

**INITIAL STUDY / MITIGATED NEGATIVE  
DECLARATION Jamestown Sanitary  
District Wastewater Facilities Upgrades  
#1 Project**

**Draft Initial Study/  
Mitigated Negative  
Declaration  
November 2024**

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## Abbreviations and Acronyms

### *Abbreviations and Acronyms*

AB	<b>Assembly Bill</b>
amsl	<b>Above mean sea level</b>
APN	<b>Assessor's Parcel Number</b>
BMP	<b>Best Management Practice</b>
CAAQS	<b>California Ambient Air Quality Standards</b>
CARB	<b>California Air Resources Board</b>
CCR	<b>California Code of Regulations</b>
CDFW	<b>California Department of Fish and Wildlife</b>
CDMG (CGS)	<b>California Division of Mines and Geology (California Geological Survey)</b>
CEQA	<b>California Environmental Quality Act</b>
CESA	<b>California Endangered Species Act</b>
CFGC	<b>California Fish and Game Code</b>
CNDDB	<b>California Natural Diversity Database</b>
CNPS	<b>California Native Plant Society</b>
County	<b>Tuolumne County</b>
Corps	<b>U.S. Army Corps of Engineers</b>
CRHR	<b>California Register of Historic Resources</b>
CRLF	<b>California Red-Legged Frog</b>
CVRWQCB	<b>Central Valley Regional Water Quality Control Board</b>
CWA	<b>Federal Clean Water Act</b>
DTSC	<b>California Department of Toxic Substance Control</b>
DWR	<b>California Department of Water Resources</b>
ESA	<b>Environmentally Sensitive Areas</b>
ESFRS	<b>Equivalent Single-Family Residential Units</b>
FEMA	<b>Federal Emergency Management Agency</b>
FESA	<b>Federal Endangered Species Act</b>
FIRM	<b>Flood Insurance Rate Maps</b>
FYLF	<b>Foothill yellow-legged frog</b>
GHG	<b>Greenhouse Gas</b>
HCP	<b>Habitat Conservation Plan</b>
HSC	<b>California Health and Safety Code</b>
IS/MND	<b>Initial Study / Mitigated Negative Declaration</b>

## Abbreviations and Acronyms

JSD	<b>Jamestown Sanitary District</b>
lf	<b>Linear feet</b>
MBTA	<b>Migratory Bird Treaty Act</b>
MM	<b>Mitigation Measure</b>
MTCO <sub>2e</sub>	<b>Metric tons of carbon dioxide equivalent</b>
NAAQS	<b>National Ambient Air Quality Standards</b>
NAHC	<b>Native American Heritage Commission</b>
NCCP	<b>Natural Community Conservation Plan</b>
NEPA	<b>National Environmental Policy Act</b>
NOA	<b>Naturally Occurring Asbestos</b>
NPDES	<b>National Pollution Discharge Elimination System</b>
NRCS	<b>National Resource Conservation Service</b>
NRHP	<b>National Register of Historic Places</b>
PRC	<b>Public Resources Code</b>
Project	<b>Jamestown Sanitary District Wastewater Facilities Upgrades #1 Project (Alternative 2)</b>
PSA	<b>Project Study Area</b>
ROW	<b>Right-of-way</b>
RTP	<b>Regional Transportation Plan</b>
RWQCB	<b>Regional Water Quality Control Board</b>
SCC	<b>Species of Special Concern</b>
SFDU	<b>Single Family Residential Dwelling Unit</b>
SOIS	<b>Secretary of the Interior Standards</b>
SR	<b>State Route</b>
SWPPP	<b>Storm Water Pollution Prevention Plan</b>
SWRCB	<b>State Water Resources Control Board</b>
TCAPCD	<b>Tuolumne County Air Pollution Control District</b>
TCOC	<b>Tuolumne County Zoning Ordinance/Ordinance Code</b>
TUD	<b>Tuolumne Utilities District</b>
USFWS	<b>United States Fish and Wildlife Service</b>
USGS	<b>United States Geological Survey</b>
WDRs	<b>Waste Discharge Requirements</b>
WWTF	<b>Wastewater treatment facility (= WWTP)</b>

*Abbreviations and Acronyms*

WWTP      **Wastewater treatment plant (= WWTF)**

# Jamestown Sanitary District Wastewater Facilities Upgrades #1 Project

## 1.0 Project and Setting

**LEAD AGENCY:** Jamestown Sanitary District

**RESPONSIBLE AGENCY:** State Water Resources Control Board

**CONTACT:** Amy Augustine, AICP  
Augustine Planning Associates, Inc.  
270 S. Barretta, Suite C  
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[tuolandplanner@gmail.com](mailto:tuolandplanner@gmail.com)

**APPLICANT/ OWNER:** Jamestown Sanitary District

### GENERAL PLAN/ ZONING

#### **Quartz Site**

General Plan: Public (P)

Zoning:

Public (P) 23.5 acres

Open Space (O) – 1.5 acres

Open Space-1 (O-1) – 6.7 acres

Public: Historic Combining (P:H) – 0.2 acre

#### **Jamestown/Woods Creek**

General Plan: Public (P)

Zoning:

Public – 3.7±

Open Space – 0.1± (25' c/l of Woods Creek)

## 1.1 PROJECT LOCATION

### Wood's Creek Site

17600 SR 49/108, Jamestown, CA

APNS: 059-080-096 (3.73± acres), 059-080-058 (0.07± acre) = 3.8± acres

A portion of Sections 15 & 16, T1N, R14E, MDB&M

### Quartz Site

10190 Karlee Lane, Jamestown, CA

APN: 14+- acres of 059-150-027 (31.9± acres)

A portion of Sections 21 and 22, T1N, R14E MDB&M

This project excludes APN: 058-180-055 (31.1± acres)

Figure 1: Location JSD Woods Creek and JSD Quartz

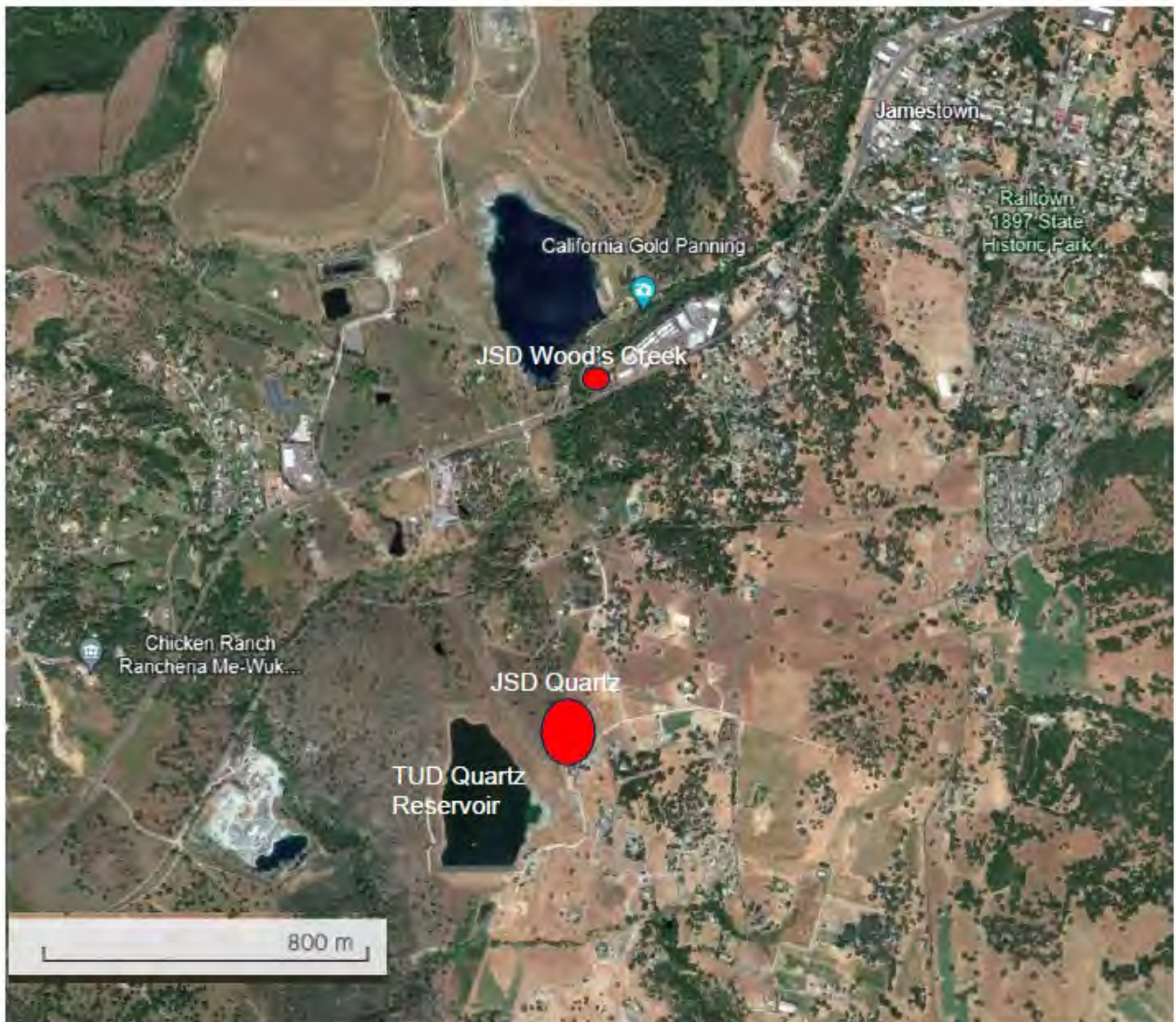
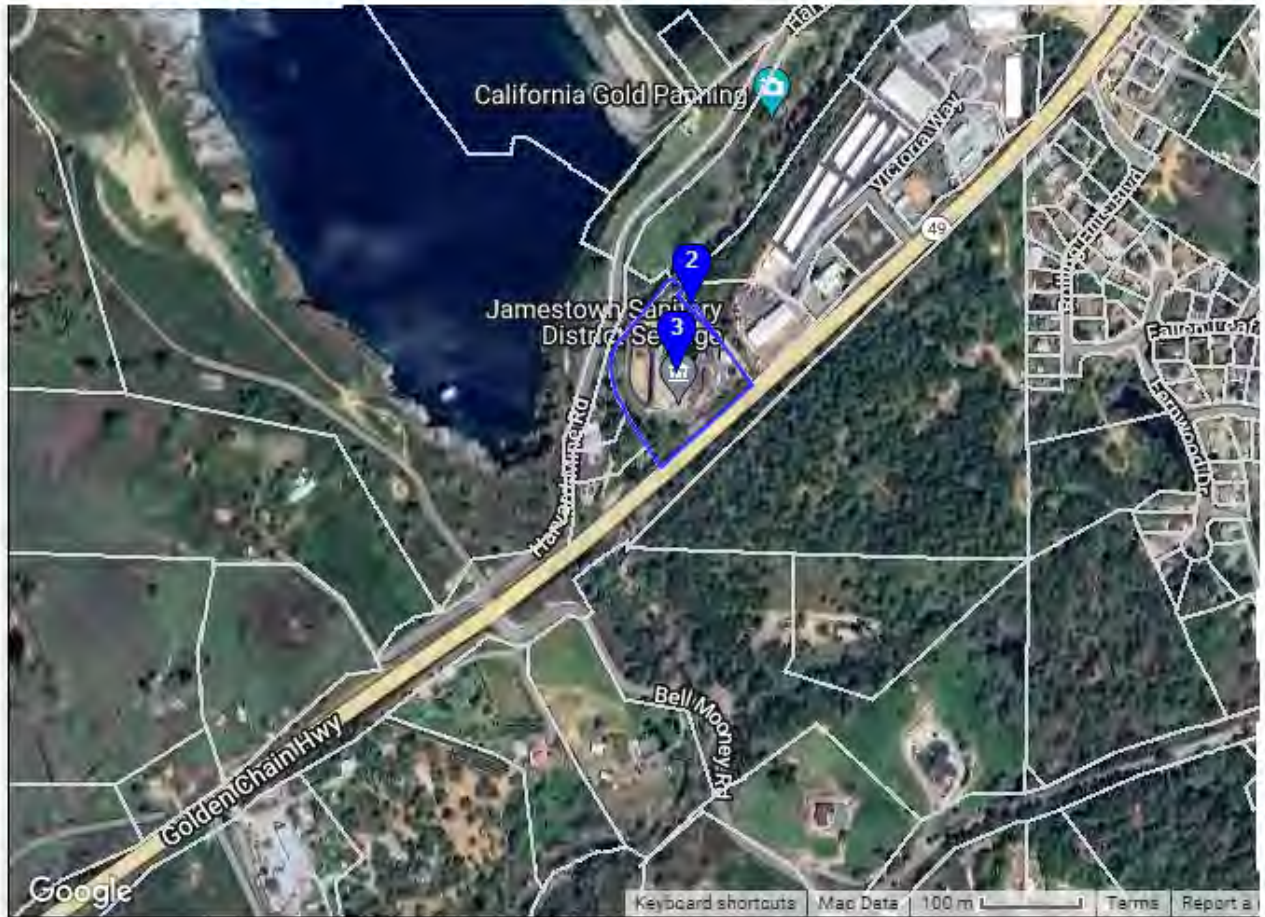


Figure 2: JSD Quartz Site



Figure 3: JSD Woods Creek



## 1.2 PROJECT PURPOSE/NEED, DESCRIPTION

The Jamestown Sanitary District Wastewater Treatment Facility (JSD WWTF) consists of the Woods Creek Facility and the Quartz WWTF (**Figure 1**). The Woods Creek Facility at 17600 Highway 108, Jamestown, CA (**Figure 2**) includes a headworks, grit removal system, influent pump station, and two emergency storage ponds. The Quartz WWTF at 10190 Karlee Lane, Jamestown, CA (**Figure 3**) includes an administration building, Aeromod package activated sludge system, cloth disk filter, tertiary chlorine contact tank, secondary chlorine contact tank, and solids handling facilities. The influent pump station at the Woods Creek Facility conveys influent wastewater to the Quartz WWTF.

### Need:

The JSD WWTF produces disinfected, secondary treated effluent which discharges to the TUD Wastewater Reclamation System (adjacent Quartz Reservoir). JSD has equipment to treat a portion of the wastewater to disinfected tertiary standards. The JSD WWTF may use disinfected tertiary effluent at a recycled water fill station, for on-site washdown water, and irrigation of landscaping at the Quartz WWTF. However, the JSD WWTF is not currently producing disinfected tertiary effluent due to issues with short-circuiting in the tertiary chlorine contact tank.

JSD and the Tuolumne Utilities District (TUD) have an agreement under which TUD provides effluent outfall service to JSD (into the Quartz Reservoir) if the quality of the treated wastewater meets TUD's discharge permit requirements and as long as JSD complies with TUD's Wastewater Ordinance and the agreement. The TUD Sonora Regional Wastewater Treatment Facility (TUD Sonora WWTF) is being upgraded to produce disinfected tertiary effluent. The current configuration of the JSD WWTF will not be capable of treating all effluent to comply with the anticipated upcoming TUD waste discharge requirements.

The primary purpose of the project analyzed herein (Alternative #2) is to address JSD's ability to meet new waste discharge requirements in response to TUD system upgrades to tertiary treatment and discharges.

