i>Falco mexicanus</i>)	WL	Dry, open places with cliffs for nesting.	None. Habitat lacking; no nesting habitat in survey area.
Fringed myotis (<i>Myotis thysanodes</i>)	CNDDDB	Caves, rock outcrops, mines, and buildings for roosting.	None. No potential roosting habitat in survey area; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Hoary bat (<i>Lasiurus cinereus</i>)	CNDDDB	Medium to large trees for roosting; open areas, specializing on moths for foraging.	Moderate. Suitable roosting trees and foraging areas within 50 feet of the Project site; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.
Long-eared myotis (<i>Myotis evotis</i>)	CNDDDB	Buildings, rock crevices, snags, and under tree bark for roosting and chaparral, cismontane woodland for foraging.	Moderate. Suitable roosting trees and foraging areas within 50 feet of the Project site; any potential for occurrence over the Project site while foraging is negligible since work will occur during the day when this species roosts.

Species	Status ¹	Habitat	Potential to Occur ²
Long-legged myotis (<i>Myotis volans</i>)	CNDDDB	Conifer forest above 4000 feet elevation.	None. Habitat lacking; Project site is below known elevation range.
Silver-haired bat (<i>Lasionycteris noctivagans</i>)	CNDDDB	Trees, cavities, snags, exfoliating bark, or abandoned woodpecker holes for roosting.	Moderate. Suitable roosting trees and foraging areas within 50 feet of the Project site. Any potential for occurrence over the Project site while foraging is negligible; work will occur during the day, when this species would be roosting in trees.
Yuma myotis (<i>Myotis yumanensis</i>)	CNDDDB	Caves, rock crevices, mines, or buildings for roosting; open water for foraging.	None. No potential roosting or open water foraging habitat found in survey area.
California Rare Plants			
Beaked clarkia (<i>Clarkia rostrata</i>)	1B.3	Cismontane woodland and valley and foothill grassland.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Big-scale balsamroot (<i>Balsamorhiza macrolepis</i>)	1B.2	Chaparral, cismontane woodland, and valley and foothill grassland.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Brewer's calandrinia (<i>Calandrinia breweri</i>)	4.2	Chaparral and coastal scrub.	None. Habitat lacking; the Project site is in a low elevation cismontane woodland.
Brownish beaked-rush (<i>Rhynchospora capitellata</i>)	2B.2	Meadows, seeps, and marshes in conifer forest.	None. Habitat lacking; the Project site is in a low elevation cismontane woodland.
California beaked-rush (<i>Rhynchospora californica</i>)	1B.1	Bogs, fens, meadows, and seeps in conifer forest.	None. Habitat lacking; no meadows or seeps were found in the survey area.

Species	Status ¹	Habitat	Potential to Occur ²
Congdon's lomatium (<i>Lomatium congdonii</i>)	1B.2	Chaparral and cismontane woodland with serpentine soil.	None. Habitat lacking; no serpentine soils known from the survey area.
Congdon's onion (<i>Allium sanbornii</i> var. <i>congdonii</i>)	4.3	Serpentine or volcanic soils in chaparral and cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Elongate copper moss (<i>Mielichhoferia elongata</i>)	4.3	Usually acidic metamorphic rocky, sometimes carbonate soils near meadows or seeps in conifer forest, cismontane woodland, broadleaf forest, and chaparral.	None. Habitat lacking; no metamorphic rocky or carbonate soils known from the survey area.
Ewan's larkspur (<i>Delphinium hansenii</i> ssp. <i>ewanianum</i>)	4.2	Rocky substrates in cismontane woodland and valley and foothill grassland.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Foothill jepsonia (<i>Jepsonia heterandra</i>)	4.3	Rocky substrates in cismontane woodland and low elevation conifer forest.	None. Not detected during reconnaissance surveys, which occurred outside the blooming period of this species.
Fresno ceanothus (<i>Ceanothus fresnensis</i>)	4.3	Rocky substrates in cismontane woodland openings and low elevation conifer forest.	None. No records within five miles. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Hall's wyethia (<i>Wyethia elata</i>)	4.3	Cismontane woodland and low elevation conifer forest.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Jepson's onion (<i>Allium jepsonii</i>)	1B.2	Serpentine or volcanic soils in chaparral, cismontane woodland, and low elevation conifer forest.	None. Habitat lacking; no serpentine soils known from the survey area.

Species	Status ¹	Habitat	Potential to Occur ²
Mariposa clarkia (<i>Clarkia biloba</i> ssp. <i>australis</i>)	1B.2	Serpentine soils in chaparral and cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Mariposa cryptantha (<i>Cryptantha mariposae</i>)	1B.3	Rocky, serpentine soils in chaparral.	None. Habitat lacking; no serpentine soils known from the survey area, which is a low elevation cismontane woodland.
Parry's horkelia (<i>Horkelia parryi</i>)	1B.2	lone formation and other soils in chaparral and cismontane woodland.	None. Habitat lacking; no lone formation soils known from the survey area.
Rawhide Hill onion (<i>Allium tuolumnense</i>)	1B.2	Serpentine soils in cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Red Hills cryptantha (<i>Cryptantha spithamaea</i>)	1B.3	Serpentine soils in chaparral and cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Red Hills ragwort (<i>Senecio clevelandii</i> var. <i>heterophyllus</i>)	1B.2	Serpentine seeps in cismontane woodland.	None. Habitat lacking; no serpentine seeps or soils known from the survey area.
Serpentine bluecup (<i>Githopsis pulchella</i> ssp. <i>serpentinicola</i>)	4.3	Serpentine or lone formation soils in cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Shaggyhair lupine (<i>Lupinus spectabilis</i>)	1B.2	Serpentine soils in chaparral and cismontane woodland.	None. Habitat lacking; no serpentine soils known from the survey area.
Sierra clarkia (<i>Clarkia virgata</i>)	4.3	Cismontane woodland and low elevation conifer forest.	None. No records from within five miles. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Slender-stemmed monkeyflower (<i>Erythranthe filicaulis</i>)	1B.2	Meadows and seeps in cismontane woodland and conifer forest.	None. Habitat lacking; no meadows or seeps were found in the survey area.
Small-flowered monkeyflower (<i>Erythranthe inconspicua</i>)	4.3	Chaparral, cismontane woodland, and low elevation conifer forest.	None. Not detected during reconnaissance surveys, which occurred