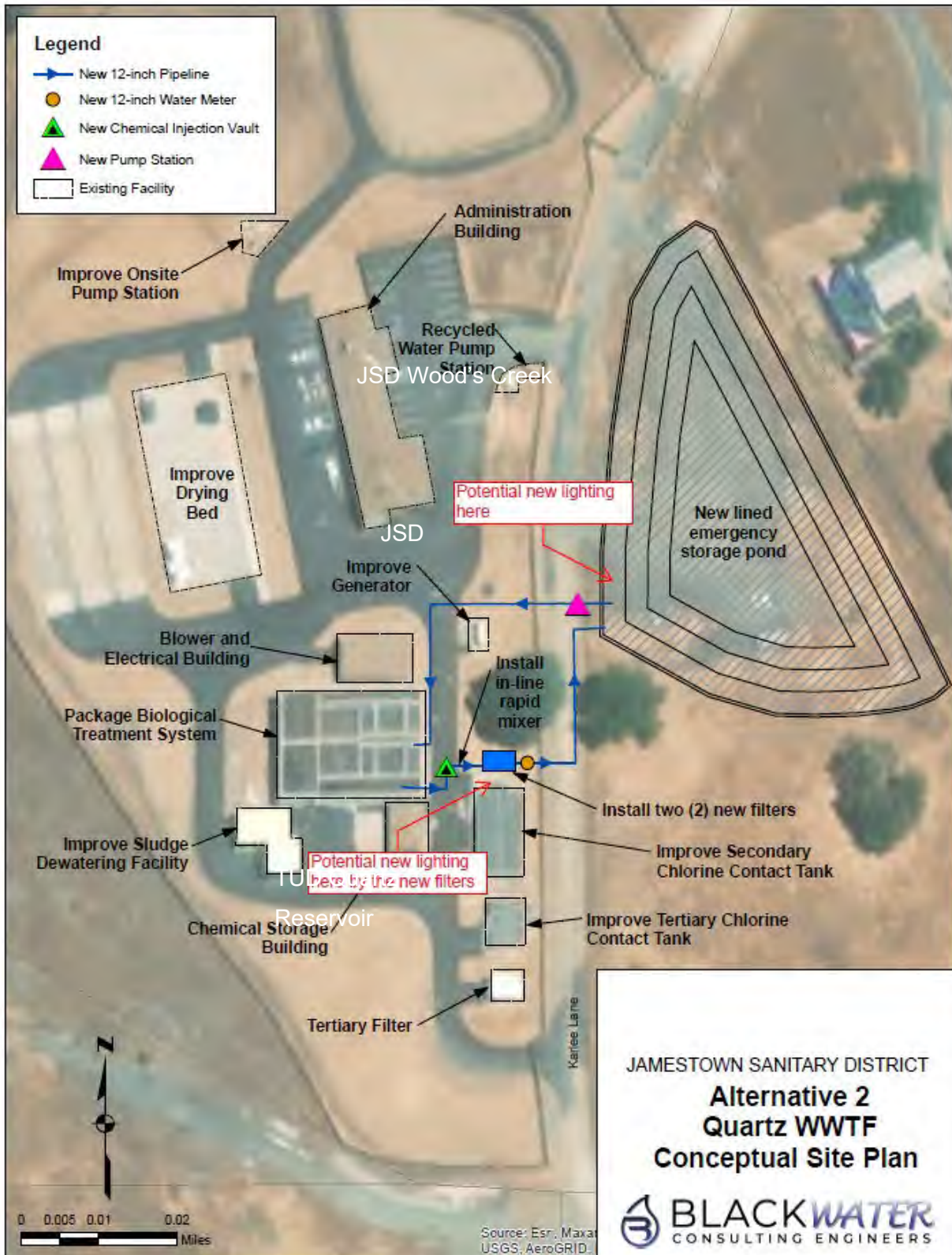
A secondary issue to be addressed by this Project is the benefit of higher influent pumping capacity. The 2022-2023 wet weather season highlighted the vulnerability of JSD's infrastructure to high peak wet weather flows during storm events. JSD has implemented and will continue to implement improvements to the collection system to reduce peak flows.

Four project alternatives are addressed herein:

- Alternative 1: No Project - See Section 4.22
- Alternative 2: Additional Tertiary Treatment Facilities – Analyzed herein
- Alternative 3: Disinfected Secondary Storage Pond – See Section 4.22
- Alternative 4: Expanded JSD Recycled Water System - See Section 4.22

Per page 26, Tables 4-2 and 4-3 of the *Jamestown Sanitary District Facility Upgrades #1 Final Report* (BlackWater, May 2024); "the overall capacity of the WWTF will remain the same" for all alternatives. Therefore, it is assumed that none of the alternatives are growth-inducing, but instead assist in realizing the original design capacity of the WWTF. As the preferred Alternative, Alternative 2 is analyzed in the following. Alternatives 1, 3, and 4 are evaluated in Section 4.22.

Figure 4: Alternative 2 – Quartz Facility



**Figure 5: Alternative 2 - Woods Creek Facility**



## Alternative 2 “Additional Tertiary Treatment Facilities”

Consists of two new tertiary filters and additional facilities and upgrades to address existing issues at the existing JSD WWTF to be able to reliably treat all influent to disinfected, tertiary standards to realize the existing WWTF design capacity.

The following summarizes Alternative #2 improvements:

### **JSD Quartz WWTF (Figure 4):**

#### Install proposed facilities

- Install two tertiary filters capable of treating all influent with one unit out of service.
- Capability to inject chemicals upstream of the filters if filter influent turbidity exceeds 5 NTU for more than 5 minutes, as required by Title 22.
- Piping modifications to integrate proposed facilities into existing WWTF.
- Lined emergency storage pond sized to accommodate at least one day of PWWF, depending on area availability at the Quartz WWTF.
- Pump station to return wastewater from emergency storage pond to treatment facilities.

#### Improvements to existing facilities

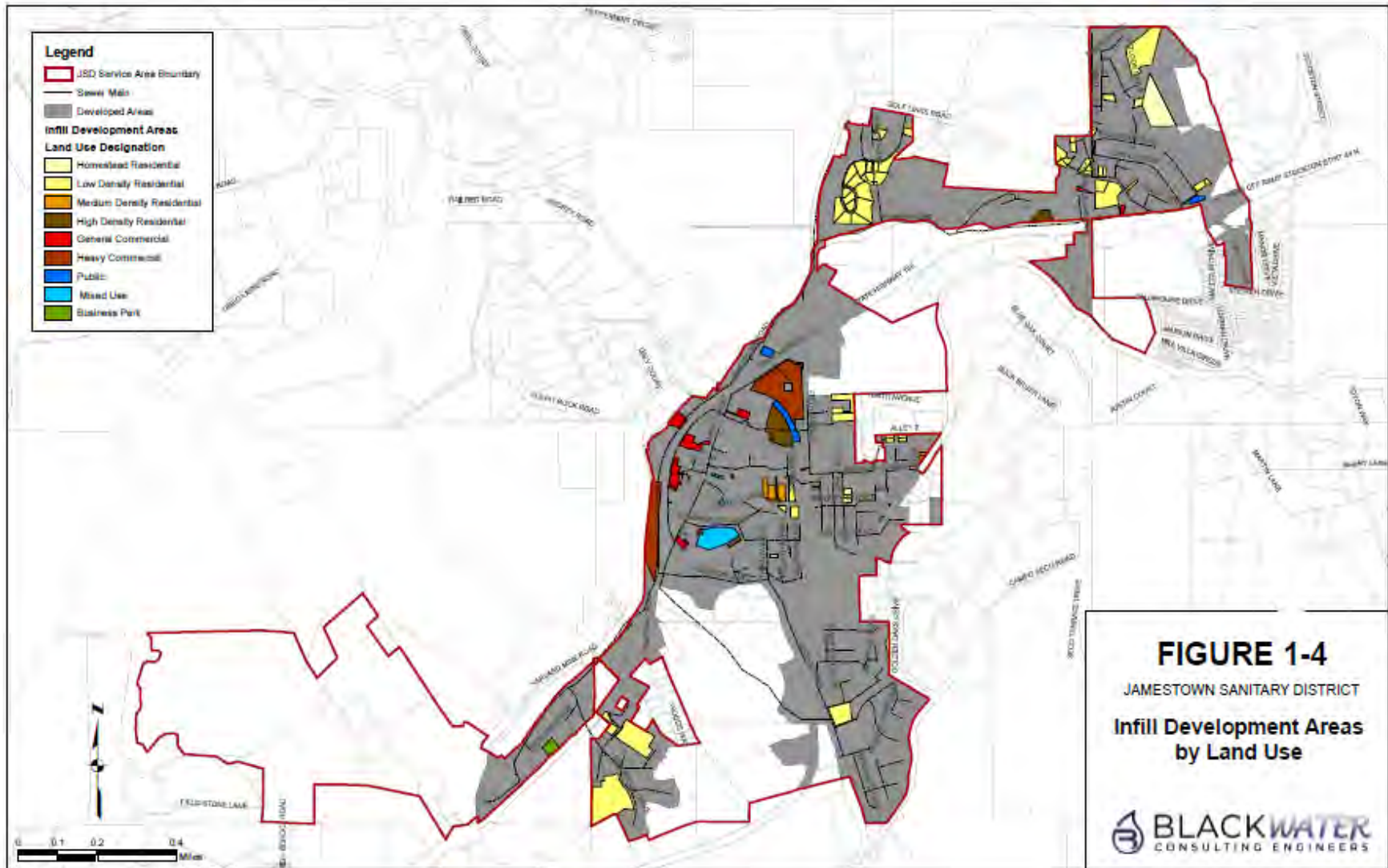
- Addressing accessibility to secondary chlorine contact tank (CCT).
- Adding vertical baffles at the secondary CCT and tertiary CCT to improve modal residence time.
- Upgrading electrical and SCADA programming to integrate proposed facilities into existing WWTF.
- Improving the generator to provide power supply for solids handling and proposed equipment.
- Replacing uninterruptible power supplies (UPSs).
- Improving the electrical conduit connections to reduce potential for water damage of electrical equipment.
- Adding protective measures for outdoor electrical equipment.
- Replacing check valve at on-site pump station.
- Improving the existing sludge dewatering facility
  - ✓ Providing a contained drainage system to the dewatered cake trailer area.
  - ✓ Upgrade the sludge dewatering equipment.
- Improving the drying beds by adding a drainage system.
- Adding a flow meter at the discharge of the recycled water pump station.
- Upgrading piping in the chemical storage building.

### **JSD Wood’s Creek WWTF (Figure 5):**

#### Improvements to existing facilities:

- Improving the electrical control panels and main electrical cabinets that are currently exposed to heat, rain, and dust by enclosing the area and adding heating and ventilation controls.
- Improving the grit removal system
  - ✓ increase water pressure capability to system
  - ✓ add canopy for grit dumpster, pump, and control panel with shelter
- 
- Adding protection for the flow meter at the influent pump station.
- Replacing the pumps at existing influent pump station.

Figure 6: Existing District Service Boundaries



## 1.3 Project Setting

Both sites are located in, along, or immediately adjacent to the Mother Lode belt – a historic gold mining area in the general vicinity of the community of Jamestown, Tuolumne County, CA.

### Wood's Creek WWTF:

The Woods Creek Facility at 17600 Highway 108, Jamestown, CA currently includes a headworks, grit removal system, influent pump station, and two emergency storage ponds (**Figure 5**). The influent pump station at the Woods Creek Facility conveys influent wastewater to the Quartz WWTF. The site consists of two adjacent parcels (**Figure 3**). The “main” parcel is APN 59-080-96 totaling 3.7± acres with the smaller 0.7± acre parcel (APN 59-080-58) forming the site’s northeastern boundary. Wood’s Creek forms the entirety of the site’s northerly and westerly boundaries<sup>1</sup>. SR 108/49 borders the site to the south and a developed commercial and industrial center joins the site to the east. The current WWTP was built on land purchased in 1950 by JSD. Plant construction was completed in 1952 and covers the bulk of that portion of the site above Wood’s Creek.

### Quartz WWTF:

The Quartz WWTF at 10190 Karlee Lane, Jamestown, CA includes an administration building, Aeromod package activated sludge system, cloth disk filter, tertiary chlorine contact tank, secondary chlorine contact tank, and solids handling facilities (**Figure 4**).

The Quartz site is composed of two adjacent parcels with a common parcel boundary. Assessor’s Parcel 59-150-27, totaling 31.9± acres, is the “easterly parcel” and APN 58-180-55, totaling 31.1 acres is the “westerly parcel.” The “westerly parcel” is not a part of this project (**Figure 2**). The two parcels are separated by a serpentine chaparral ridge. Rare plants, a pond, and portion of Wood’s Creek are associated with the westerly parcel and the serpentine chaparral ridge. The proposed project excludes the biologically sensitive westerly parcel and that portion of the serpentine chaparral ridge located on the easterly (project) parcel. The two JSD parcels surround the northerly one-third of the Tuolumne Utilities District’s (TUD) Quartz Reservoir. Karlee Lane crosses through the southern portion of the easterly parcel. Primary access to the site is via Jacksonville Road to Karlee Lane. The majority of the existing and proposed new development on the Quartz site is concentrated in the southeastern portion of the easterly parcel (**Figure 2**).

A TUD pipeline follows the eastern boundary of the eastern Quartz parcel and was installed in 1996 to serve an adjacent residential subdivision. The Quartz site was acquired by the Jamestown Sanitary District in 1993.

## 1.4 Public Resources Code Section 21080.3.1 Consultation

Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014) establishes a formal consultation process for California tribes as part of CEQA. Under AB 52, tribes requesting formal consultation from the Lead Agency are notified of the project prior to the preparing the CEQA document. Consultations were conducted in conjunction with the prior, larger, projects on the project site identified herein (Section 1.5) with the following results:

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<sup>1</sup> Map of Record: R/S 37-1 (June 1987).

The Native American Heritage Commission (NAHC) was contacted three times for three different portions of the prior projects on the site requesting a Sacred Lands File search. Six individuals affiliated with interested groups were contacted on September 17, 2014, and again on April 28, 2015. Additional follow-up consultations were conducted May 18, 2015, via e-mail. No replies were forthcoming. However, an advisory agency notification sent by Augustine Planning Associates, Inc. on May 15, 2015, to Stanley Cox, Tuolumne Band of Me-Wuk Indians received a response requesting a copy of the cultural resource report to allow the Band to support the alternative with the fewest impacts to Native American resources. A report copy was e-mailed to Mr. Cox on July 17th, and no reply was received. Details of all consultations are included in the cultural resources study prepared for the site's original development (Francis, 2015).

The NAHC was renotified on May 29, 2024, and responded June 3, 2024 (Appendix D). All identified tribes were notified (Appendix D). The Chicken Ranch Band of Me-Wuk requested a site visit with the applicant. The site visit was conducted July 10, 2024, with Ms. Cynthia Reyes at both the Woods Creek and Quartz WWTFs. The results of that consultation are summarized in Appendix D and Section 2.18 herein.

## 1.5 Incorporation by Reference

The following studies are applicable to the proposed current project only and are hereby incorporated by reference:

Augustine Planning Associates, Inc. August 2024. *Jamestown Sanitary District Facility Upgrades #1 Biological Study Report.*

BlackWater Consulting Engineers, Inc. May 2024. *Jamestown Sanitary District Facility Upgrades #1 Final Report.*

Solano Archaeological Services, October 22, 2024. *Cultural Resources Technical Memorandum Cultural Resources Investigation - Jamestown Sanitary District Wastewater Facilities Upgrades Project, Jamestown, Tuolumne County, California*

WK Shijo Consulting, LLC. January 15, 2024. *Jamestown Sanitary District Wastewater Facility Upgrades No. 1 Project Air Quality and Greenhouse Gas Analysis*

Ibid. January 30, 2024. *Jamestown Sanitary District Wastewater Facility Upgrades No. 1 Project - Indirect Emissions - Air Quality and Greenhouse Gas Analysis*

In addition to the preceding documents, the following focused technical studies apply to the current project and previously adopted larger projects on the same parcels and are hereby incorporated by reference:

Francis Heritage, LLC. July 2015. *Cultural Resources Study Jamestown Sanitary District Wastewater Treatment Plant. Tuolumne County, California.*

Copies of these documents may be viewed at the Jamestown Sanitary District Offices  
 10190 Karlee Lane, Jamestown, CA 95327 during regular business hours or online at  
<https://www.jamestownsanitarydistrict.com/>

## 1.6 Other Public Agency Approvals

Permitting Agency	Permit/Agreements
Tuolumne Utilities District	Amended agreement to accept tertiary outflow
Tuolumne County Air Pollution Control District	Burn permit
State Water Resources Control Board	Stormwater Pollution Prevention Plan (SWPPP)
<b><i>All other applicable local, state and federal permits required by law.</i></b>	

## 2.0 ENVIRONMENTAL EVALUATION

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

- **Potentially Significant Impact.** This term applies to adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared consistent with the California Environmental Quality Act (CEQA).
- **Less-than-Significant Impact with Mitigation.** This term applies to adverse environmental consequences that have the potential to be significant, but can be reduced to less-than-significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed Project.
- **Less-than-Significant Impact.** This term applies to potentially adverse environmental consequences that do not meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.
- **No Impact.** This term means no adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

The environmental factors checked below would be potentially affected by this project (**Alternate #2**), involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. **Impacts associated with Alternatives 1, 3 and 4 are found in Section 4.22.**

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

**DETERMINATION: (Completed by the Lead Agency) .** On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR or NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR or NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Jamestown Sanitary District

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Date

## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

## 2.1 Aesthetics

I. AESTHETICS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<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? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.1.1 Background and Setting

#### Wood's Creek

The Woods Creek WWTP is bordered to the west and north by Wood's Creek, Harvard Mine Road, and a small commercial structure (crematorium). To the east is a commercial and industrial complex. State Route 49/108 borders the WWTP to the south. A single-family residence is located on the north side of Harvard Mine Road north of the WWTP adjacent to a large reservoir formed from a water-filled pit remaining from a large gold mining operation no longer in production (**Figure 3**). Surrounding vegetation includes riparian woodland along Wood's Creek with non- native Chinese tree-of-heaven and ornamental shrubs adjacent to SR 49/108.

#### Quartz

The Quartz project site includes only one of two JSD-owned parcels. Specifically, the project is proposed on JSD's easterly parcel (APN 59-150-27, 31.9± acres) where the WWTP facilities are found in the south/southeastern portion of the parcel. The site includes isolated oaks, non-native grasslands in the northerly portion of the parcel, and a serpentine chaparral ridge to the west/southwest (**Figure 2**).

The parcel is surrounded to the:

- West/southwest by the Tuolumne Utilities District (TUD) Quartz Reservoir and its minor associated structures.

- West/northwest by vacant JSD owned property (not a part of this project) including blue oak woodlands, annual grasslands, ephemeral drainages, a pond and serpentine chaparral hill ridge rising to just above 1,500 feet.
- East, northeast, and southeast are single-family rural residential parcels and ranchettes ranging in size from approximately three to five acres.

Of the proposed improvements at both WWTP facilities, the most visible will be the proposed storage pond on the Quartz site which will be visible from two residences immediately adjacent to the WWTP.

## 2.1.2 Analysis

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

**No Impact.** Both project sites include existing wastewater treatment plant facilities. No scenic vistas exist within the Project areas; therefore, no substantial adverse effects on scenic vistas are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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

**No Impact.**

#### Woods Creek

The Wood's Creek WWTP is located adjacent to SR 49/108 which is identified as eligible for designation as a state scenic highway<sup>2</sup>. The Jamestown WWTP is located within view of SR 49/108 by autos traveling 55± mph visible for only 1.5± seconds. Due to the nature and location of the proposed improvements and the minimal visibility from the highway, none will be visible from the highway.

#### Quartz

The Quartz project is not located along or within view of a state scenic highway.

Based on the preceding, no substantial adverse impacts to scenic resources within a state scenic highway are anticipated at either site.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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<sup>2</sup> <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>

- 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 points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

**Less than significant.**

Woods Creek

See paragraph b.

Quartz

The project revision will add an emergency storage pond in view of 10255 Karlee Lane (two homes) and 10104 Hitchcock Court. The storage pond will be visible from both parcels (**Figure 7**).

Alternative #2 will convert existing disturbed grassland to a pond. This would be similar to the installation of a stock pond for cattle as is common in the surrounding area. Therefore, the potential aesthetic impact of creating a pond at the site does not degrade the visual quality of public views and is consistent with the surrounding visual character and development patterns, This is a less-than-significant impact on aesthetics.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

Neighboring landowners have indicated opposition to the pond. As noted above, the pond does not create a significant adverse impact relative to aesthetics. It is presumed, therefore, that objections to the pond are not appearance-related, but rather privacy related (i.e., employees may move to and from the pond creating privacy related issues with the nearest neighbors at 10255 Karlee Lane) and/or concerns related to potential odors.

To address potential privacy issues, while not a CEQA environmental issue, the District has expressed a willingness to plant a solid evergreen screen surrounding the pond. To ensure this provision of design is included in contracting plans, a design feature of the project has been incorporated as follows:

**Project Design Feature:**

A solid evergreen landscaping screen will be planted between the emergency storage pond and 10255 Karlee Lane. Planting materials will exclude trees with seeds that may easily spread to the rare plant habitat located west of the project site (i.e., no cottonwoods, no willows). Landscape trees shall be incense cedar (*Calocedrus decurrens*), Texas privet (*Ligustrum japonicum 'texanum'*), or Leyland cypress (*Cupressus × leylandii*) Alternative trees may be reviewed and approved by the project biologist prior to installation.

Odors are addressed in the Air Quality section of this report.

**Mitigation Measure:** None.

**Mitigation Monitoring:** None.

Figure 7: Parcels from which the storage pond will be visible



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

**Less than Significant with Mitigation.** New lighting is proposed in conjunction with the proposed project at the JSD Quartz Site (**Figure 4**). This could create new light and glare in a rural setting, a potentially significant adverse impact. To minimize the potential impact, the following mitigation measure is proposed:

**Mitigation Measure AES-1:** All lighting shall be shielded and directed downward to the ground to minimize glare in the night skies and onto neighboring property. Lighting shall not be directed northeasterly towards the adjoining residential properties. .

**Mitigation Monitoring:** The measures shall be included in all construction documents. The measure is the responsibility of the construction contractor and shall be implemented prior to accepting work as final on the project site.

Proper implementation of the preceding measure is expected to minimize the potential impact to a level of less-than-significant.

## 2.2 Agriculture and Forestry Resources

II. Agriculture and Forestry Resources: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on <a href="#">the maps prepared pursuant to the Farmland Mapping and Monitoring Program</a> 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 <a href="#">Williamson Act</a> 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 <a href="#">Public Resources Code section 12220(g)</a> ), timberland (as defined by <a href="#">Public Resources Code section 4526</a> ), or timberland zoned Timberland Production (as defined by <a href="#">Government Code section 51104(g)</a> )?	<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"/>

### 2.2.1 Background and Setting

Pursuant to the USDA NRCS Soils Survey Reports, on site soils are summarized in the following tables and **Figures 8-9**.

Figure 8: Woods Creek USDA NRCS Soils Report



**Table 1: Woods Creek Soils**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7211	Millvilla-Luckymine complex, 15 to 30 percent slopes	0,0	0,3%
8110	Cumulic Humixerepts-Riverwash complex, 0 to 8 percent slopes	0,5	10,6%
9013	Urban land-Millvilla complex, 1 to 25 percent slopes	2,9	89,1%
<b>Totals for Area of Interest</b>		<b>3,2</b>	<b>100,0%</b>

**7211—Millvilla-Luckymine complex, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2r6fk  
*Elevation:* 950 to 2,410 feet  
*Mean annual precipitation:* 27 to 35 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 205 to 325 days  
*Farmland classification:* Not prime farmland

**8110—Cumulic Humixerepts-Riverwash complex, 0 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2lk58  
*Elevation:* 850 to 3,610 feet  
*Mean annual precipitation:* 28 to 49 inches  
*Mean annual air temperature:* 55 to 61 degrees F  
*Frost-free period:* 195 to 305 days  
*Farmland classification:* Not prime farmland

**9013—Urban land-Millvilla complex, 1 to 25 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2lp8b  
*Elevation:* 1,430 to 2,260 feet  
*Mean annual precipitation:* 31 to 39 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 215 to 280 days  
*Farmland classification:* Not prime farmland

Figure 9: Quartz – USDA NRCS Soils



**Table 2: Quartz Soils**

Map Unit Symbol	Map Unit Name	Acres in ADI	Percent of ADI
7074	Loafercreek-Bonanza complex, 3 to 15 percent slopes	1.5	12.4%
7086	Loafercreek-Gopheridge complex, 15 to 30 percent slopes	3.2	26.8%
7156	Crimeahouse-Sixbit complex, 15 to 30 percent slopes	0.7	6.1%
7210	Deerflat-Milvilla complex, 3 to 15 percent slopes	6.6	54.8%
<b>Totals for Area of Interest</b>		<b>12.0</b>	<b>100.0%</b>

**7074—Loafercreek-Bonanza complex, 3 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2x296*  
*Elevation: 840 to 1,890 feet*  
*Mean annual precipitation: 24 to 33 inches*  
*Mean annual air temperature: 59 to 61 degrees F*  
*Frost-free period: 235 to 325 days*  
*Farmland classification: Not prime farmland*

**7086—Loafercreek-Gopheridge complex, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2mx81*  
*Elevation: 850 to 2,300 feet*  
*Mean annual precipitation: 24 to 34 inches*  
*Mean annual air temperature: 57 to 61 degrees F*  
*Frost-free period: 215 to 320 days*  
*Farmland classification: Not prime farmland*

**7156—Crimeahouse-Sixbit complex, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol: 20m7*  
*Elevation: 800 to 1,790 feet*  
*Mean annual precipitation: 24 to 32 inches*  
*Mean annual air temperature: 59 to 61 degrees F*  
*Frost-free period: 235 to 330 days*  
*Farmland classification: Not prime farmland*

## 7210—Deerflat-Millville complex, 3 to 15 percent slopes

### Map Unit Setting

National map unit symbol: 2r6fl  
Elevation: 950 to 2,260 feet  
Mean annual precipitation: 27 to 36 inches  
Mean annual air temperature: 57 to 61 degrees F  
Frost-free period: 215 to 320 days  
Farmland classification: Not prime farmland

### 2.2.2 Analysis

- a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

#### **No Impact.**

No commercial agricultural uses are located on the project sites. No portions of the project parcels are under a Williamson Act Land Conservation Contract and none are within an agricultural preserve. As shown in **Figures 8 and 9** and **Tables 1 and 2**, no prime farmland is present on either site.

None of the existing zoning districts (Public, Open Space, Historic Combining) are associated with agricultural uses.

Therefore, no significant adverse impacts associated with the conversion of agricultural lands to non-agricultural use are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

- 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.** No timberland production lands exist on or adjacent to the proposed Project sites. Therefore, no conversion of forest land to non-forest use and no impacts to timberland production or parcels zoned for such use are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.3 Air Quality

<b>III. AIR QUALITY.</b> Where available, the significance criteria established by the applicable <u>air quality management or air pollution control district</u> may be relied upon to make the following determinations. Would the Project:	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.3.1 Background and Setting

A study was undertaken for the proposed project Alternatives, previously incorporated by reference as follows:

WK Shijo Consulting, LLC. January 15, 2024. *Jamestown Sanitary District Wastewater Facility Upgrades No. 1 Project Air Quality and Greenhouse Gas Analysis*

Ibid. January 30, 2024. *Jamestown Sanitary District Wastewater Facility Upgrades No. 1 Project - Indirect Emissions - Air Quality and Greenhouse Gas Analysis*

Results of the analysis for Alternative #2 are as follows with the results for Alternatives #1, #3 and #4 found in **Section 4.22**.

The Project site is located within the Mountain Counties Air Basin under the jurisdiction of the Tuolumne County Air Pollution Control District (TCAPCD). Based on data from the EPA (U.S. Environmental Protection Agency 2024a), Tuolumne County is designated a “marginal” nonattainment area for ozone.

Project implementation will result in construction activity which generates air pollutant emissions. Construction activities such as grading, excavation and travel on unpaved surfaces

may generate dust, and can lead to elevated concentrations of inhalable particulate matter smaller than 10 microns in diameter (PM10). The operation of construction equipment results in exhaust emissions. A substantial portion of the construction equipment is powered by diesel engines, which produce relatively high levels of nitrogen oxide (NOx) emissions. Construction activity could also potentially entrain naturally occurring asbestos (NOA) if present in the soil.

To evaluate the significance of pollutant emissions impacts, the Tuolumne County Air Pollution Control District (TCAPCD) has established significance thresholds for emissions of ozone precursors reactive organic gas (ROG) and NOx, PM10, and carbon monoxide (CO). These types of emissions are referred to as “criteria” pollutants. Significance thresholds used in this analysis are from the *TCAPCD CEQA Thresholds of Significance* (Tuolumne County Air Pollution Control District 2024).

The TCAPCD significance thresholds in the following table are used to evaluate criteria pollutant impacts associated with the Proposed Project.

**Table 3: Significant Thresholds for Pollutants - Tuolumne County**

Type of Pollutant Emissions	Amount of Pollutant Emissions in Pounds per Day	Amount of Pollutant Emissions in Tons per Year
Reactive Organic Gases (ROG)	1,000	100
Nitrogen Oxides (NO <sub>x</sub> )	1,000	100
Inhalable Particulate Matter (PM <sub>10</sub> )	1,000	100
Carbon Monoxide (CO)	1,000	100
<p>Note: These thresholds are applied to both construction-related and operational emissions.  Source: Tuolumne County Air Pollution Control District 2020.</p>		

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

#### Federal Clean Air Act Conformity

Projects that involve federal funding may be required to comply with Federal Clean Air Act Conformity regulations. In these cases, a project is required to demonstrate it is in conformance with plans prepared to comply with the Federal Clean Air Act. Conformity regulations are divided into two types: Transportation Conformity, which applies to transportation projects; and General Conformity, which applies to non-transportation projects. The SWRCB recommends that California Environmental Quality Act (CEQA) documents address Federal General Conformity, and indicate if a project is subject to a conformity determination (California State Water Resources Control Board 2018).

To address Federal General Conformity for this project, two steps are applied:

- Identifying if the project is subject to a conformity determination, and
- Comparing project-related emissions to mass-emission thresholds.

To identify whether the Project is subject to a conformity determination, guidance from the U.S. Environmental Protection Agency (EPA) (U.S. Environmental Protection Agency 2024a.) will be used in this report.

If the proposed project is subject to a conformity determination, *de minimis* mass-emissions thresholds from EPA will be used to identify if the project would result in a significant impact. EPA defines *de minimis* levels as the minimum threshold for which a conformity determination must be performed, for various criteria pollutants in various areas (U.S. Environmental Protection Agency 2024b). For areas designated "marginal" nonattainment areas for ozone, 40 CFR 93 § 153 sets the *de minimis* thresholds as:

- 100 tons per year of volatile organic compounds (VOC), which in this report will be measures as ROG; and
- 100 tons per year of NOx.

The Road Construction Emissions Model was used to quantify criteria pollutant for this project.

#### Naturally occurring asbestos (NOA)

Naturally occurring asbestos is identified as a toxic air contaminant (TAC) by the California Air Resources Board (ARB). No quantitative significance thresholds have been set for NOA. However, the California Department of Conservation website (<https://www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos>) provides a map that may be used as a screening-level indicator of the likelihood of NOA being present on the proposed project site.

The map, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* (California Department of Conservation 2000) shows the locations considered to be subject to elevated risk of containing NOA. If a project site is located

outside of areas considered to be subject to elevated risk of containing NOA, it may be considered to have a relatively lower probability of containing NOA and, in this analysis, will be considered to have a less-than-significant impact. If a project site is located within an area considered to be subject to elevated risk of containing NOA, it may be considered to have an elevated probability of containing NOA and, in this report, will be considered to have a significant impact.

If a project site is located outside of areas considered to be subject to elevated risk of containing NOA, it may be considered to have a relatively lower probability of containing NOA and, in this report, will be considered to have a less-than-significant impact.

If a project site is located within an area considered to be subject to elevated risk of containing NOA, it may be considered to have an elevated probability of containing NOA and, in this report, will be considered to have a significant impact.

Implementation of mitigation measures to reduce asbestos emissions during construction activities will be considered to reduce the impact to a less-than-significant level.

#### Odor

TCAPCD Rule 205, Nuisance, states

*“A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.”*

*“**Exception:** The provisions of Rule 205 do not apply to odors emanating from agriculture operations necessary for the growing of crops or raising of fowl or animals.”*

The TCAPCD CEQA *Thresholds of Significance* (Tuolumne County Air Pollution Control District 2024) states a project would have a significant impact on air quality if it would, “Create objectionable odors affecting a substantial number of people.” For an existing facility, in this air quality report, a project is also considered to have a significant impact on air quality if it would exacerbate an existing odor problem.

The TCAPCD operates a *Complaints* website. Issues for the website specifically include odor. Complainant information is kept confidential. For this air quality report, the WWF Upgrade project is considered to have a significant impact on odor if the project would be expected to increase the number of odor complaints reported to the TCAPCD *Complaints* website.

### **2.3.2 Analysis**

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

##### **No Impact.**

Tuolumne County does not have an adopted air quality plan. Therefore, none of the proposed alternatives will conflict with that plan. Should a plan be adopted prior to project development;

applicable regulations will be applied as appropriate.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

*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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

The air quality analysis for Criteria Pollutant Emissions Construction of the proposed project identifies maximum emissions per day for all construction phases and components as follows:

Criteria pollutants – Construction

**Less than Significant.** Construction activity would generate maximum emissions per day for all construction time periods

During a daily period, construction activity would generate a maximum of:

- 0.38 ppd of ROG,
- 2.26 ppd of NO<sub>x</sub>,
- 26.31 ppd of PM<sub>10</sub>, and
- 3.35 ppd of CO.

Construction activity annually for both 2025 and 2026 would generate:

- 0.01 tpy of ROG,
- 0.12 tpy of NO<sub>x</sub>
- 1.47 tpy of PM<sub>10</sub>, and
- 0.14 tpy of CO

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

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

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

Criteria pollutants – Operational

**No Impact.**

Project Alternative #2 is not capacity-building, but rather focuses on upgrades to the facilities allowing them to operate at planned capacity to serve development *within the existing JSD*

*Boundaries.* No new service lines will be constructed to extend service to new development. Therefore, no impacts associated with operational emissions are anticipated.