Species	Status ¹	Habitat	Potential to Occur ²
			within the blooming period of this species.
Small's southern clarkia (<i>Clarkia australis</i>)	1B.2	Cismontane woodland and low elevation conifer forest between 2600 and 4900 feet elevation.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Stinkbells (<i>Fritillaria agrestis</i>)	4.2	Clay and sometimes serpentine soils in chaparral, cismontane woodland, pinyon-juniper woodland, and valley and foothill grassland.	None. Habitat lacking; no serpentine soils known from the survey area; not detected during reconnaissance surveys.
Tansy-flowered woolly sunflower (<i>Eriophyllum confertiflorum</i> var. <i>tanacetiflorum</i>)	4.3	Cismontane woodland and low elevation conifer forest. Affinity to serpentine soil.	None. Habitat lacking. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Tuolumne button-celery (<i>Eryngium pinnatisectum</i>)	1B.2	Seasonally flooded depressions in cismontane woodland and low elevation conifer forest.	None. Habitat lacking; no seasonal wetlands found in the survey area.
Tuolumne fawn lily (<i>Erythronium tuolumnense</i>)	1B.2	Broadleaf upland forest, chaparral, cismontane woodland, and low elevation conifer forest. Affinity to serpentine soil.	None. Habitat lacking; not detected during reconnaissance surveys, which occurred within the blooming period of this species.
Yellow-lip pansy monkeyflower (<i>Diplacus pulchellus</i>)	1B.2	Often disturbed areas with clay soil and meadows and seeps in low elevation conifer forest.	None. Not detected during reconnaissance surveys, which occurred within the blooming period of this species.

CDFW (2018), CNPS (2018), USFWS (2018b).

Status ¹	Potential to Occur ²
CNDDDB = Recognized by the CNDDDB as rare or of uncertain status.	None: Neither species nor sign observed; conditions unsuitable for occurrence.
FC = Federal Candidate for listing	Low: Neither species nor sign observed; conditions marginal for occurrence.
FE = Federally listed Endangered	Moderate: Neither species nor sign observed, but conditions suitable for occurrence.
FT = Federally listed Threatened	High: Neither species nor sign observed, but conditions highly suitable for occurrence.
FP = Fully Protected	Present: Species or sign observed.
SE = State-listed Endangered	
SR = State-designated Rare	
ST = State-listed Threatened	
SSSC = State Species of Special Concern	
WL = CDFW Watch List	

CNPS California Rare Plant Rank:	Threat Ranks:
1A – plants presumed extirpated in California and either rare or extinct elsewhere.	0.1 – seriously threatened in California (> 80% of occurrences).
1B – plants rare, threatened, or endangered in California and elsewhere.	0.2 – moderately threatened in California (20-80% of occurrences).
4 – plants of limited distribution or infrequently encountered throughout a broad area of California.	0.3 – not very threatened in California (<20% of occurrences).

3.2 Reconnaissance Survey

3.2.1 Land Use and Habitats

The Project site consists developed and disturbed land cover (commercial and residential development) surrounded by cismontane woodland.

The alignment of existing and proposed new sewer infrastructure runs below paved roads (Figure 6), dirt roads (Figure 7), residential and commercial development (Figure 8), and cismontane woodland land cover (Figure 9).



Figure 6. Photograph of the Project site showing the location of an existing sewer alignment below a paved surface surrounded by commercial development in Groveland.



Figure 7. Photograph of the Project site showing a manhole along a dirt road surrounded by cismontane woodland.



Figure 8. Photograph of the Project site showing a concrete manhole collar in a residential area, surrounded by nonnative landscaping and native oak trees.



Figure 9. Photograph of the Project site showing the location of an existing sewer alignment in cismontane woodland.

3.2.2 Plant and Animal Species Observed

A total of 112 plant species (72 native and 40 nonnative) were found during reconnaissance surveys (Table 2). Two amphibian species, 33 bird species, and four mammal species were also detected (Table 2).

Table 2. Plant and animal species observed during the reconnaissance surveys.

Common Name	Scientific Name	Regulatory Status
Plants		
Family Adoxaceae		
Blue elderberry	<i>Sambucus nigra</i> ssp. <i>caerulea</i>	Native
Family Anacardiaceae		
Poison oak	<i>Toxicodendron diversilobum</i>	Native
Family Apiaceae		
Bur chervil	<i>Anthriscus caucalis</i>	Nonnative
Field hedge parsley	<i>Torilis arvensis</i>	Nonnative
Pacific sanicle	<i>Sanicula crassicaulis</i>	Native
Family Asteraceae		
Anderson's thistle	<i>Cirsium andersonii</i>	Native
Blow wives	<i>Achyraea mollis</i>	Native
California mugwort	<i>Artemisia douglasiana</i>	Native
Common dandelion	<i>Taraxacum officinale</i>	Nonnative
Common groundsel	<i>Senecio vulgaris</i>	Nonnative
Common yarrow	<i>Achillea millefolium</i>	Native
Gumweed	<i>Grindelia hirsutula</i>	Native
Italian thistle	<i>Carduus pycnocephalus</i>	Nonnative
Milk thistle	<i>Silybum marianum</i>	Nonnative
Mountain dandelion	<i>Agoseris heterophylla</i>	Native
Pearly everlasting	<i>Anaphalis margaritacea</i>	Native
Prickly sow thistle	<i>Sonchus asper</i>	Nonnative
Q-tips	<i>Micropus californicus</i>	Native
Rosin weed	<i>Calycadenia truncate</i>	Native
Rough cat's ear	<i>Hypochaeris radicata</i>	Nonnative
Smooth cat's ear	<i>Hypochaeris glabra</i>	Nonnative
Woolly mule ears	<i>Wyethia mollis</i>	Native
Family Betulaceae		
White alder	<i>Alnus rhombifolia</i>	Native
Family Boraginaceae		
Baby blue eyes	<i>Nemophila menziesii</i>	Native
Canyon nemophila	<i>Nemophila heterophylla</i>	Native
Fiddleneck	<i>Amsinckia</i> sp.	Native

Common Name	Scientific Name	Regulatory Status
Grand hound's tongue	<i>Cynoglossum grande</i>	Native
Rusty popcorn flower	<i>Plagiobothrys nothofulvus</i>	Native
Yerba santa	<i>Eriodictyon californicum</i>	Native
Family Brassicaceae		
American wintercress	<i>Barbarea orthoceras</i>	Native
Fringe pod	<i>Thysanocarpus curvipes</i>	Native
Shepherd's purse	<i>Capsella bursa-pastoris</i>	Nonnative
Short pod mustard	<i>Hirschfeldia incana</i>	Nonnative
Wild radish	<i>Raphanus sativus</i>	Nonnative
Family Calycanthaceae		
Spicebush	<i>Calycanthus occidentalis</i>	Native
Family Caprifoliaceae		
Chaparral honeysuckle	<i>Lonicera interrupta</i>	Native
Family Caryophyllaceae		
Sticky mouse-ear chickweed	<i>Cerastium glomeratum</i>	Nonnative
Family Cupressaceae		
Incense cedar	<i>Calocedrus decurrens</i>	Native
Family Cyperaceae		
Green-sheathed sedge	<i>Carex feta</i>	Native
Sedge	<i>Carex</i> sp.	Native
Family Ericaceae		
White leaf manzanita	<i>Arctostaphylos manzanita</i>	Native
Family Equisetaceae		
Common horsetail	<i>Equisetum arvense</i>	Native
Family Fabaceae		
American bird's foot trefoil	<i>Acmispon americanus</i>	Native
California burclover	<i>Medicago polymorpha</i>	Nonnative
Deerweed	<i>Acmispon glaber</i>	Native
Greater periwinkle	<i>Vinca major</i>	Nonnative
Miniature lupine	<i>Lupinus bicolor</i>	Native
Perennial sweet pea	<i>Lathyrus latifolius</i>	Nonnative
Rose clover	<i>Trifolium hirtum</i>	Nonnative
Scotch broom	<i>Cytisus scoparius</i>	Nonnative
Silver bush lupine	<i>Lupinus albifrons</i>	Native
Family Fagaceae		
Black oak	<i>Quercus kelloggii</i>	Native
Blue oak	<i>Quercus douglasii</i>	Native
Canyon live oak	<i>Quercus chrysolepis</i>	Native
Interior live oak	<i>Quercus wislizeni</i>	Native
Valley oak	<i>Quercus lobata</i>	Native

Common Name	Scientific Name	Regulatory Status
Family Geraniaceae		
Big heron bill	<i>Erodium botrys</i>	Nonnative
Crane's beak geranium	<i>Geranium molle</i>	Nonnative
Cutleaf geranium	<i>Geranium dissectum</i>	Nonnative
Greenstem filaree	<i>Erodium moschatum</i>	Nonnative
Red stemmed filaree	<i>Erodium cicutarium</i>	Nonnative
Family Grossulariaceae		
Wax currant	<i>Ribes cereum</i>	Native
Family Iridaceae		
Western blue eyed grass	<i>Sisyrinchium bellum</i>	Native
Family Juncaceae		
Common wood rush	<i>Luzula comosa</i>	Native
Family Lamiaceae		
Giraffe head	<i>Lamium amplexicaule</i>	Nonnative
White horehound	<i>Marrubium vulgare</i>	Nonnative
Family Liliaceae		
Common soaproot	<i>Chlorogalum pomeridianum</i>	Native
Yellow star tulip	<i>Calochortus monophyllus</i>	Native
Family Montiaceae		
Miner's lettuce	<i>Claytonia perfoliata</i>	Native
Narrow-leaved miner's lettuce	<i>Claytonia parviflora</i>	Native
Red maids	<i>Calandrinia menziesii</i>	Native
Family Myrsinaceae		
Scarlet pimpernel	<i>Lysimachia arvensis</i>	Nonnative
Family Orobanchaceae		
Butter 'n' eggs	<i>Triphysaria eriantha</i>	Native
Family Papaveraceae		
California poppy	<i>Eschscholzia californica</i>	Native
Cream cups	<i>Platystemon californicus</i>	Native
Family Phrymaceae		
Yellow monkey flower	<i>Erythranthe guttata</i>	Native
Family Pinaceae		
California foothill pine	<i>Pinus sabiniana</i>	Native
Douglas fir	<i>Pseudotsuga menziesii</i>	Native
Ponderosa Pine	<i>Pinus ponderosa</i>	Native
Sugar pine	<i>Pinus lambertiana</i>	Native
Family Plantaginaceae		
English plantain	<i>Plantago lanceolata</i>	Nonnative
Few flowered collinsia	<i>Collinsia sparsiflora</i>	Native
Speedwell	<i>Veronica arvensis</i>	Nonnative