#### Federal conformity

##### **Less than Significant**

Based on data from the EPA (U.S. Environmental Protection Agency 2024a), Tuolumne County is designated a “marginal” nonattainment area for ozone. As a result, the project is subject to a Federal Clean Air Act conformity determination.

As shown in the preceding, the project would result in 0.01 tons per year of ROG emissions and 0.12 tons per year of NOx emissions. These amounts of emissions are less than the *de minimis* thresholds of 100 tons per year of VOC (applied in this report to ROG emissions), and 100 tons per year of NOx. Therefore, the impact of the project on Federal Clean Air Conformity is considered less than significant. No mitigation measures are required.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

#### Naturally Occurring Asbestos (NOA)

##### **Less than Significant with Mitigation.**

The map, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* shows areas more likely to contain NOA. Soil-disturbing construction activity in these areas would result in an elevated risk of entraining NOA. The asbestos map shows the Quartz Reservoir area is in, or adjacent to, an area more likely to contain NOA. As a result, soil disturbing activities at the project site could result in an elevated risk of entraining NOA. This impact is considered to be potentially significant. Implementation of the following mitigation measure would reduce this impact to a level of less than significant.

This following mitigation measure is proposed as follows:

#### **Mitigation Measure: AQ-1 Implement Naturally Occurring Asbestos Emission Reduction Control Measures**

The JSD will comply with the asbestos Airborne Toxic Controls Measure (ATCM) for Surfacing Applications (17 CCR 93106) , and the asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations (17 CCR 93105). Complying with these ATCMs would reduce the potential for entraining NOA, and reduce this impact to a less-than-significant level.

- The Asbestos ATCM for Surfacing Applications restricts the asbestos content of material used in surfacing applications such as unpaved roads, parking lots, driveways, and walkways. The purpose of this ATCM is to reduce public exposure to NOA from unpaved surfaces. A description of this ATCM is presented at the internet link <http://www.arb.ca.gov/toxics/asbestos/atcm/regadv1101.pdf>. Regulatory text for this ATCM is presented in 17 CCR 93106, and at the internet link <http://www.arb.ca.gov/toxics/atcm/asbeatcm.htm>.
- The Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining

Operations requires the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The purpose of this ATCM is to reduce public exposure to NOA from construction and mining activities that emit or re-suspend dust which may contain NOA. A description of this ATCM is presented at the internet link <http://www.arb.ca.gov/toxics/asbestos/atcm/regadv0702.pdf>. Regulatory text for this ATCM is presented in 17 CCR 93105, and at the internet link <http://www.arb.ca.gov/toxics/atcm/asb2atcm.htm>.

**Mitigation Monitoring:** The mitigation measure shall occur throughout project construction. It is the responsibility of the District and the project contractor. JSD shall include this provision in bid documents to ensure compliance.

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

*c) Expose sensitive receptors to substantial pollutant concentrations?*

**Less than significant with mitigation.**

The project has the potential to expose neighboring residents (Quartz) or businesses (Wood's) to air emissions from burning, dust generation and heavy equipment operations during construction. However, proper implementation of the following mitigation measures is expected to reduce temporary impacts to air quality related to burning and heavy equipment operations (short-term) to a less-than-significant level.

**Mitigation Measure AQ-2 Site Preparation**

Secure applicable permits from the Tuolumne County Air Pollution Control District prior to burning vegetation on the project site. Construction debris should not be burned on the site. Prior to land clearing involving vegetation removal, the applicant shall secure a burn permit, or evidence of waiver, from the Tuolumne County Air Pollution Control District and the California Department of Forestry and Fire Protection, as applicable.

**Mitigation Monitoring AQ-2:** The required mitigation measure will be implemented prior to site disturbance and throughout site preparation. The measure is the responsibility of the construction contractor.

**Mitigation Measure AQ-3 Serpentine Gravel**

Exposed serpentine gravel is prohibited on the project site (except for native soils within open space areas protecting special status plants), unless exempted pursuant to Sections 93106 and 93105(f) of the California Health and Safety Code. No person shall use, apply, sell, supply, or offer for sale or supply any restricted material (as defined in subsection (i)(20) of Section 93105) for surfacing, unless it has been tested and determined to have an asbestos content that is less than 0.25 percent. Pavement shall be required for any road, driveway or parking area utilizing serpentine gravel. (California Health and Safety Code, Sections 93105 and 93106)

**Mitigation Monitoring AQ-3:** The required mitigation measure will be implemented throughout the life of the project. The measure is the responsibility of the construction

contractor during construction and JSD throughout the life of the project.

#### **Mitigation Measure AQ-4 TCAPCD Compliance**

All construction and operations shall comply with all TCAPCD Rules and regulations.

**Mitigation Monitoring AQ-4:** The required mitigation measure will be implemented throughout the life of the project. The measure is the responsibility of the construction contractor during construction and JSD throughout the life of the project.

#### **Mitigation Measure AQ-5 Construction Emissions**

1. Exposed soils shall be watered as needed to control wind borne dust. The construction contractor shall be responsible for dust abatement during construction and development operations. A water truck or other watering device shall be on the construction site on all working days when natural precipitation does not provide adequate moisture for complete dust control. Said watering device shall be used to spray water on the site at the end of each day and at all other intervals, as need dictates, to control dust. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions using application of water. A water truck shall be present on site throughout construction activities.
2. Exposed piles of dirt, sand, gravel, or other construction debris shall be enclosed, covered and/or watered as needed to control wind borne dust.
3. Vehicle trackout shall be minimized through the use of rumble strips and wheel washers for all trucks and equipment leaving the site where mud deposits could affect the drivability or drainage of the existing off-site dirt roadway.
4. Sweep paved streets once a day to limit off-site tracking (recommend water sweepers with reclaimed water).
5. On-site vehicle speed shall be limited to 10 miles per hour on unpaved surfaces.
6. Loads on all haul/dump trucks shall be covered securely or at least two feet of freeboard shall be maintained on trucks hauling loads.

Throughout Project construction:

7. Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions.
8. Equipment idling shall be kept to a minimum when equipment is not in use.
9. Construction equipment shall be in compliance with the California Air Resources Board off-road and portable equipment diesel particulate matter regulations.

**Mitigation Monitoring AQ-5:** The required mitigation measure will be implemented throughout Project construction. The measure is the responsibility of the construction contractor.

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

***Less Than Significant with Mitigation Incorporated.***

**Construction**

Heavy equipment operations during project construction will emit temporary odors. However, proper implementation of mitigation measures identified in paragraph b are expected to reduce temporary impacts associated with construction odors to a less-than-significant level.

**Operations**

Odors associated with WWTPs can occur and are typically seasonal. Odors are best controlled by proper operation of all plant processes. Odor levels in the future are expected to be approximately the same as current conditions. (Furuya pers. comm.)

Wood's Creek

Prior to existing upgrades at the facility, odors were detected by the Rolling Hills residential subdivision located southeast of the existing Wood's Creek WWTP primarily during specific operations (decanting, spreading beds) in the summer when heat and wind direction combine to direct odors southeasterly. Per the Tuolumne County Air Pollution Control District, that agency has had no odor complaints since at least 2021<sup>3</sup>.

Quartz

Prior to establishing the JSD Quartz site, per the Tuolumne County Air Pollution Control District, that agency has not received complaints related to TUD's existing Quartz Reservoir adjacent to the proposed JSD Quartz site. Per the Tuolumne County Air Pollution Control District, that agency has had no odor complaints since at least 2021<sup>4</sup>.

Based on the preceding the impact of the proposed project on odor is considered to be unlikely, but could potentially occur and adversely impact neighboring landowners and/or JSD employees. As with the initial project establishment, the following mitigation measure is proposed to minimize this potential impact, if it occurs:

**Mitigation Measure AQ-6 Odors**

In response to recurring affected landowner or JSD employee complaints to either JSD or the Tuolumne County Air Pollution Control District (TCAPCD), where the cause of odors can be verifiably traced to the JSD WWTP, one or more of the following steps shall be taken, as determined by JSD's engineer in consultation with TCAPCD:

- Additional aeration to improve treatment and reduce anoxic conditions

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<sup>3</sup> Personal communication, Tuolumne County APCD, April 4, 2024.

<sup>4</sup> Personal communication, Tuolumne County APCD, April 4, 2024

- Construction of enclosures or buildings with air scrubbers or other odor mitigation equipment to contain and remove odors
- Bagging and off-hauling of screenings
- Dispersion of odor masking agents at the perimeter of the WWTP or other odor control measures at the WWTP.

**Mitigation Monitoring AQ-6:** The required mitigation measure will be implemented throughout the life of the project. The measure is the responsibility of JSD.

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

## 2.4 Biological Resources

IV. BIOLOGICAL RESOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the <a href="#">California Department of Fish and Wildlife</a> or <a href="#">U.S. Fish and Wildlife Service</a> ?	<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 <a href="#">California Department of Fish and Wildlife</a> or <a href="#">US Fish and Wildlife Service</a> ?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
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 <a href="#">Habitat Conservation Plan</a> , <a href="#">Natural Community Conservation Plan</a> , or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.4.1 Background and Setting

The following biological study was prepared for the project and was previously incorporated by reference:

Augustine Planning Associates, Inc. August 2024. Jamestown Sanitary District Facility Upgrades #1 Biological Study Report

**Figures 10 and 11** show sensitive biological areas outside the project boundaries (i.e., wetlands, and soils supporting sensitive plant species, respectively). The project analyzed herein does NOT include this area, but only a small portion of it (**Figure 12**) where project activities are proposed. The project analyzed herein excludes all areas containing sensitive plant habitats and wetlands—except where an indirect impact, if any, could occur.

To ensure that the WWTP did not encroach into sensitive biological areas, fencing was installed at the Quartz WWTP prior to construction and remains in place as a protective measure (**Figure 11**). All areas within the fencing were surveyed intensively before WWTP construction. Areas within the current project footprint have been disturbed, paved, built-upon, graveled, or otherwise altered.

Site elevations range within the project area range from approximately 1300±-1400± feet above mean sea level (amsl). On-site vegetation in the project area is shown in **Figure 13**.

### Quartz

At the Quartz site, given the sensitivity of the surrounding area to special status plants; soil boundaries are included to emphasize the project location relative to soils supporting special status plant populations (**Figure 11**). The area surrounding JSD's Quartz WWTP contains soils identified as the Crimeahouse-Sixbit complex (**Figure 11**). These soils are closely associated with special status plant species due to their calcium/magnesium ratios (toxic to most common plants that would otherwise out-compete the special status plant species)



For the proposed project boundaries (**Figure 12**) are located on a small portion of the area owned by JSD. Of this, 0.07± acre (less than 6% of the project site) is potentially composed of this soil type per soil maps. However, it is noted that the precise boundary between soils series can only be determined with detailed field surveys. For the original establishment of the Quartz WWTP, extensive botanical studies were undertaken in the 0.07± acre area of potential sensitive plant habitat to ensure that no special status plants occurred in that area. None were identified. In conjunction with site construction converting the site to an urbanized/industrial use; permanent fencing was erected to separate the existing WWTP facilities from adjacent soils supporting special status plants (**Figure 11**). The project footprint does not extend into the boundaries of those soils verified to support sensitive plant species.

Figure 10: 2015 Biological Study Area, Wetlands



April 5, 2024

**Wetlands**

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper

Figure 11: Sensitive Ecological Areas Identified in 2015 Biological Study (Red shaded) and Current Project Footprint

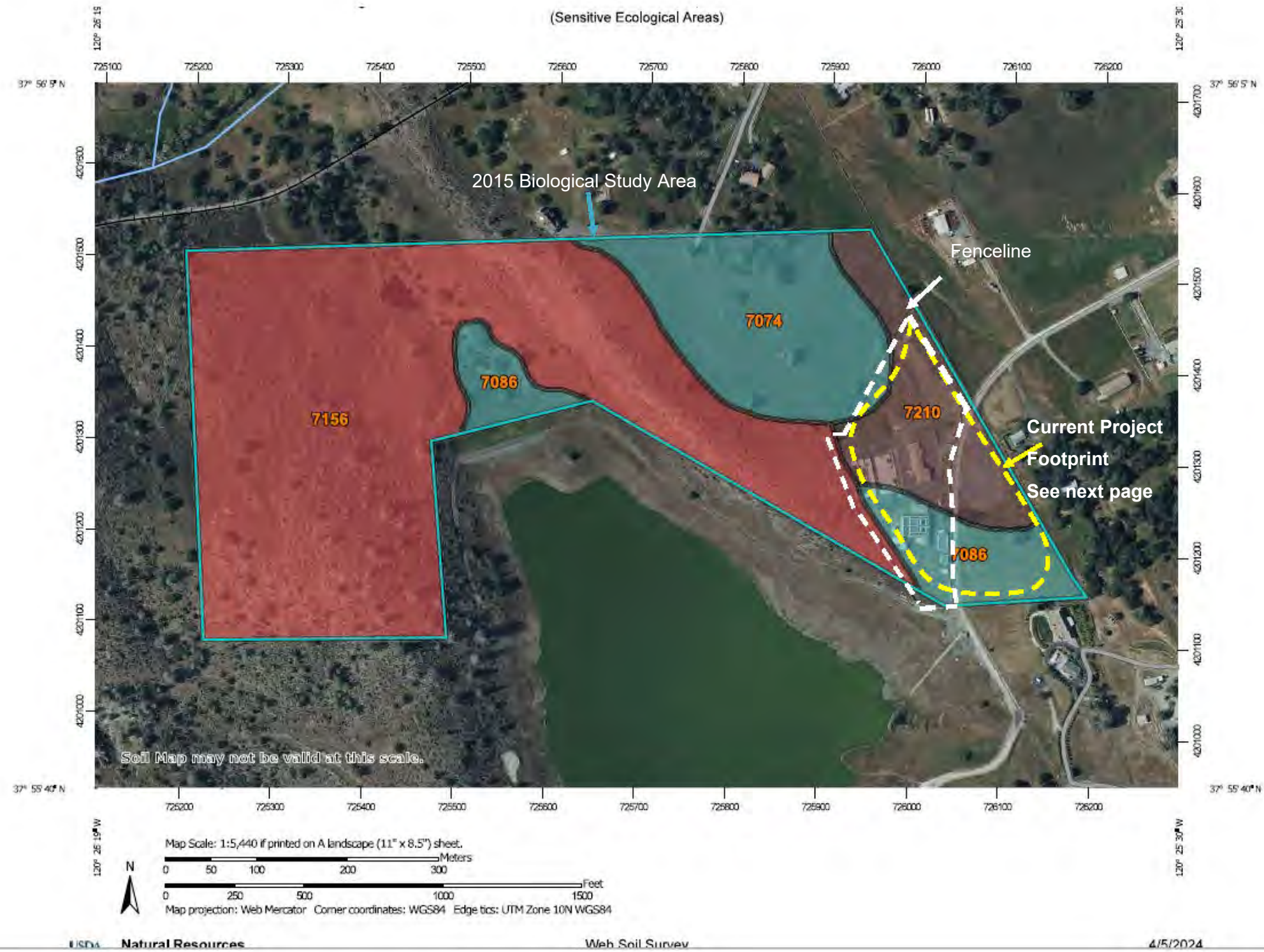


Figure 12: Close-up of Current Project Footprint with areas of proposed improvements