Common Name	Scientific Name	Regulatory Status
Family Poaceae		
Bulbous blue grass	<i>Poa bulbosa</i>	Nonnative
California brome	<i>Bromus carinatus</i>	Native
Deergrass	<i>Muhlenbergia rigens</i>	Native
Grass	<i>Poa</i> sp.	Nonnative
Hairy chess	<i>Bromus commutatus</i>	Nonnative
Purple false brome	<i>Brachypodium distachyon</i>	Nonnative
Ripgut brome	<i>Bromus diandrus</i>	Nonnative
Slender wild oat	<i>Avena barbata</i>	Nonnative
Small quaking grass	<i>Briza minor</i>	Nonnative
Soft chess	<i>Bromus hordeaceus</i>	Nonnative
Velvet grass	<i>Holcus lanatus</i>	Nonnative
Family Polygonaceae		
Curly dock	<i>Rumex crispus</i>	Nonnative
Family Primulaceae		
Shooting star	<i>Primula hendersonii</i>	Native
Family Pteridaceae		
Gold back fern	<i>Pentagramma triangularis</i>	Native
Family Ranunculaceae		
California buttercup	<i>Ranunculus californicus</i>	Native
Family Rhamnaceae		
Buck brush	<i>Ceanothus cuneatus</i>	Native
Family Rosaceae		
Himalayan blackberry	<i>Rubus armeniacus</i>	Nonnative
Toyon	<i>Heteromeles arbutifolia</i>	Native
Wood strawberry	<i>Fragaria vesca</i>	Native
Family Rubiaceae		
Climbing bedstraw	<i>Galium porrigens</i>	Native
Goose grass	<i>Galium aparine</i>	Native
Family Salicaceae		
Quaking aspen	<i>Populus tremuloides</i>	Native
Sandbar willow	<i>Salix exigua</i>	Native
Pacific willow	<i>Salix lasiandra</i>	Native
Family Sapindaceae		
California buckeye	<i>Aesculus californica</i>	Native
Family Scrophulariaceae		
Woolly mullein	<i>Verbascum thapsus</i>	Nonnative
Family Themidaceae		
Blue dicks	<i>Dichelostemma capitatum</i>	Native
Harvest brodiaea	<i>Brodiaea coronaria</i>	Native

Common Name	Scientific Name	Regulatory Status
Family Typhaceae		
Cattail	<i>Typha</i> sp.	Native
Family Violaceae		
Goosefoot violet	<i>Viola purpurea</i>	Native
Amphibians		
Family Hylidae		
Sierran treefrog	<i>Pseudacris sierra</i>	None
Family Ranidae		
American bullfrog	<i>Lithobates catesbeianus</i>	None
Birds		
Family Accipitridae		
Red-shouldered hawk	<i>Buteo lineatus</i>	MBTA
Family Aegithalidae		
Bushtit	<i>Psaltriparus minimus</i>	MBTA
Family Bombycillidae		
Cedar waxwing	<i>Bombycilla cedrorum</i>	MBTA
Family Cardinalidae		
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>	MBTA
Family Cathartidae		
Turkey vulture	<i>Cathartes aura</i>	MBTA
Family Columbidae		
Band-tailed pigeon	<i>Patagioenas fasciata</i>	MBTA
Mourning dove	<i>Zenaida macroura</i>	
Family Corvidae		
California scrub-jay	<i>Aphelocoma californica</i>	MBTA
Steller's jay	<i>Cyanocitta stelleri</i>	MBTA
Family Fringillidae		
House finch	<i>Haemorhous mexicanus</i>	MBTA
Family Icteridae		
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	MBTA
Family Odontophoridae		
California quail	<i>Callipepla californica</i>	MBTA
Family Paridae		
Oak titmouse	<i>Baeolophus inornatus</i>	MBTA
Family Parulidae		
Orange-crowned warbler	<i>Oreothlypis celata</i>	MBTA
Nashville warbler	<i>Oreothlypis ruficapilla</i>	MBTA
Yellow-rumped warbler	<i>Setophaga coronata</i>	MBTA
Family Passerellidae		
California towhee	<i>Melospiza crissalis</i>	MBTA

Common Name	Scientific Name	Regulatory Status
Dark-eyed junco	<i>Junco hyemalis</i>	MBTA
Spotted towhee	<i>Pipilo maculatus</i>	MBTA
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	MBTA
Family Passeridae		
House sparrow	<i>Passer domesticus</i>	
Family Phasianidae		
Wild turkey	<i>Meleagris gallopavo</i>	MBTA
Family Picidae		
Acorn woodpecker	<i>Melanerpes formicivorus</i>	MBTA
Hairy woodpecker	<i>Picoides villosus</i>	MBTA
Northern flicker	<i>Colaptes auratus</i>	MBTA
Nuttall's woodpecker	<i>Picoides nuttallii</i>	MBTA
Family Regulidae		
Ruby-crowned kinglet	<i>Regulus calendula</i>	MBTA
Family Sturnidae		
European starling	<i>Sturnus vulgaris</i>	
Family Sylviidae		
Wrentit	<i>Chamaea fasciata</i>	MBTA
Family Trochilidae		
Anna's hummingbird	<i>Calypte anna</i>	MBTA
Family Turdidae		
American robin	<i>Turdus migratorius</i>	MBTA
Family Tyrannidae		
Black phoebe	<i>Sayornis nigricans</i>	MBTA
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	MBTA
Mammals		
Family Cervidae		
California mule deer	<i>Odocoileus hemionus californicus</i>	None
Family Cricetidae		
Dusky-footed woodrat	<i>Neotoma fuscipes</i>	None
Family Geomyidae		
Botta's pocket gopher	<i>Thomomys bottae</i>	None
Family Sciuridae		
California ground squirrel	<i>Otospermophilus beecheyi</i>	None

MTBA: Covered under the Migratory Bird Treaty Act.

3.2.3 Nesting Birds and the Migratory Bird Treaty Act

Migratory birds have the potential to nest on or near the Project site. Species that may use the Project site or adjacent habitat include, but are not limited to, mourning dove (*Zenaida macroura*), red-shouldered hawk (*Buteo lineatus*), acorn woodpecker (*Melanerpes formicivorus*), black phoebe (*Sayornis nigricans*), California scrub-jay (*Aphelocoma californica*), house finch (*Haemorhous mexicanus*), and spotted towhee (*Pipilo maculatus*).