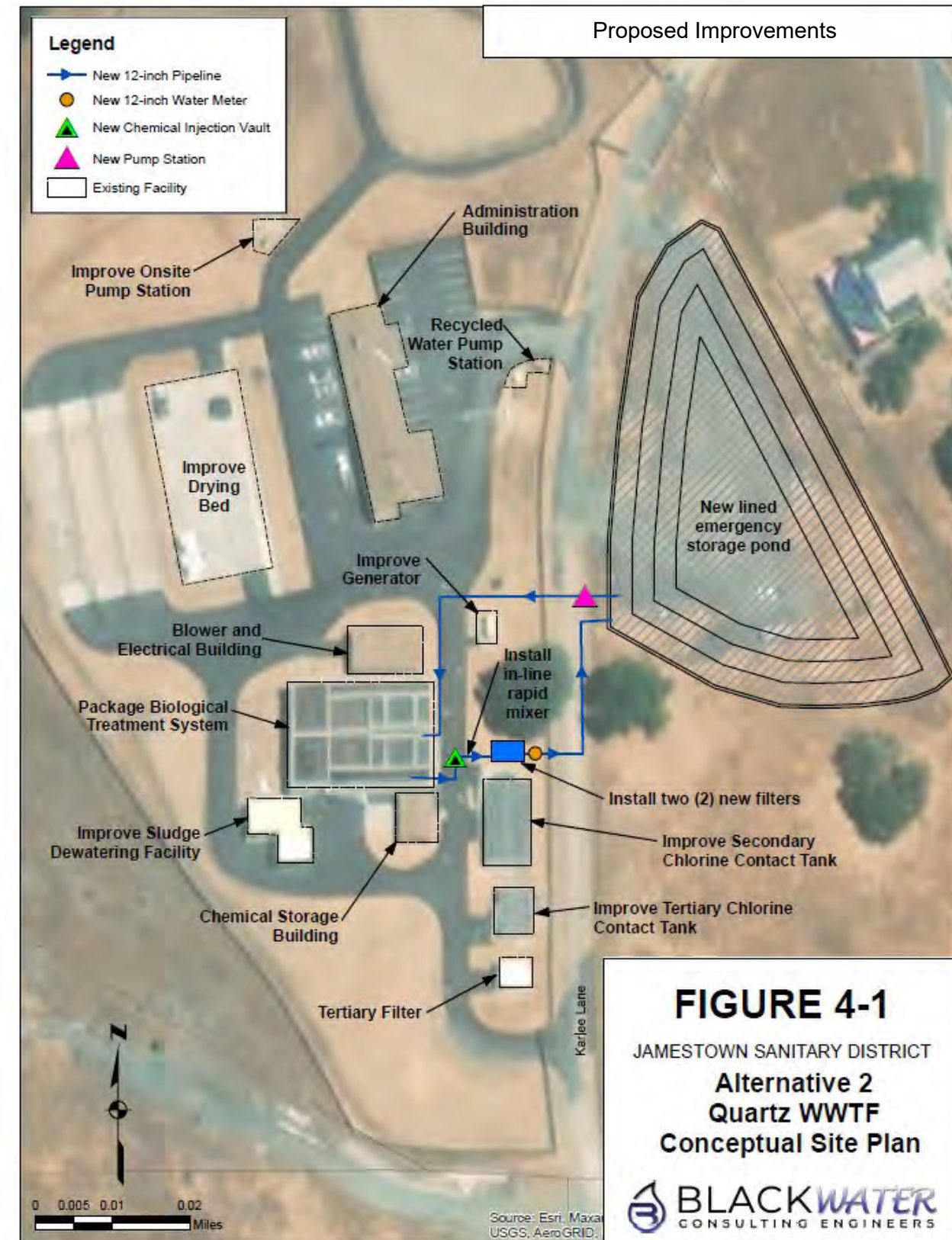
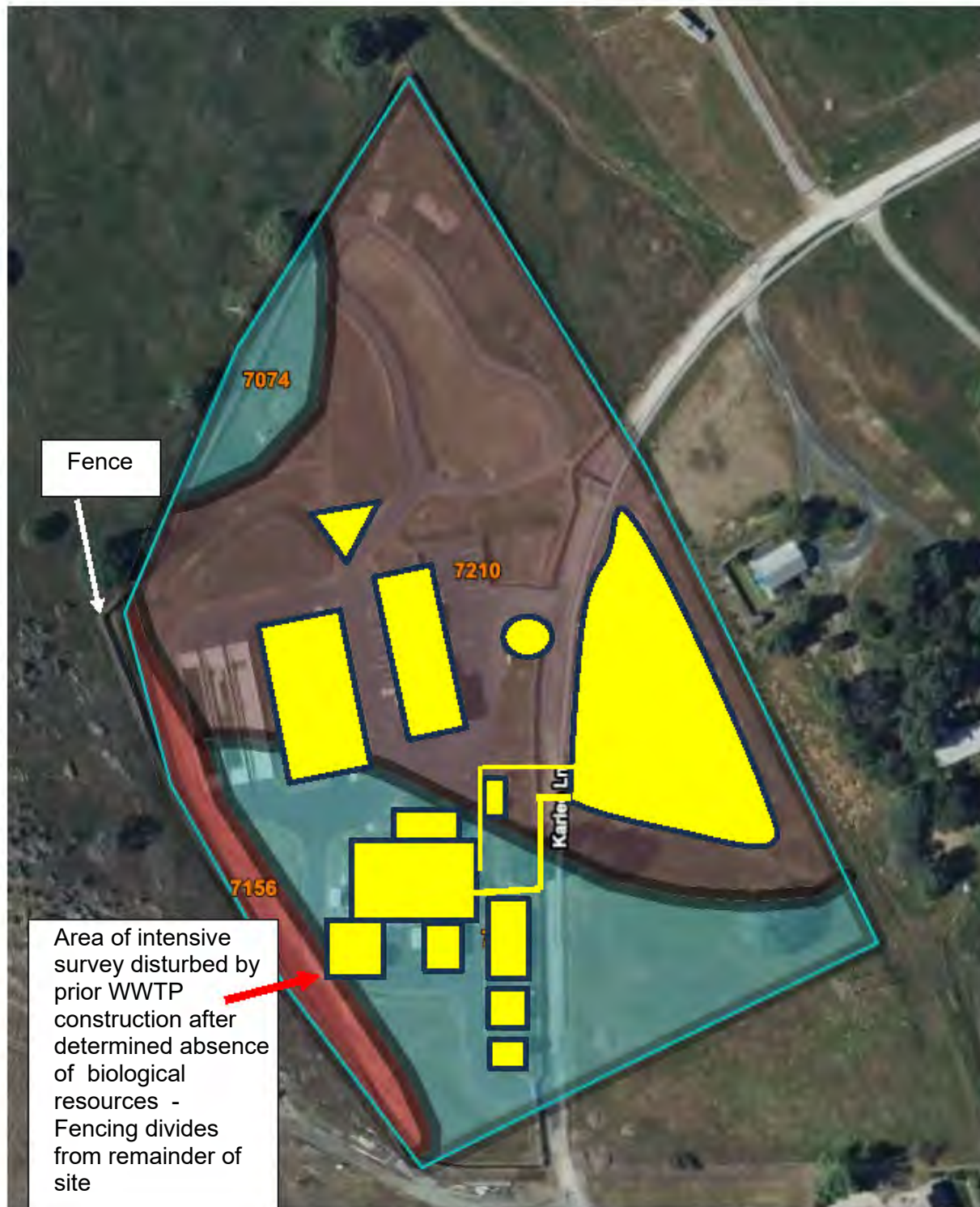
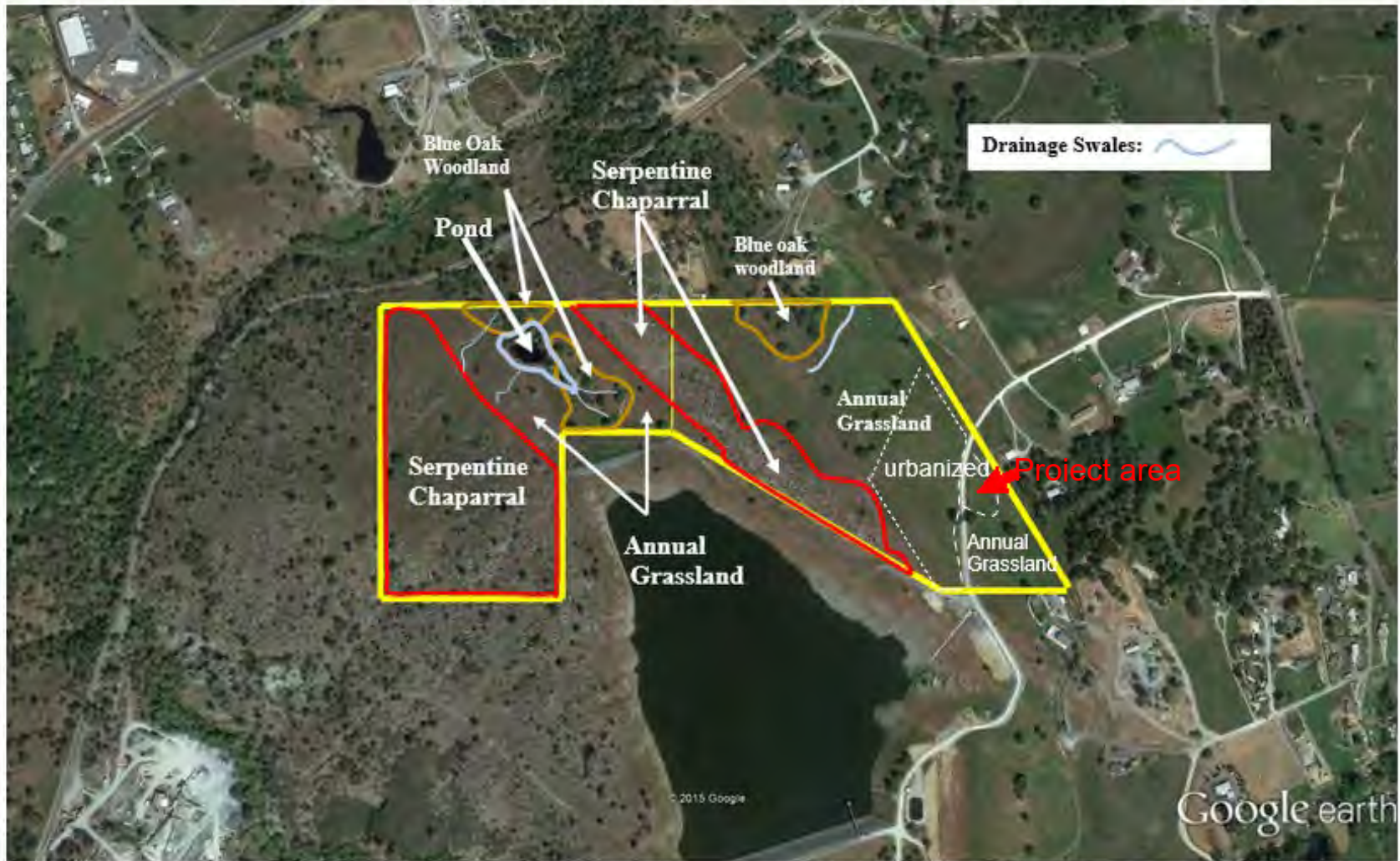


Figure 13: Habitat Types – all JSD Owned Property



## Woods Creek

The Woods Creek WWTP is bordered by Woods Creek to the west and north of the facility. Habitat types on the site are identified in **Figure 14**. Woods Creek adjacent to the WWTP is bordered by a north and westerly bank (away from the WWTP) with a relatively gently sloped flood-plain and along a south and easterly bank (adjacent to the WWTP) that is high and steep. The high, steep bank cannot be climbed easily (without assistance) by humans.

### **2.4.2 Methodology**

#### Review of existing data and previous surveys

Prior to commencing field surveys, APA reviewed the California Natural Diversity Database/Rarefind, obtained a USFWS species lists, reviewed the National Wetlands Inventory, CalFlora plant list, and California Native Plant Society (CNPS) plant list. The Sonora USGS 7.5' Topographic Map and Google Earth were reviewed to determine the potential for drainages, wetlands, clearings, and access points. Species lists were obtained from the CNDDDB and USFWS and are included in the **Confidential Appendix B**.

#### Site Surveys:

Site surveys were conducted on 4/5/2024 and 4/6/24. 2024 surveys were conducted using Nikon Monarch M7 8 X 42 binoculars, Nikon D3300 digital camera (18- 55mm and 70-300mm lens), and standard field and collection supplies.

#### Botanical surveys

Surveys were conducted on foot. Photos of representative vegetation were taken throughout the surveys. Where species were not readily identified in the field, plant specimens were inspected with a hand lens, sketched and, if necessary, collected and preserved then keyed in-house using a dissecting microscope and Jepson Manual.

#### Animal surveys

Live and dead trees were inspected with special attention to potential nesting opportunities. Potential roosts and structures were inspected for whitewash.

Mud and sand were inspected for animal tracks and structures were examined for whitewash, scat, hair and presence/absence of spider webs across openings. Dirt trails also were observed for tracks. Matted grasses indicating potential bedding areas were inspected for hair and scat.

#### Definitions

For the purposes of this analysis, a species was considered "Special Status" if it met one or more of the following:

- Listed pursuant to the California Endangered Species Act (CESA)
- A candidate for listing pursuant to CESA
- A species petitioned for listing pursuant to CESA
- Listed pursuant to the Federal Endangered Species Act (FESA)
- A candidate for listing pursuant to FESA
- A species petitioned for listing pursuant to FESA
- Designated by the CDFW as a Species of Special Concern (SSC)

- Designated by the CDFW as a Special Animal (SA)
- Designated by the CDFW as a Fully Protected Species (FPS)
- Designated by CNPS as List 1A (Presumed extinct in California), List 1B (Rare, threatened, or endangered in California and elsewhere), or List 2 Plant (Plants rare, threatened, or endangered in California but more common elsewhere)
- Identified by the US Forest Service as Sensitive (USFS-S)
- Identified by the US Bureau of Land Management as Sensitive (BLM-S)
- Identified by the International Union for Conservation of Nature (IUCN) as vulnerable
- Identified by the Western Bat Working Group (WBWG) as High Priority
- Identified by the WBWG as Moderate Priority
- Birds identified by the US Fish and Wildlife Service as Birds of Conservation Concern (USFWS BCC)

**Table 4: Quartz - Special Status Species Evaluations**

Quartz Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
<b>Plants</b>			
Jepson's onion <i>Allium jepsonii</i>	CNPS 1B.2 BLM-S USFS-S	Chapparal, cismontane woodland, lower montane coniferous forest. On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. On slopes and flats; usually in an open area. 1,100 – 3,700 ft. (Blooms April – August)	U - The nearest CNDDDB occurrence is less than two miles from the project site. The WWTP site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). Surveys failed to confirm presence of this species on serpentine soils outside the project footprint. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present.
Congdon's onion <i>Allium sanbornii var condonii</i>	CNPS 4.3	Chaparral, cismontane woodland. Ultramafic barrens or volcanic soils with scattered grey pines. 900 – 3,300 ft. (Blooms April to July)	Doesn't meet criteria for classification as special status
Rawhide Hill onion <i>Allium tuolumnense</i>	BLM – S CNPS 1B.2	Cismontane woodland, Serpentinite soils (Blooms March – May)	U – The nearest CNDDDB occurrence is 1,200± feet from the project footprint. However, the WWTP site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). Within the proposed project boundaries are dense non-

			native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present.
Nissenan manzanita <i>Arctostaphylos nissenana</i>	CNPS 1B.2	Rocky, Closed-cone coniferous forest, Chaparral (Blooms February – March)	U – The nearest CNDDDB occurrence is more than three miles from the project site. The project area does not include any species of manzanita. Therefore, the species does not occur.
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	CNPS 1B.2	Sometimes serpentinite, Chaparral, Cismontane woodland, Valley and foothill grassland (Blooms March – June)	U - The nearest CNDDDB occurrence is more than three miles from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils, chaparral, woodland, and native grasslands do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species

			habitat is present.
Chinese Camp brodiaea <i>Brodiaea pallida</i>	FT CE CNPS 1B.1	Vernal streambeds, often serpentinite; Cismontane woodland, Valley and foothill grassland (Blooms May – June)	U - The nearest CNDDDB occurrence is more than four miles from the project site. The WWTP site lacks vernal streambeds and serpentinite soils. Multiple previous surveys for the species on adjacent land failed to find the species on suitable habitat. Due to the lack of habitat at the WWTP project site, the species is not expected to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the drainages and wetlands where potential species habitat is present.
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	BLM-S CNPS 1B.2	Serpentinite, gabbroic and other soils; Chaparral, Cismontane woodland, Lower montane coniferous forest (Blooms May – June)	U - The nearest CNDDDB occurrence is approximately one mile from the project site. The WWTP site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and identified a similar species ( <i>Chlorogalum pomeridianum</i> ) off-site. Surveys failed to confirm presence of this species on serpentine soils outside the project footprint. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present.