3.2.4 Regulated Habitats

Multiple Project work locations were within 50 feet of intermittent and ephemeral streams that are hydrologically connected to the Tuolumne River, a navigable waterway under the regulatory jurisdiction of the USACE, the RWQCB, and the CDFW. The Project will likely impact jurisdictional waterways at three locations: one in Big Oak Flat, where work could involve open trench excavation across Rattlesnake Creek, and two in Pine Mountain Lake, where open trench excavation could be needed across an unnamed intermittent stream and an unnamed ephemeral stream.

No marine or estuarine fishery resources or migratory routes to and from anadromous fish spawning grounds were present in the survey area. The streams in the survey area do not contain the perennial or prolonged flows necessary to support fish. In addition, no EFH, defined by the Magnuson-Stevens Act as those resources necessary for fish spawning, breeding, feeding, or growth to maturity, were present in the survey area.

The Project site is not within a flood plain (Federal Emergency Management Agency 2017). The nearest flood plain limit is Priest Reservoir approximately 1.2 miles southwest of the Project site.

4.0 Environmental Impacts

4.1 Effects Determinations

4.1.1 Critical Habitat

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

4.1.2 Special-Status Species

Bald eagle, northwestern pond turtle, and western red bat were identified in the desktop review as having potential to occur on or near the Project site due to the presence of habitat in the survey area (Table 1):

Bald eagle requires large trees near water bodies for nesting. Suitable trees were present near Pine Mountain Lake. Therefore, we conclude the Project **may affect but is not likely to adversely affect** bald eagle.

Northwestern pond turtle uses aquatic habitats such as creeks, streams, or irrigation ditches for movements and foraging and adjacent upland areas for egg laying. The Project site is adjacent to and crosses multiple drainages that could support this species. Therefore, we conclude the Project **may affect but is not likely to adversely affect** northwestern pond turtle.

Western red bat uses trees, tree cavities, and peeling bark for roosting. Because several riparian trees that qualify as habitat will likely be removed to facilitate sewer pipe installation activities, we conclude the Project **may affect but is not likely to adversely affect** this species.

Additionally, we conclude that the Project will have **no effect** on other special-status species due either to the lack of habitat for such species in the survey area or for some plants because they were found to be absent during appropriate seasonal surveys.

4.1.3 Migratory Birds

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

4.1.4 Regulated Habitats

We conclude the Project **may affect and is likely to adversely affect** three regulated habitats. These habitats consist of intermittent and ephemeral streams under the regulatory jurisdiction

of the USACE, the RWQCB, and the CDFW. As such, Clean Water Act Section 404 permits and 401 certifications as well as California Fish and Game Code Section 1602 notifications are being prepared for impacts at these work locations. However, the project will have **no effect** on federally protected wetlands or other regulated habitats under CEQA-Plus purview as no such habitats were found in the survey area.

4.2 Significance Determinations

This Project will not:

(1) 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 (criterion c) as no federally protected wetlands were found in the survey area;

(2) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (criterion e) [Although Chapter 9.24 of the Tuolumne County Ordinance Code addresses requirements for preventing the premature removal of native oaks, no oaks will be removed for this Project]; or

(3) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan (criterion f) as no such plans exist that pertain to the proposed activities in the Project area.

Therefore, these significance criteria are not analyzed further.

The remaining statutorily defined criterion provided the framework for criterion BIO1 through BIO4 below. This criterion is used to assess the impacts to biological resources stemming from the Project and provides the basis for determinations of significance:

- Criterion BIO1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Criterion BIO2: 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.
- Criterion BIO3: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

4.2.1 Direct and Indirect Impacts

4.2.1.1 Potential Impact #1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Criterion BIO1)

The Project could have a substantial, direct adverse effect on bald eagle. Bald eagle requires large trees within about one mile of large, open water bodies for nesting. The Project site is within one mile of Pine Mountain Lake, the nearest water body that could support nesting by this species. Although the two trees, both Pacific willow (*Salix lasiandra*), that may need to be removed to facilitate Project construction are too small to support nesting, construction-related disturbance could result in the incidental loss of reproduction. Therefore, we recommend that Mitigation Measure B1 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

The Project could also have a substantial, direct adverse effect on northwestern pond turtle, a native reptile designated by the CDFW as a Species of Special Concern. Northwestern pond turtle uses a variety of aquatic habitats including streams, creeks, ponds, lakes, and canals for shelter, foraging, and basking and lays its eggs in upland areas adjacent to these aquatic habitats. Because the Project will involve excavation and staging in and adjacent to multiple sections of intermittent and ephemeral streams that could support this species at some time during the year, incidental loss of animals or eggs could occur. Therefore, we recommend that Mitigation Measure B2 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

The Project could also have a substantial, direct adverse effect on western red bat, a native bat species designated by the CDFW as a Species of Special Concern. Western red bat uses trees for roosting and pupping habitat. This species often uses trees on the edges of streams, open fields, and urban areas, approximately 2-40 feet above ground level (Zeiner et al. 1988-1990). Because the Project may require that riparian trees be removed at two work locations, incidental loss of animals or young from these trees could occur. Therefore, we recommend that Mitigation Measure B3 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

Mitigation Measure B1. Protect nesting bald eagle.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through July.
2. If it is not possible to schedule construction between August and January, pre-construction surveys for nesting bald eagles shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates (large trees) within 0.5-miles of the impact areas in Pine Mountain Lake for nests. If an active nest is found close enough to the construction area to be disturbed by Project activities, the qualified biologist in consultation with the CDFW shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting eagles, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

Mitigation Measure B2. Protect northwestern pond turtle.