<p>Mariposa clarkia <i>Clarkia biloba ssp. australis</i></p>	<p>CNPS 1B.2</p>	<p>Serpentinite; Chaparral, Cismontane woodland (Blooms May – July)</p>	<p>U - The nearest CNDDDB occurrence is more than three miles from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present.</p>
<p>Mariposa cryptantha <i>Cryptantha mariposae</i></p>	<p>BLM-S CNPS 1B.3</p>	<p>Chaparral, serpentinite, rocky (Blooms April – June)</p>	<p>U – The nearest species occurrence is 1,200± feet from the project site. However, the WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). The species occurs off-site to the west outside the project footprint. Within the proposed project boundaries, are dense non-native grasslands, graveled surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to the lack of suitable habitat on the project site, the species is unlikely to occur. The species is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where the species occurs.</p>
<p>Red Hills cryptantha</p>	<p>CNPS 1B.3</p>	<p>Serpentinite, sometimes streambeds,</p>	<p>U - The nearest species occurrence is 1,200±</p>

<i>Cryptantha spithamaea</i>		sometimes openings; Chaparral, Cismontane woodland (Blooms April – May)	feet from the project site. However, the WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). The species occurs off-site to the west outside the project footprint. Within the proposed project boundaries, are dense non-native grasslands, graveled surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to the lack of suitable habitat on the project site, the species is unlikely to occur. The species is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where the species occurs.
Ewan’s larkspur <i>Delphinium hansennii ssp. ewanianum</i>	CNPS 4.2	Cismontane woodland, valley and foothill grassland. Rocky soils. 190 - 2000 ft. elev. Blooms March – May.	Doesn’t meet criteria for classification as special status
Tuolumne button-celery <i>Eryngium pinnatisectum</i>	CNPS 1B.2	Mesic; Cismontane woodland, Lower montane coniferous forest, Vernal pools (Blooms May – August)	U - The nearest CNDDDB occurrence is more than one mile from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., vernal pools and mesic sites do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates

			the WWTP/project footprint from the serpentine ridge where potential species habitat is present.
Stanislaus monkeyflower <i>Erythranthe marmorata</i>	CNPS 1B.1	Cismontane woodland Lower montane coniferous forest. 985- 4700 ft. (Blooms March – May)	U - The nearest CNDDDB occurrence is more than two miles from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., woodland, coniferous forest). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present.
Stinkbells <i>Fritillaria agrestis</i>	CNPS 4.2	Cismontane woodland, chaparral, valley and foothill grassland, pinyon and juniper woodland. Ultramafic. Sometimes on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 32-5200 ft. (Blooms March to June)	Doesn't meet criteria for classification as special status (note: Although patches of non-native grassland exist on site, the species was not located and is not expected to occur).
Serpentine bluecup <i>Githopsis pulchella ssp. serpentinicola</i>	CNPS 4.3	Cismontane woodland. Serpentine or Ione formation. 1000 – 2000 ft. Blooms May to June	Doesn't meet criteria for classification as special status
Foothill jepsonia <i>Jepsonia heterandra</i>	CNPS 4.3	Cismontane woodland, lower montane coniferous forest. Crevices, especially in slate-like rock. 150 –	Doesn't meet criteria for classification as special status

		1600 ft. Blooms August to December	
Congdon's lomatium <i>Lomatium congdonii</i>	CNPS 1B.2	Serpentinite; Chaparral, Cismontane woodland (Blooms March – June)	U - The nearest species occurrence is 1,000± feet from the project site. However, the WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils do not occur within the project footprint). The species occurs off-site to the west outside the project footprint. Within the proposed project boundaries, are dense non-native grasslands, graveled surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to the lack of suitable habitat on the project site, the species is unlikely to occur. The species is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where the species occurs.
Shaggyhair lupine <i>Lupinus spectabilis</i>	CNPS 1B.2	Serpentinite; Chaparral, Cismontane woodland (Blooms April – May)	U - The nearest CNDDDB occurrence is more than two miles from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils, chaparral, woodland do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the

			serpentine ridge where potential species habitat is present.
Red Hills Ragwort <i>Senecio clevelandii</i> var. <i>heterophyllus</i>	CNPS 1B.2 BLM-S	Cismontane woodland, seeps, serpentinite. Drying serpentine soils; often along streams. Cismontane woodland, Ultramafic (Blooms May – July)	U – Known from one 1915 record of uncertain location 2.3± miles from the project site. Serpentine soils are located west of the project site and not within the project boundaries. The species was not present during surveys conducted during the blooming period and is not expected to occur.
Michael’s rein orchid <i>Piperia michaelii</i>	CNPS 4.2	Coastal bluff scrub, coastal scrub, cismontane woodland, chaparral, closed-cone coniferous forest, lower montane coniferous forest. Mudstone and humus, generally dry sites. 0 – 3,000 ft. (Blooms April to August)	Doesn’t meet criteria for classification as special status

Red Hills Vervain <i>Verbena californica</i>	FT CT CNPS 1.B.1	Mesic, usually serpentinite seeps or creeks; Cismontane woodland, Valley and foothill grassland (Blooms May – September)	U – The nearest CNDDDB occurrence is more than three miles from the project site. The WWTP project site is outside the footprint of suitable habitat for the species (i.e., serpentine soils, serpentinite seeps do not occur within the project footprint). Biological surveys previously sought this species outside the project footprint and failed to confirm presence of this species. Within the proposed project boundaries are dense non-native grasslands, graveled surfaces, paved surfaces, and surfaces developed by buildings where conversion to urban/industrial uses have occurred. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat off-site is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present. Therefore, the species is not expected to occur.
<b>Invertebrates</b>			
Crotch bumble bee <i>Bombus crotchii</i>	C-E	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	U - The project site is within a CNDDDB buffer for the species. However, per the record, the occurrence is more than 0.5± mile from the project site dating to 1919 with an uncertain location, but references to a valley well outside the project boundaries. The project footprint lacks all of the species' preferred food plants. Those food plants do occur on surrounding parcels. Given the WWTPs lack of suitable food sources and industrialized uses, the species is not expected to occur.
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	FT	Valley & foothill grassland, Vernal pool, wetland; Inhabit small, clear-water sandstone-	U – The nearest CNDDDB occurrence is more than four miles from the project site. The project footprint lacks vernal pools. Suitable

		depression pools and grassed swale, earth slump, or basalt-flow depression pools.	habitat for this species does not exist on site. Therefore, it is not expected to occur.
Monarch butterfly <i>Danaus plexippus</i>	F-C (California overwintering population)	Western North American monarch ACU. Adults require a diversity of blooming nectar resources, fed on throughout migration routes and breeding grounds (spring through fall). Require milkweed (primarily <i>Asclepias</i> spp.) for both laying eggs and feeding larvae. Use a variety of roosting trees along the fall migration route. Primarily overwinter in groves along the coast of California and Baja CA in trees including blue gum eucalyptus ( <i>Eucalyptus globulus</i> ), Monterey pine ( <i>Pinus radiata</i> ), and Monterey cypress ( <i>Hesperocyparis macrocarpa</i> ), all serve as roost trees. Preferred locations provide indirect sunlight for overwintering, moisture for hydration, defense against freezing temperatures, and protection against strong winds with a mild winter climate which must be warm enough to prevent freezing yet cool enough to prevent lipid depletion.	U – There are no records for this species in Tuolumne County in the CNDDDB. The site lacks the species’ preferred milkweed. Winter temperatures within the project area can drop below freezing making the site unsuitable for wintering populations of the species. None were identified during surveys. Therefore, the species is not expected to occur in overwintering populations in the project area.

Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Riparian scrub	U – The nearest CNDDDB occurrence record is 2.6± miles from the project site. The project footprint lacks elderberry shrubs. The US Fish and Wildlife Service has amended the range for this species to encompass areas in Tuolumne County below 500 feet in elevation. The site generally is located above 1300± feet in elevation. Therefore, the project is outside the range of this species and no impacts to the species will occur <sup>5</sup> . Therefore, the species is not expected to occur.
Hirsute Sierra sideband <i>Monadenia mormonum hirsuta</i>	BLM-S	Chaparral, Cismontane woodland Valley & foothill grassland. Known only from a few basaltic outcrops in Tuolumne County.	U – The nearest CNDDDB occurrence record is 2.8± miles from the project site. The site lacks the basaltic outcrops associated with the species which was not present during surveys and is therefore unlikely to occur.
Grady's cave amphipod <i>Stygobromus gradyi</i>	None	Central California foothills. Mostly found in caves and mine tunnels. Also taken from a spring.	N/A. Does not meet criteria for special status as established herein. (Note: The species was not identified during surveys and suitable habitat does not exist within the project footprint for the species).
<b>Fish</b>			
Central California roach <i>Hesperoleucus symmetricus symmetricus</i>	CDFW-SSC	Central California roach are generally found in small streams and are particularly well adapted to life in intermittent watercourses; dense populations are frequently observed in isolated pools. Roach are most abundant in mid-elevation streams in	U - The nearest CNDDDB occurrence is more than ¾ mile from the project site. The WWTP site lacks the intermittent watercourses in which the species is normally found. The lack of suitable habitat makes it unlikely to occur.

5 <https://ecos.fws.gov/ecp0/profile/speciesProfile?sld=7850#currentRange>

		the Sierra Nevada foothills.	
<b>Amphibians</b>			
California Tiger Salamander <i>Abystoma californiense</i>	FT	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool wetland; Needs underground refuges, especially ground squirrel burrows, & vernal pools or other seasonal water sources for breeding.	U – The nearest CNDDDB occurrence is more than ten miles from the project site. The WWTP site lacks the moist habitat and lacks refugia required by the species which was not identified during project surveys. It is not expected to occur.
California red-legged frog <i>Rana draytonii</i>	FT CDFW-SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. 11-20 weeks of permanent water and access to estivation habitat necessary.	U – The nearest CNDDDB potential habitat is 0.39 mile from the project site (note: most of Woods Creek is identified as potential habitat). The WWTP site lacks deep water sources with dense shrubbery. On site “habitat” is urbanized/industrial. The nearest potentially suitable habitat for the species occurs at a pond 0.34± mile from the project site separated from the WWTP by a steep dry rocky ridge with a climb of more than 100 feet in elevation with no habitable areas at the WWTP. Therefore, the species is not expected to occur.
Foothill yellow-legged frog South Sierra DPS <i>Rana boylei</i>	FE BLM-S CDFW-SSC USFS-S	In or near rocky streams in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, mixed chaparral, and wet meadow types.	U – The nearest CNDDDB occurrence is four miles from the project site. The WWTP site lacks rocky streams suitable for the species. The nearest marginally suitable habitat for the species occurs along Woods Creek 0.4± mile from the project site and is separated from the WWTP by a steep dry, rocky ridge with a climb of more than 100 feet in elevation with no habitable areas at the WWTP. Therefore, the species is not expected to occur. Note: Regional FYLF species surveys were conducted in 2023 including areas upstream of the project site along Woods Creek.

<b>Reptiles</b>			Surveys for the species were negative.
Northwestern pond turtle <i>Actinemys (Emys) marmorata</i>	F-T USFS-S BLM-S CDFW-SSC	Broad range of habitats include flowing streams, permanent lakes, ponds, reservoirs, settling ponds, marshes and other wetlands including. Requires upland habitat suitable for nesting and overwintering. Mates throughout the spring, summer, and fall. Nests usually in the spring or early summer normally within 300 feet of water, but may be located up to 1500 feet from water. Eggs hatch in the fall in the northern range and hatchlings often remain in the nest through the first winter. Soils for nesting must be loose enough to allow for excavation with disturbances infrequent enough to avoid nest disturbance.	P – The species occurs on a pond 0.34± mile from the project site. The WWTP site includes some small settling ponds which could provide habitat for the species; however, there is no adjacent upland habitat suitable for nesting within the project boundaries and no vegetation removal is expected to occur that could disturb WPTs. More suitable habitat for the species occurs at the pond 0.34± mile from the project site separated from the WWTP by a steep dry rocky ridge with a climb of more than 100 feet in elevation. The species was not present during 2024 surveys at the WWTP. However, because the site does include some settling ponds, the small potential for the species to occupy the site prior to project construction exists. Therefore, mitigation is included requiring a preconstruction survey to ensure that the species remains absent prior to commencing construction with provisions for relocation, if necessary.
Coast horned lizard <i>Phrynosoma blainvillii</i>	BLM-S CDFW-SSC	Chaparral, Cismontane woodland Desert wash, Riparian scrub Riparian woodland, Valley & foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	U – The nearest CNDDDB record for the species is 4.8± miles from the project site. Based on a site inspection for the species, no evidence of ant hills and loose soils indicating preferred habitat were found. Therefore, the species is not expected to occur.

Birds			
Clark's grebe <i>Aechmophorus clarkii</i>	USFWS-BCC	<p>"Light phase" individuals (black crown does not extend to eyes) recently separated from western grebe (<i>A. occidentalis</i>). Life history has not been distinguished.</p> <p>Common to abundant October to May along coast south of the San Francisco Bay Region and in San Francisco Bay in marine subtidal and estuarine waters; uncommon north. Uncommon to fairly common on large lakes near coast and inland at low elevations. Winter range extends in lowest elevations of Tuolumne County. Pattern: For nesting, prefer large stands of tall, emergent vegetation adjacent to large lakes.</p>	U – The project footprint lacks the large lakes required by the species for breeding and is outside the species' breeding range. The adjacent Quartz Reservoir is modest in size and includes only minimal vegetation but could provide a temporary "stop" during migration with only occasional use. The species is more likely to use the larger nearby water bodies (Melones, Don Pedro). Activities within the proposed project footprint are unlikely to affect the species given the ongoing mechanized activities undertaken almost daily at the existing WWTP and the existence of a physical ridge/barrier between the proposed work area and the wetted surface at Quartz Reservoir (150 feet minimum).
Western grebe <i>Aechmophorus occidentalis</i>	USFWS-BCC	See <i>A. clarkii</i>	U – See above.
Tricolored blackbird <i>Agelaius tricolor</i>	CT BLM-S CDFW-SSC USFWS BCC	Protected nesting substrate and foraging area with insect prey within a few km of the colony.	U – The nearest suitable habitat for the species occurs 0.34 mile from the project boundaries. The project site lacks nesting substrate. The project boundaries do not provide foraging ground for the species which is not expected to occur. No evidence of occupation was found during biological surveys conducted before, during or after the species breeding period (on or off-site). Therefore, it is unlikely that this species will occupy the site.
Golden eagle	BGEPA	Habitat typically rolling foothills,	U – The species is not documented in

<i>Aquila chrysaetos</i>	BLM:S CDF:S CDFW:FP CDFW:WL USFWS-BCC	mountain areas. Tuolumne County is within the year-round range for the species at most elevations.	Tuolumne County in the CNDDDB. The urbanized project site lacks rolling foothills and mountainous areas. Grasslands to the west (off-site) could provide some minimal foraging habitat, however; the species was not identified during multiple surveys at the project site and its surroundings. It is not expected to occur.
Oak titmouse <i>Baeolophus inornatus</i>	USFWS-BCC	Common resident in a variety of habitats, but is primarily associated with oaks. Occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California, Range encircles San Joaquin Valley onto the western slope of the Sierra Nevada.	P – The species was not identified during site surveys, but suitable habitat exists in the two large oaks within the project footprint site and the species would be expected to occur. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.
Wrentit <i>Chamaea fasciata</i>	USFWS BCC	Prefers dense stands of chaparral. Sometimes found in sparse or open conifers or other woodlands with a heavy shrub understory. The species range extends into Tuolumne County year-round.	U – The species was not identified during site surveys. The project footprint does not include chaparral. Suitable habitat exists off site to the west. Given the lack of foraging or nesting habitat at the project site, however, it is not expected to occur.
Olive-sided flycatcher <i>Contopus cooperi</i>	USFWS BCC	Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. Extent and density of forest habitat less important than the amount of air space that can be scanned from its highest perches. Breeds approx. May 20 – Aug. 31.	U – The WWTP lacks all suitable habitat for the species. The project area is below the elevation supporting the species preferred habitat. The species was not identified during surveys and is not expected to occur.
Nuttall’s woodpecker <i>Dryobates nuttallii</i>	USFWS BCC	Common, permanent resident of low-elevation riparian deciduous and	P – The species was not identified on site; however, suitable habitat for nesting exists at

		oak habitats. Occurs in the lower portions of the Sierra Nevada.	the two large oaks on site. Mitigation measures include preconstruction bird/nesting surveys with avoidance measures to ensure impacts to the species, if present, are less-than-significant.
Prairie falcon <i>Falco mexicanus</i>	CDFW-WL	Uncommon permanent resident that ranges from southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada. Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Mostly absent from northern coastal fog belt. Not found in upper elevations of Sierra Nevada. Requires sheltered cliff ledges for cover.	U – No suitable habitat exists within the WWTP boundaries. The general area west of the project site (offsite) is within the species’ winter range and off-site grasslands more than 1000 feet to the west could provide some foraging habitat. However, even offsite, the area lacks sheltered cliff ledges necessary for species cover and nesting opportunities. The species was not identified during surveys and is not expected to occur at or near the WWTP project site. While the species could occasionally pass over the project site, it is unlikely the species would land within the project boundaries and would relocate to its preferred habitats offsite in response to any disturbances within the WWTP project boundaries. The species was not identified during surveys and no impacts to the species are anticipated.
Common yellowthroat <i>Geothlypis trichas sinuosa</i>	USFWS BCC	Mostly breeds and winters in wet meadow, fresh emergent wetland, and saline emergent wetland habitats; also breeds in valley foothill riparian, annual grassland, and perennial grassland habitats.	U - The WWTP site is outside the footprint of suitable habitat for the species (i.e., suitable wetlands do not occur within the project footprint). The species occurs approximately 0.34 mile from the project site. The WWTP project site lacks all suitable habitat for the species. Given the intervening distance to the occupation site, and that the species has ample foraging and nesting habitat more than 1,500 feet from the project site, no impacts to the species are anticipated.

<p>Cassin's finch <i>Haemorhous cassinii</i></p>	<p>USFWS-BCC</p>	<p>Common montane resident; breeds in most higher mountain ranges in CA. Prefers tall, open coniferous forests, in lodgepole pine, red fir, and subalpine conifer habitats, particularly in breeding season. Most numerous near wet meadows and grassy openings; also frequents semi-arid forests. Requires conifers for nesting, resting, singing perches, other cover needs. Prefers tall trees in open, montane coniferous forests for nesting and resting, and nearby grassy meadows or other openings for foraging. Breeds approx. May 15 to Jul 15.</p>	<p>U – The project site is below the elevation supporting the species preferred habitat. No suitable habitat for the species occurs within the project boundaries or surrounding area. The species was not identified during surveys and is not expected to occur.</p>
<p>Bald Eagle <i>Haliaeetus leucocephalus</i></p>	<p>CE BLM-S CDF-S CDFW-FP USFS-S USFWS BCC</p>	<p>Lake margins, &amp; rivers for both nesting &amp; wintering. Most nests within 1 mi of water. Lower montane coniferous forest, Old growth; Nests in large, old-growth, or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.</p>	<p>U – The nearest CNDDDB record is more than two miles from the project site. The species' preferred habitat exists at the reservoir west of the project site. Past observances of bald eagles feeding at the reservoir have been made. There are no nesting records for the species at the reservoir. Suitable nesting habitat does not occur at the WWTP which is highly urbanized. Activities within the proposed project footprint are unlikely to affect the species given the ongoing mechanized activities undertaken almost daily at the existing WWTP and the existence of a physical ridge/barrier between the proposed work area and the wetted surface at Quartz Reservoir (150 feet minimum). While the species could occasionally feed off-site to the west of the WWTP, it would relocate to its preferred habitats (or move to the opposite side of the reservoir) in response to</p>

			site disturbances at the WWTP and therefore, no impacts to the species are anticipated. The species was not identified during surveys.
Bullock's oriole <i>Icterus bullockii</i>	USFWS-BCC (some regions)	A fairly common to common, summer resident throughout most of California. Breeds primarily in valley foothill riparian, valley foothill hardwood, and valley foothill hardwood-conifer habitats, and corresponding montane habitats, especially in open stands of large trees. Frequents riparian deciduous trees and deciduous oaks. Breeding in coniferous forests limited to stands with substantial numbers of hardwoods. Breeds most commonly in interior northern California and coastal southern California; common locally in southern deserts, and absent from higher mountains. Rare to uncommon in winter in southern coastal areas, primarily in introduced flowering trees and shrubs, especially eucalyptus.	U – The species' preferred habitat exists in the riparian habitats located outside the project footprint approximately 0.34 mile west of the project site. Suitable nesting habitat does not occur at the WWTP which is highly urbanized. While the species could occasionally pass through the project site, it would relocate to its preferred habitats in response to site disturbances and therefore, no impacts to the species are anticipated. The species was not identified during surveys.
California gull <i>Larus californicus</i>	USFWS-BCC	A fairly common nester at alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades, and an abundant visitor to coastal and interior lowlands in nonbreeding season. California's nesting population is scattered across the northeastern plateau region and at Mono Lake. Negit Island colony in Mono Lake was estimated at 25,000 pairs in 1976, but continued survival	U/P - The Quartz Reservoir west of the WWTP facility provides potential habitat for the species to "stop" and rest on its journey to and from Mono Lake off-site outside of the project footprint. If the species were to temporarily occupy the off-site reservoir, activities within the proposed project footprint are unlikely to affect the species given the ongoing mechanized activities undertaken almost daily at the existing WWTP and the existence of a physical ridge/barrier between

		<p>of this population is threatened by receding water. Evidence of former breeding exists for the Central Valley . In late summer, migrates westward across the Sierra Nevada from interior nesting grounds to winter in California and the Pacific Northwest (Cogswell 1977). Preferred habitats along the coast are sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands. Inland, frequents lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. Throughout the winter range in California, often among the most abundant species.</p>	<p>the proposed work area and the wetted surface at Quartz Reservoir (150 feet minimum). Therefore, no impacts to the species are anticipated. The species was not identified during surveys.</p>
<p>Santa Barbara (Channel Island) song sparrow <i>Melospiza melodia graminea</i></p>	<p>USFWS-BCC (some regions only)</p>	<p>Currently known from San Miguel and Santa Rosa Islands; believed extirpated from Santa Barbara and San Clemente Islands. Needs moderately dense scrubby vegetation for nesting, a water source, and exposed ground for foraging. Dense shrubs and thickets of Giant Coreopsis (<i>C. gigantea</i>) and/or dense grasslands with scattered shrubs. Nests often located on leeward side of shrubs avoiding prevailing winds. Chaparral Coastal scrub, Riparian scrub.</p>	<p>U – The nearest CNDDDB records are in Los Angeles and Santa Barbara counties. The project site is outside the range of the species, lacks the dense shrubs and thickets preferred and was not present during surveys. It is not expected to occur.</p>
<p>Western Screech owl <i>Megascops kennicottii</i></p>	<p>USFWS-BCC (some regions)</p>	<p>Uncommon to common, yearlong resident of open oak, pinyon-juniper,</p>	<p><b>P</b> – The CNDDDB does not have records for this species in Tuolumne County; however, it is</p>

<i>cardonensis</i>	only)	riparian, redwood, and mixed conifer habitats. Tolerant of humans; found in small towns, suburbs, farms, ranches, and meadows. Uses edges of oak, riparian, or conifer habitats with snags, tree cavities, or woodpecker holes for nesting and roosting, and openings and meadows nearby for feeding. Roosts in woodpecker hole or other cavity in snag or tree, under moderate canopy.	known to occur in urban areas in the County. The species was not present during surveys conducted for the species. Evidence of owl occupation on site was not identified. However, given the surrounding oaks; the species could occupy the site prior to construction. Therefore, preconstruction surveys shall occur to reconfirm absence prior to commencing site disturbances.
Osprey <i>Pandion halieatus</i>	CDF-S CDFW-WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water. Riparian forest.	<b>P</b> – The nearest CNDDDB species record is 2.6± miles from the project site; however, prior to treating the WWTP waters in the Quartz Reservoir (west of the Quartz project site); ospreys were known to occur around the Quartz Reservoir. None were present during surveys conducted in 2024; however, the species has the potential to occur within ¼ mile of the project site. Preconstruction surveys and mitigation will ensure species protection, if present prior to project construction.
Belding’s Savannah Sparrow <i>Passerculus sandwichensis beldingi</i>	USFWS-BCC (some regions)	Occurs primarily in grassland, saline emergent wetland, and wet meadow habitats. Coastal breeders restricted to saline emergent wetlands and, in northern California, to moist grasslands within the fog belt. In the interior, breeding occurs mostly in valleys, in moist grasslands and meadows. Montane valleys are occupied locally, as are hay fields. Breeds locally on western slope of Cascade Range, in upper Kern Basin,	<b>U</b> – The project site lacks the species preferred habitats in adequate quantity (only small patches of non-native grasslands occur within the project footprint, no wetlands or wet meadows occur in the project boundaries). Suitable habitat also does not exist adjacent to the project site. It was not identified during surveys and is, therefore, not expected to occur.

		Kern Co., and at Baldwin Lake in San Bernardino Mts. Mostly withdraws from Great Basin in winter; common then in most other foothill and lowland areas throughout the state. At Salton Sea, winters uncommonly in desert riparian habitat, primarily in saltcedar scrub at river mouths. East of Sierra Nevada, winters locally north through Owens Valley. Belding's savannah sparrow, <i>P. s. beldingi</i> , lives year-round in scattered southern coastal wetlands.	
Lawrence's goldfinch <i>Spinus lawrencei</i>	USFWS BCC	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks. Broadleaved upland forest, Chaparral, Pinon & juniper woodlands, riparian woodland.	U – The species was not identified during site surveys. The project footprint does not include open oak woodlands or chaparral. Suitable habitat exists off site to the west. Given the lack of foraging or nesting habitat at the project site, it is not expected to occur.
California thrasher <i>Toxostoma redivivum</i>	USFWS-BCC	A common resident of foothills and lowlands in cismontane California. Occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open valley foothill riparian habitat. In southern California, occurs in montane chaparral up to 1500-2000 m (5000-6600 ft). Avoids dense tree canopy. Occurs from Mexican border north to Shasta, Trinity, and southern Humboldt cos., and into the Shasta Valley of Siskiyou Co. Along the	U – The species' preferred habitat exists in the chaparral located offsite on the western (open space) parcel west of the WWTP facilities and outside the project footprint. Suitable nesting habitat does not occur at the WWTP which is highly urbanized. While the species could occasionally pass through the project site, it would relocate to its preferred habitats in response to site disturbances and therefore, no impacts to the species are anticipated. The species was not identified during surveys.

		coastal fog belt north of San Francisco, occurs only on drier sites. Frequents chaparral habitat with dense canopy and openings next to ground. Also uses similar riparian thickets, especially with California blackberry and California wild grape.	
<b>Mammals</b>			
Pallid bat <i>Antrozous pallidus</i>	BLM-S CDFW-SSC USFS-S WBWG-H	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	<b>P</b> – The nearest CNDDDB occurrence buffer encompasses the project site. Rock crevices found along the outcroppings generally near the serpentine chaparral habitat west of the project site coupled with the presence of the pond off-site and adjacent grassland make the adjacent property site potential habitat for this species. Indications of species presence was not found at the WWTP, but the species could potentially forage in or around the project footprint in the evening. Based on a prior evening survey, this species was not detected. However, mitigation is proposed to address potential habitat disturbance.
Townsend’s big-eared bat <i>Corynorhinus townsendii</i>	BLM-S CDFW-SSC USFS-S	Wide variety of habitats throughout CA, most common in mesic sites. Roosts in open hanging from walls and ceilings. Very sensitive to human disturbance. During the winter months, they hibernate either individually or in groups composed of several hundred bats, in mines or caves. In summer, bats roost in a caves, lava tubes, and man-made structures. In the summer, the	<b>P</b> – A documented breeding site is located within one aerial mile. Potential exists for the species to forage on site. However, neither the project site nor adjacent habitat provides opportunities for colonial roosting. The project parcel is exposed to human disturbance likely to discourage species occupation (e.g., existing TUD activities, JSD activities, adjacent residential traffic, and nearby home occupations). There is a small potential for the species to forage on the western parcel more

		females form nesting roosts. Males are solitary during the maternity periods.	isolated from human disturbance. No evidence of colonial bat roosting sites was detected during surveys. Based on an evening survey, this species was not detected. Mitigation is proposed to address potential disturbances should the species forage at night in proximity to the WWTP.
Western mastiff bat <i>Eumops perotis californicus</i>	BLM-S CDFW-SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels. Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland	U – The nearest CNDDDB record is 1.7 miles from the project site. The site lacks the high perches/cliffs required by the species for take-off. No evidence of species occupation was found on site. The species is not expected to occur.

**KEY:**

**State of California**

CT: California endangered species act listed threatened

CE: California endangered species act listed endangered

C-E: California candidate for listing as endangered

C-R: California endangered species act candidate for listing as rare (plants only)

C-T: California endangered species act Candidate for listing as threatened

CDFW-FP: Fully protected species – California Fish and Game Code

CDFW-SSC: CA Dpt. Fish and Wildlife Species of Special Concern

S1: Critically Imperiled. Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled. Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

**United States**

FE: Federal endangered species act listed endangered

FT: Federal endangered species act listed threatened

F-T: Federally proposed threatened species

F-C: Federal candidate for listing under the federal endangered species act  
PE: Federal endangered species act petitioned for listing endangered  
BLM-S: U.S. Bureau of Land Management Sensitive Species  
USFWS BCC: United States Fish and Wildlife Service Bird of Conservation Concern  
USFS-S: United States Forest Service Sensitive Species  
MBTA: Migratory Bird Treaty Act  
BGEPA: Bald and Golden Eagle Protection Act