1. To the extent practicable, construction in and adjacent to intermittent and ephemeral streams shall be scheduled to occur when these streams are dry (approximately mid-July through October) to avoid the possibility of northwestern pond turtle being present at the worksite.
2. If it is not possible to schedule construction between August and October, pre-construction surveys for northwestern pond turtle shall be conducted by a qualified biologist to determine if turtles are occupying streamside worksites. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all sections of stream within 300 feet of planned work activities, including adjacent upland areas, for turtles and nests; northwestern pond turtle nests in upland areas within several hundred feet of water in the spring, typically during the months of April and May. If a turtle or nest is found within 300 feet of the worksite, a qualified biological monitor shall remain on site during construction to ensure that no turtles or turtle nests are impacted by work activities. Any turtle found on or adjacent to the worksite shall be allowed to leave on its own.

Mitigation Measure B3. Protect western red bat.

1. To the extent practicable, construction shall be scheduled to avoid the birthing and pupping season for western red bat, which extends from May through August.
2. If it is not possible to schedule construction between September and April, pre-construction surveys for roosting bats shall be conducted by a qualified biologist to ensure that no active maternal colonies will be disturbed during Project implementation. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential colony substrates in and immediately adjacent to the impact areas for maternity roosts. If an active maternity roost is found close enough to the construction area to be disturbed by work activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the colony. If work cannot proceed without disturbing the colony, work may need to be halted or redirected to other areas until young are able to fly or the colony has otherwise failed for non-construction related reasons.

4.2.1.2 Potential Impact #2: 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 (Criterion BIO2)

The Project has the potential to impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act and California Fish and Game Code.

Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort is considered take by the CDFW. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant impact if the species is particularly rare in the region. Construction activities such as excavation, trenching, water main or water valve installation, and mobilizing or demobilizing construction equipment that disturb a nesting bird on the site or immediately adjacent to the construction zone could constitute a significant impact. We recommend that Mitigation Measure B4 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

Mitigation Measure B4. Protect nesting birds.

3. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.

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

4.2.1.3 Potential Impact #3: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS (Criterion BIO3)

The Project will impact two intermittent streams, Rattlesnake Creek in Big Oak Flat and an unnamed stream in Pine Mountain Lake. Both support white alder (*Alnus rhombifolia*) and Pacific willow, two species of native riparian tree. In both cases, work activities will involve excavating an open trench across the stream to replace the existing sewer pipeline. This work could impact four white alders in Big Oak Flat (two 4-inch diameter at breast height [DBH], one 3-inch DBH, and one 2-inch DBH) and two Pacific willows in Pine Mountain Lake (two 8-inch DBH). Work activities will also impact Himalayan blackberry (*Rubus armeniacus*), a nonnative vine, along Rattlesnake Creek in Big Oak Flat. Based on the abundance of this plant species in the local area and at this location, including on and adjacent to the impact area, recolonization after Project completion is expected to occur naturally and probably within one growing season. Therefore, we conclude that Project-related impacts to Himalayan blackberry will be negligible, don't meet the threshold of significance, and consequently require no mitigation. However, to mitigate potential impacts to white alder and Pacific willow at these two drainages, we recommend that Mitigation Measure B5 (below) be included in the conditions of approval to reduce the potential impact to a less-than-significant level.

Mitigation Measure B5. Mitigate impacts to riparian vegetation.

1. To the extent practical, avoid impacting white alder and Pacific willow trees.
2. If impacts to white alder and Pacific willow trees are unavoidable, the District shall implement the tree replacement and maintenance requirements detailed in the Streamed Alteration Agreement issued by the CDFW for the Project. Those

requirements are likely to involve replacing trees with a DBH of 4 inches or greater that are damaged or removed by replanting native species at a 3:1 ratio (replaced to lost) and ensuring a performance criterion of 70 percent survival of tree plantings for a minimum period of five consecutive years, including up to three years with supplemental irrigation and a minimum of two years without such assistance.

4.2.2 Cumulative Impacts

The Project involves maintenance and repair of existing sewer infrastructure. Most of the work will occur in disturbed or developed land cover. However, several worksites are in natural land cover near riparian areas or in areas that support native vegetation that could support native wildlife. Although the potential for these areas to support special-status species is limited as discussed above, Mitigation Measures B1 through B5 would reduce any contribution of cumulative impacts on biological resources to a less-than-significant level.

4.2.3 Unavoidable Significant Adverse Impacts

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

5.0 Literature Cited

- California Department of Fish and Wildlife (CDFW). 2018. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Biogeographic data branch, California Natural Diversity Data Base. <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed 06 April 2018.
- California Native Plant Society, Rare Plant Program (CNPS). 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). <http://www.rareplants.cnps.org>. Accessed 06 April 2018.
- Federal Emergency Management Agency. 2017. Map Number FM06047C0200G, Merced County, California. National Flood Insurance Program. Map revised December 2, 2008. <https://msc.fema.gov/portal/>. Accessed 18 April 2018.
- United States Army Corps of Engineers (USACE). 1987. Corps of Engineers Wetlands Delineation Manual. Wetland Research Program Technical Report Y-87-1.
- United States Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). ERDC/EL TR-08-28. http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf. Accessed 06 April 2018.
- United States Fish and Wildlife Service. 2018. IPaC Information for Planning and Conservation. <https://ecos.fws.gov/ipac/>. Accessed 06 April 2018.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Department of Fish and Game. Sacramento, California.

Appendix A. Official lists of threatened and endangered species and critical habitats.



United States Department of the Interior



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

In Reply Refer To:

April 19, 2018

Consultation Code: 08ESMF00-2018-SLI-1902

Event Code: 08ESMF00-2018-E-05560

Project Name: Groveland Community Services District Sewer Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

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

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2018-SLI-1902

Event Code: 08ESMF00-2018-E-05560

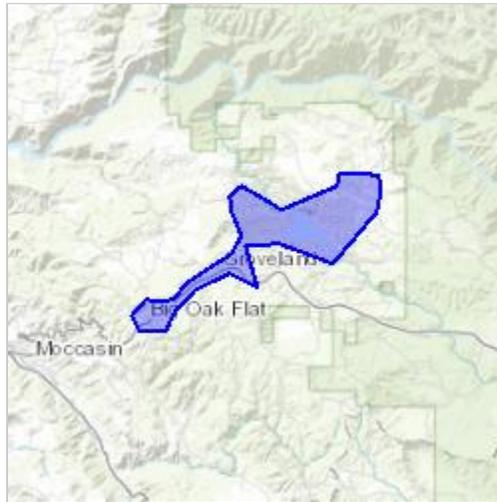
Project Name: Groveland Community Services District Sewer Project

Project Type: WASTEWATER PIPELINE

Project Description: Sewer rehabilitation activities will occur in the communities of Big Oak Flat, Groveland, and Pine Mountain Lake.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/37.84455871827525N120.19096300410484W>



Counties: Tuolumne, CA

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Flowering Plants

NAME	STATUS
Layne's Butterweed <i>Senecio layneae</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4062	Threatened

Critical habitats

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

Appendix B. CNDDDB occurrence records.



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS > (Standard (3712083)< OR > Tuolumne (3712082)< OR > Duckwall Mtn. (3712081)< OR > Moccasin (3712073)< OR > Groveland (3712072)< OR > Jawbone Ridge (3712071)< OR > Penon Blanco Peak (3712063)< OR > Coulterville (3712062)< OR > Buckhorn Peak (3712061))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Allium tuolumnense</i> Rawhide Hill onion	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	700 1,250	23 S:2	0	1	1	0	0	0	2	0	2	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	810 2,750	411 S:5	0	0	0	0	0	5	1	4	5	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,700 1,700	1967 S:1	0	0	0	1	0	0	0	1	1	0	0
<i>Baeolophus inornatus</i> oak titmouse	G4 S4	None None	IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	980 980	2 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	2,300 2,900	50 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Banksula tuolumne</i> Tuolumne cave harvestman	G1 S1	None None		3,100 3,100	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None None		3,000 3,000	234 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Clarkia australis</i> Small's southern clarkia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	3,000 5,000	59 S:9	0	1	2	0	0	6	4	5	9	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	G4G5T2T3 S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	800 4,850	83 S:44	1	6	2	0	0	35	3	41	44	0	0
<i>Clarkia rostrata</i> beaked clarkia	G2G3 S2S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	900 2,000	74 S:11	0	1	0	0	0	10	1	10	11	0	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	1,380 3,720	626 S:6	0	0	0	0	0	6	4	2	6	0	0
<i>Cryptantha mariposae</i> Mariposa cryptantha	G2G3 S2S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	1,500 1,500	9 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cryptantha spithamaea</i> Red Hills cryptantha	G2 S2	None None	Rare Plant Rank - 1B.3	1,750 1,750	6 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	G3T2 S2	Threatened None		1,650 2,850	271 S:3	0	2	1	0	0	0	0	3	3	0	0
<i>Diplacus pulchellus</i> yellow-lip pansy monkeyflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	2,200 4,000	69 S:8	0	1	1	0	0	6	4	4	8	0	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	1,060 3,000	1340 S:4	0	1	0	0	0	3	3	1	4	0	0
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	G2 S2	None None	Rare Plant Rank - 1B.2	2,400 3,000	24 S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Erythranthe filicalis</i> slender-stemmed monkeyflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	2,045 3,250	49 S:10	1	3	1	0	0	5	9	1	10	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Erythronium tuolumnense</i> Tuolumne fawn lily	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	1,600 3,200	35 S:10	2	2	0	0	0	6	7	3	10	0	0
<i>Euderma maculatum</i> spotted bat	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	2,700 2,700	68 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Eumops perotis californicus</i> western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	850 1,550	294 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Falco mexicanus</i> prairie falcon	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,100 1,100	459 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Fritillaria agrestis</i> stinkbells	G3 S3	None None	Rare Plant Rank - 4.2	940 3,000	32 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	700 700	327 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Horkelia parryi</i> Parry's horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	1,500 3,300	44 S:4	0	1	0	0	0	3	3	1	4	0	0
<i>Hydromantes brunus</i> limestone salamander	G2G3 S2S3	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_VU-Vulnerable USFS_S-Sensitive	1,180 3,275	21 S:6	0	0	0	0	0	6	3	3	6	0	0



Summary Table Report

California Department of Fish and Wildlife California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lasionycteris noctivagans</i> silver-haired bat	G5 S3S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	1,550 1,550	139 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Lasiurus blossevillii</i> western red bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	850 3,450	126 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	850 3,450	236 S:6	0	0	0	0	0	6	2	4	6	0	0
<i>Lavinia symmetricus ssp. 1</i> San Joaquin roach	G4T3Q S3	None None	CDFW_SSC-Species of Special Concern	900 2,750	8 S:5	0	2	2	1	0	0	0	5	5	0	0
<i>Lomatium congdonii</i> Congdon's lomatium	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	1,500 1,600	20 S:2	0	1	0	0	0	1	0	2	2	0	0
<i>Lupinus spectabilis</i> shaggyhair lupine	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	1,425 2,500	24 S:16	1	8	2	0	1	4	9	7	15	1	0
<i>Margaritifera falcata</i> western pearlshell	G4G5 S1S2	None None		2,800 2,850	78 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Monadenia circumcarinata</i> keeled sideband	G1 S1	None None	BLM_S-Sensitive IUCN_VU-Vulnerable	1,500 2,500	6 S:6	0	0	0	0	0	6	5	1	6	0	0
<i>Monadenia tuolumneana</i> Tuolumne sideband	G1 S1	None None	BLM_S-Sensitive	1,650 2,300	2 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Monadenia yosemitensis</i> Yosemite Mariposa sideband	G1 S1S2	None None		1,390 1,390	7 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Myotis evotis</i> long-eared myotis	G5 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_M-Medium Priority	3,720 3,720	139 S:1	0	0	0	0	0	1	0	1	1	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Myotis thysanodes</i> fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	1,550 3,720	86 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Myotis volans</i> long-legged myotis	G5 S3	None None	IUCN_LC-Least Concern WBWG_H-High Priority		117 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Myotis yumanensis</i> Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	850 2,750	263 S:4	0	0	0	0	0	4	0	4	4	0	0
<i>Packera layneae</i> Layne's ragwort	G2 S2	Threatened Rare	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	1,650 1,650	52 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Rana boylei</i> foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	1,200 3,800	1693 S:7	0	1	0	0	0	6	6	1	7	0	0
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	G1 S1	Endangered Threatened	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	2,500 2,500	663 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rhynchospora capitellata</i> brownish beaked-rush	G5 S1	None None	Rare Plant Rank - 2B.2	3,010 3,010	19 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Senecio cleavelandii</i> var. <i>heterophyllus</i> Red Hills ragwort	G4?T2Q S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	1,200 1,200	9 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Strix nebulosa</i> great gray owl	G5 S1	None Endangered	CDF_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive	2,825 3,200	79 S:4	0	0	1	0	0	3	4	0	4	0	0
<i>Stygobromus harai</i> Hara's Cave amphipod	G1G2 S1S2	None None	IUCN_VU-Vulnerable	2,350 2,350	3 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Stygobromus wengerorum</i> Wengerors' Cave amphipod	G1 S1	None None	IUCN_VU-Vulnerable	2,400 2,900	2 S:2	0	0	0	0	0	2	2	0	2	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence			
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.	
<i>Vireo bellii pusillus</i> least Bell's vireo	G5T2 S2	Endangered Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	840 840	482 S:1	0	0	0	0	1	0	1	0	0	0	0	1
<i>Vulpes vulpes necator</i> Sierra Nevada red fox	G5T1T2 S1	Candidate Threatened	USFS_S-Sensitive	3,000 3,400	201 S:2	0	0	0	0	0	2	2	0	2	0	0	0

Appendix C. CNPS plant list.

Plant List

Inventory of Rare and Endangered Plants

32 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3712083, 3712082, 3712081, 3712073, 3712072, 3712071, 3712063 3712062 and 3712061;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Allium jepsonii	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
Allium sanbornii var. congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	4.3	S3	G4T3
Allium tuolumnense	Rawhide Hill onion	Alliaceae	perennial bulbiferous herb	Mar-May	1B.2	S2	G2
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	4.2	S4	G4
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
Clarkia australis	Small's southern clarkia	Onagraceae	annual herb	May-Aug	1B.2	S2	G2
Clarkia biloba ssp. australis	Mariposa clarkia	Onagraceae	annual herb	Apr-Jul	1B.2	S2S3	G4G5T2T3
Clarkia rostrata	beaked clarkia	Onagraceae	annual herb	Apr-May	1B.3	S2S3	G2G3
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	May-Aug	4.3	S3	G3
Cryptantha mariposae	Mariposa cryptantha	Boraginaceae	annual herb	Apr-Jun	1B.3	S2S3	G2G3
Cryptantha spithamaea	Red Hills cryptantha	Boraginaceae	annual herb	Apr-May	1B.3	S2	G2
Delphinium hansenii ssp. ewaniamum	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	4.2	S3	G4T3
Diplacus pulchellus	yellow-lip pansy monkeyflower	Phrymaceae	annual herb	Apr-Jul	1B.2	S2	G2
Eriophyllum confertiflorum var. tanacetiflorum	tansy-flowered woolly sunflower	Asteraceae	perennial shrub	May-Jul	4.3	S2?	G5T2?Q
Eryngium pinnatisectum	Tuolumne button- celery	Apiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2
Erythranthe filicaulis	slender-stemmed monkeyflower	Phrymaceae	annual herb	Apr-Aug	1B.2	S2	G2
Erythranthe inconspicua	small-flowered monkeyflower	Phrymaceae	annual herb	May-Jun	4.3	S4	G4
Erythronium tuolumnense	Tuolumne fawn lily	Liliaceae	perennial bulbiferous	Mar-Jun	1B.2	S2S3	G2G3

			herb				
<u>Fritillaria agrestis</u>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	4.2	S3	G3
<u>Githopsis pulchella ssp. serpentinicola</u>	serpentine bluecup	Campanulaceae	annual herb	May-Jun	4.3	S3	G4T3
<u>Horkelia parryi</u>	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2
<u>Jepsonia heterandra</u>	foothill jepsonia	Saxifragaceae	perennial herb	Aug-Dec	4.3	S3	G3
<u>Lomatium congdonii</u>	Congdon's lomatium	Apiaceae	perennial herb	Mar-Jun	1B.2	S2	G2
<u>Lupinus spectabilis</u>	shaggyhair lupine	Fabaceae	annual herb	Apr-May	1B.2	S2	G2
<u>Mielichhoferia elongata</u>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<u>Packera layneae</u>	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
<u>Pseudobahia bahiifolia</u>	Hartweg's golden sunburst	Asteraceae	annual herb	Mar-Apr	1B.1	S2	G2
<u>Rhynchospora californica</u>	California beaked- rush	Cyperaceae	perennial rhizomatous herb	May-Jul	1B.1	S1	G1
<u>Rhynchospora capitellata</u>	brownish beaked- rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
<u>Senecio clevelandii var. heterophyllus</u>	Red Hills ragwort	Asteraceae	perennial herb	May-Jul	1B.2	S2	G4?T2Q
<u>Wyethia elata</u>	Hall's wyethia	Asteraceae	perennial herb	May-Aug	4.3	S4	G4

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 18 April 2018].

Search the Inventory

[Simple Search](#)
[Advanced Search](#)
[Glossary](#)

Information

[About the Inventory](#),
[About the Rare Plant Program](#)
[CNPS Home Page](#)
[About CNPS](#)
[Join CNPS](#)

Contributors

[The Calflora Database](#)
[The California Lichen Society](#),
[California Natural Diversity Database](#)
[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)

Questions and Comments

rareplants@cnps.org

Appendix C

Cultural Resources (Confidential –
Under Separate Cover)