**Other Organizations**

WBWG: Western bat working group

-H: High Priority

-M: Moderate Priority

IUCN-V: International Union for the Conservation of Nature - Vulnerable

CNPS: California Native Plant Society

List 1B: Rare, threatened, or endangered in California and elsewhere

List 1B.1 - Seriously endangered in California

List 1B.2 – Fairly/Moderately endangered in California

List 1B.3 - Not very endangered in California

List 3 – Needs more information

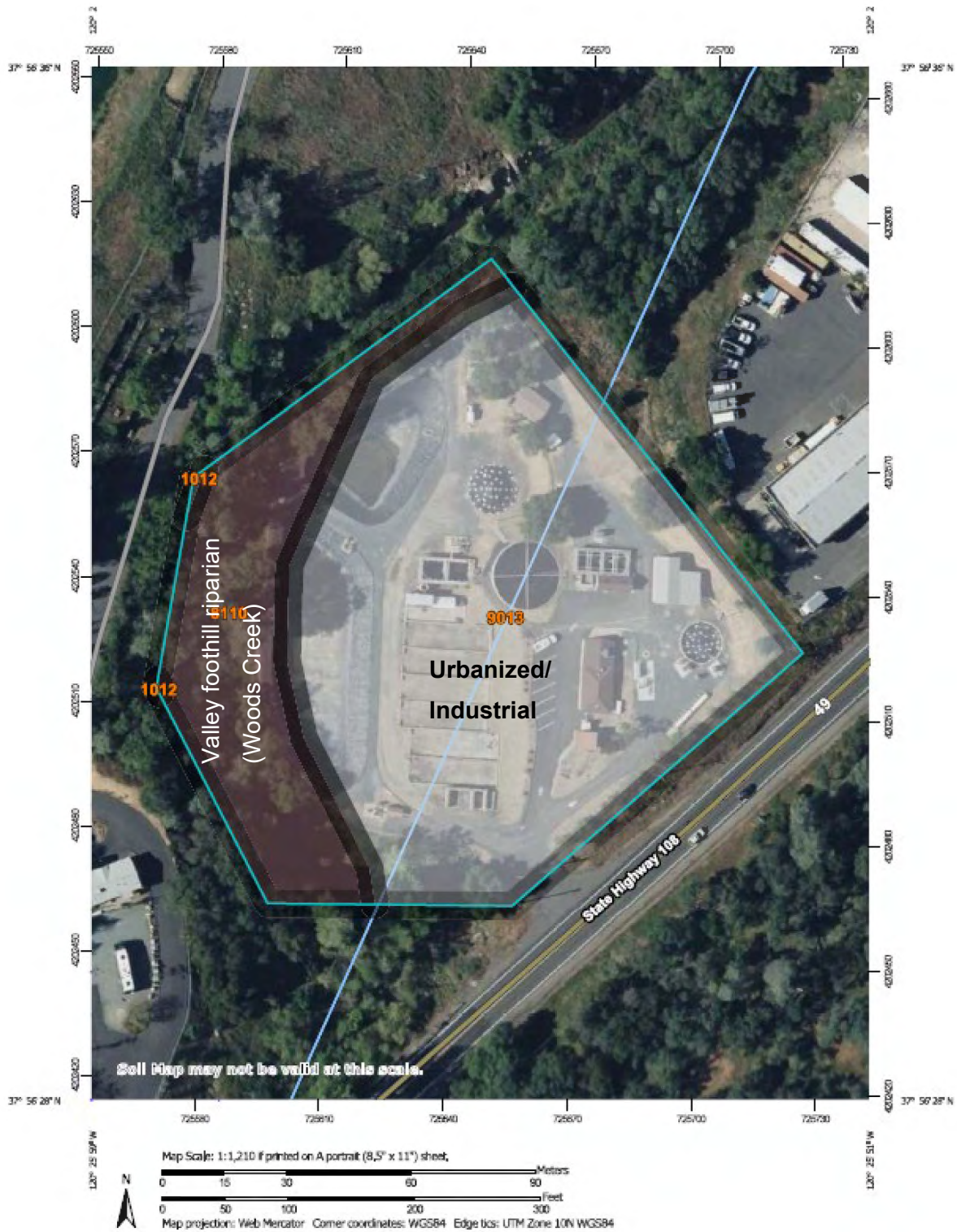
List 4 – Plants of limited distribution

AFS: American Fisheries Society

TH - Threatened

EN - Endangered

**Figure 14: Woods Creek Habitats**



**Table 5: Woods Creek Special Status Species Evaluations**

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
<b>Plants</b>			
Jepson’s onion <i>Allium jepsonii</i>	CNPS 1B.2 BLM-S USFS-S	Chapparal, cismontane woodland, lower montane coniferous forest. On serpentine soils in Sierra foothills, volcanic soil on Table Mtn. On slopes and flats; usually in an open area. 1,100 – 3,700 ft.	U - The nearest CNDDDB occurrence is approximately one mile from the project site. The urbanized WWTP site lacks serpentine soils on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Rawhide Hill onion <i>Allium tuolumnense</i>	BLM – S CNPS 1B.2	Cismontane woodland, Serpentinite soils (Blooms March – May)	U – The nearest CNDDDB occurrence is more than 0.5 mile from the project site. The urbanized WWTP site lacks serpentine soils on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Congdon’s onion <i>Allium sanbornii var congonii</i>	CNPS 4.3	Chaparral, cismontane woodland. Ultramafic barrens or volcanic soils with scattered grey pines. 900 – 3,300 ft.	Doesn’t meet criteria for classification as special status
Nissenan manzanita <i>Arctostaphylos nissenana</i>	CNPS 1B.2	Rocky, Closed-cone coniferous forest, Chaparral (Feb – March)	U – The nearest CNDDDB occurrence is more than two miles from the project site. The urbanized WWTP site lacks the species preferred rocky, coniferous or chaparral habitats on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	CNPS 1B.2	Sometimes serpentinite, Chaparral, Cismontane woodland, Valley and foothill grassland (March – June)	U –The nearest CNDDDB occurrence is more than two miles from the project site. The urbanized WWTP site lacks serpentine soils, chaparral and grasslands on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Chinese Camp brodiaea <i>Brodiaea pallida</i>	FT CE CNPS 1B.1	Vernal streambeds, often serpentinite; Cismontane woodland, Valley and foothill grassland (May – June)	U - The nearest CNDDDB occurrence is more than four miles from the project site. The urbanized WWTP site lacks serpentine soils, vernal wetlands, woodlands and grasslands on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	BLM-S CNPS 1B.2	Serpentinite, gabbroic and other soils; Chaparral, Cismontane woodland, Lower montane coniferous forest (May – June)	U - The nearest CNDDDB occurrence is approximately 1000 feet from the project site. The urbanized WWTP site lacks serpentine soils, gabbroic soils, chaparral, woodland and coniferous forest on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Mariposa clarkia <i>Clarkia biloba ssp. australis</i>	CNPS 1B.2	Serpentinite; Chaparral, Cismontane woodland (May – July)	U – The nearest CNDDDB occurrence is more than three miles from the project site. The urbanized WWTP site lacks serpentine soils, vernal chaparral and woodlands on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Mariposa cryptantha	BLM-S	Chaparral, serpentinite, rocky	U – The nearest CNDDDB occurrence is

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
<i>Cryptantha mariposae</i>	CNPS 1B.3	(April – June)	approximately 0.5 mile from the project site. The urbanized WWTP site lacks serpentine soils, rocky soils and chaparral on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Red Hills cryptantha <i>Cryptantha spithamaea</i>	CNPS 1B.3	Serpentine, sometimes streambeds, sometimes openings; Chaparral, Cismontane woodland (April – May)	U - The nearest CNDDDB occurrence is more than 1.5 miles from the project site. The urbanized WWTP site lacks serpentine soils, woodlands, chaparral on or adjacent to the site. Woods Creek, bordering the site, lacks the combination of streambed with serpentine that generally supports the species. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Ewan’s larkspur <i>Delphinium hansennii ssp. ewanianum</i>	CNPS 4.2	Cismontane woodland, valley and foothill grassland. Rocky soils. 190 - 2000 ft. elev.	Doesn’t meet criteria for classification as special status
Tuolumne button-celery <i>Eryngium pinnatisectum</i>	CNPS 1B.2	Mesic; Cismontane woodland, Lower montane coniferous forest, Vernal pools (May – August)	U - The nearest CNDDDB occurrence is more than two miles from the project site. The urbanized WWTP site lacks mesic (wetted) habitats required by the species on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Stanislaus monkeyflower <i>Erythranthe marmorata</i>	CNPS 1B.1	Cismontane woodland Lower montane coniferous forest. 985- 4700 ft.	U - The nearest CNDDDB occurrence is nearly two miles from the project site. The urbanized WWTP site lacks woodland and coniferous forest habitats required by the species on or adjacent to the site. Prior studies have failed

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
			to identify the species on or adjacent to the site. It is not expected to occur.
Stinkbells <i>Fritillaria agrestis</i>	CNPS 4.2	Cismontane woodland, chaparral, valley and foothill grassland, pinyon and juniper woodland. Ultramafic. Sometimes on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 32-5200 ft.	Doesn't meet criteria for classification as special status
Serpentine bluecup <i>Githopsis pulchella ssp. serpentinicola</i>	CNPS 4.3	Cismontane woodland. Serpentine or Ione formation. 1000 – 2000 ft.	Doesn't meet criteria for classification as special status
Foothill jepsonia <i>Jepsonia heterandra</i>	CNPS 4.3	Cismontane woodland, lower montane coniferous forest. Crevices, especially in slate-like rock. 150 – 1600 ft.	Doesn't meet criteria for classification as special status
Congdon's lomatium <i>Lomatium congdonii</i>	CNPS 1B.2	Serpentinite; Chaparral, Cismontane woodland (March – June)	U - The nearest CNDDDB occurrence is more than three miles from the project site. The urbanized WWTP site lacks serpentine soils, chaparral and woodlands on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
Shaggyhair lupine <i>Lupinus spectabilis</i>	CNPS 1B.2	Serpentinite; Chaparral, Cismontane woodland (April – May)	U - The nearest CNDDDB occurrence is more than two miles from the project site. The urbanized WWTP site lacks serpentine soils, chaparral and woodlands on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
Michael's rein orchid <i>Piperia michaelii</i>	CNPS 4.2	Coastal bluff scrub, coastal scrub, cismontane woodland, chaparral, closed-cone coniferous forest, lower montane coniferous forest. Mudstone and humus, generally dry sites. 0 – 3,000 ft.	Doesn't meet criteria for classification as special status
Red Hills Ragwort <i>Senecio clevelandii</i> var. <i>heterophyllus</i>	CNPS 1B.2 BLM-S	Cismontane woodland, seeps, serpentinite. Drying serpentinite soils; often along streams. Cismontane woodland, Ultramafic (Blooms May – July)	U – Known from one 1915 record of uncertain location 1.5± miles from the project site. Serpentine soils are not within the project boundaries. The species was not present during surveys conducted during the blooming period and is not expected to occur.
Red Hills Vervain <i>Verbena californica</i>	FT CT CNPS 1.B.1	Mesic, usually serpentinite seeps or creeks; Cismontane woodland, Valley and foothill grassland (May – September)	U – The nearest CNDDDB occurrence is approximately four miles from the project site. The urbanized WWTP site lacks serpentinite soils, mesic (wetted soils), woodland or grassland on or adjacent to the site. Prior studies have failed to identify the species on or adjacent to the site. It is not expected to occur.
<b>Invertebrates</b>			
Crotch bumble bee <i>Bombus crotchii</i>	C-E	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	U - The project site is within a CNDDDB buffer for the species. However, per the record, the occurrence is more than 0.5± mile from the project site dating to 1919 with an uncertain location, but references to a valley well outside the project boundaries. The project footprint lacks all of the species' preferred food plants. Given the WWTPs lack of suitable food sources and industrialized uses, the species is not

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
			expected to occur.
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	FT	Valley & foothill grassland, Vernal pool, wetland; Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	U – The nearest CNDDDB occurrence is more than four miles from the project site. The project and adjacent parcels lack vernal pools. Suitable habitat for this species does not exist on site. It is not expected to occur.
Monarch butterfly <i>Danaus plexippus</i>	F-C (California overwintering population)	Western North American monarch ACU. Adults require a diversity of blooming nectar resources, fed on throughout migration routes and breeding grounds (spring through fall). Require milkweed (primarily <i>Asclepias</i> spp.) for both laying eggs and feeding larvae. Use a variety of roosting trees along the fall migration route. Primarily overwinter in groves along the coast of California and Baja CA in trees including blue gum eucalyptus ( <i>Eucalyptus globulus</i> ), Monterey pine ( <i>Pinus radiata</i> ), and Monterey cypress ( <i>Hesperocyparis macrocarpa</i> ), all serve as roost trees. Preferred locations provide indirect sunlight for overwintering, moisture for hydration, defense against freezing temperatures, and protection against strong winds	U – There are no records for this species in Tuolumne County in the CNDDDB. The site lacks the species’ preferred milkweed. Winter temperatures within the project area can drop below freezing making the site unsuitable for wintering populations of the species. Therefore, it is not expected to occur in overwintering populations in the project area.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		with a mild winter climate which must be warm enough to prevent freezing yet cool enough to prevent lipid depletion.	
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Riparian scrub	U – The nearest CNDDDB occurrence record is 1.7± miles from the project site. The project footprint lacks elderberry shrubs. The US Fish and Wildlife Service has amended the range for this species to encompass areas in Tuolumne County below 500 feet in elevation. The site generally is located above 1300± feet in elevation. Therefore, the project is outside the range of this species and no impacts to the species will occur <sup>6</sup> . Therefore, the species is not expected to occur.
Hirsute Sierra sideband <i>Monadenia mormonum hirsuta</i>	BLM-S	Chaparral, Cismontane woodland Valley & foothill grassland. Known only from a few basaltic outcrops in Tuolumne County.	U – The nearest CNDDDB occurrence record is 2± miles from the project site. The site lacks the basaltic outcrops associated with the species which was not present during surveys and is therefore unlikely to occur.
Grady's cave amphipod <i>Stygobromus gradyi</i>	None	Central California foothills. Mostly found in caves and mine tunnels. Also taken from a spring.	N/A. Does not meet criteria for special status as established herein. (Note: The species was not identified during surveys and suitable habitat does not exist within the project footprint for the species).

6 <https://ecos.fws.gov/ecp0/profile/speciesProfile?sld=7850#currentRange>

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
<b>Fish</b>			
Central California roach <i>Hesperoleucus symmetricus symmetricus</i>	CDFW-SSC	Central California roach are generally found in small streams and are particularly well adapted to life in intermittent watercourses; dense populations are frequently observed in isolated pools. Roach are most abundant in mid-elevation streams in the Sierra Nevada foothills.	<b>P</b> - The fish has been identified within Woods Creek near the project site. No work is proposed in-stream, therefore, direct impacts to the species are not anticipated. Erosion or runoff could affect water quality (indirect impact). Mitigation measures are included to protect water quality within Woods Creek.
<b>Amphibians</b>			
California Tiger Salamander <i>Abystoma californiense</i>	FT	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool wetland; Needs underground refuges, especially ground squirrel burrows, & vernal pools or other seasonal water sources for breeding.	U – The nearest CNDDDB occurrence is more than ten miles from the project site. The WWTP site lacks the moist habitat and refugia sites required by the species which was not identified during project surveys. It is not expected to occur.
California red-legged frog <i>Rana draytonii</i>	FT CDFW-SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. 11-20 weeks of permanent water and access to estivation habitat necessary.	U – The project site is located within a CNDDDB buffer for this species (all of Woods Creek is identified as potential CRLF habitat). The nearest documented location of a CRLF is more than five miles from the project site. No deep pools exist within the portion of Woods Creek bordering the project site. Previous surveys have failed to identify the species at this location within Woods Creek. It is not expected to occur.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site
Foothill yellow-legged frog South Sierra DPS <i>Rana boylei</i>	FE BLM-S CDFW-SSC USFS-S	In or near rocky streams in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, mixed chaparral, and wet meadow types.	<p data-bbox="1451 228 1780 310">           O= Present on Site (Occupied)            U = Unlikely to Occur            P = Potential to Occur         </p> <p data-bbox="1346 329 1829 626"> <b>P</b> – The nearest CNDDDB occurrence is more than five miles from the project site. Regional FYLF species surveys were conducted in September 2023 including areas just upstream of the project site along Woods Creek (upstream and downstream of the Rawhide Road Bridge). Surveys for the species were negative. Bullfrogs were identified.         </p> <p data-bbox="1346 662 1829 1360">           The Woods Creek WWTP is bordered by Woods Creek along its west/northwest parcel boundaries. The stream has segments of rocky streambed suitable for the species. Woods Creek adjacent to the WWTP is bordered by a north and westerly bank (away from the WWTP) with a relatively gently sloped flood-plain and along a south and easterly bank (adjacent to the WWTP) that is high and steep. The high, steep bank cannot be climbed easily (without assistance) by humans. Therefore, movements away from the creek likely would be towards the gentle slopes of the banks opposite the WWTP rather than up the steep high bank adjacent to the WWTP. And, while potential habitat for the species may occur at the WWTP parcel, frogs would be likely to confine themselves to within 35 feet of the centerline of Woods Creek.         </p>

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
			(i.e., not extending into the boundaries of the developed WWTP where improvements are proposed). While the potential for the species to occur within the WWTP boundaries is very low, it remains a potentially significant adverse impact. Mitigation measures including preconstruction surveys, environmental awareness training and buffers are proposed to minimize potential impacts to a level of less-than significant:
<b>Reptiles</b>			
Northwestern pond turtle <i>Actinemys (Emys) marmorata</i>	F-T USFS-S BLM-S CDFW-SSC	Broad range of habitats include flowing streams, permanent lakes, ponds, reservoirs, settling ponds, marshes and other wetlands including. Requires upland habitat suitable for nesting and overwintering. Mates throughout the spring, summer, and fall. Nests usually in the spring or early summer normally within 300 feet of water, but may be located up to 1500 feet from water. Eggs hatch in the fall in the northern range and hatchlings often remain in the nest through the first winter. Soils for nesting must be loose enough to allow for excavation with disturbances	<b>P</b> – The nearest potential habitat for the species is Woods Creek forming the northern and western project borders. Settling ponds on site do not retain water for long periods of time and provide no upland habitat for nesting. No vegetation removal is anticipated that would disturb WPTs. However, given the proximity of the site to Woods Creek and the potential habitat (settling ponds) for temporary use, the species has the potential to occur (but not nest) within the developed boundaries of the WWTP. Mitigation measures are included to ensure that no turtles occur within the construction boundaries for the proposed project and will be relocated, if found.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		infrequent enough to avoid nest disturbance.	
Coast horned lizard <i>Phrynosoma blainvillii</i>	BLM-S CDFW-SSC	Chaparral, Cismontane woodland, Desert wash, Riparian scrub Riparian woodland, Valley & foothill grassland. Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	U – The nearest CNDDDB record for the species is 5.7± miles from the project site. Based on a site inspection for the species, no evidence of ant hills and loose soils indicating preferred habitat were found. Therefore, the species is not expected to occur.
<b>Birds</b>			
Clark's grebe <i>Aechmophorus clarkii</i>	USFWS-BCC	"Light phase" individuals (black crown does not extend to eyes) recently separated from western grebe ( <i>A. occidentalis</i> ). Life history has not been distinguished.  Common to abundant October to May along coast south of the San Francisco Bay Region and in San Francisco Bay in marine subtidal and estuarine waters; uncommon north. Uncommon to fairly common on large lakes near coast and inland at low elevations. Winter range extends in lowest elevations of Tuolumne County. Pattern: For	U – The project site lacks the large lakes required by the species for breeding and is outside the species' breeding range. While the reservoir across an adjacent roadway and north of the site is modest in size; it excludes vegetation and is not known to support ducks, geese, or other waterfowl. Therefore, the species is not expected to occur on or adjacent to the project site.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		nesting, prefer large stands of tall, emergent vegetation adjacent to large lakes.	
Western grebe <i>Aechmophorus occidentalis</i>	USFWS-BCC	See <i>A. clarkii</i>	U – See above.
Tricolored blackbird <i>Agelaius tricolor</i>	CT BLM-S CDFW-SSC USFWS BCC	Protected nesting substrate and foraging area with insect prey within a few km of the colony.	U – The nearest CNDDDB record for this species is approximately four miles from the project site. The project site lacks nesting substrate. The project site and adjacent sites do not provide foraging ground for the species which is not expected to occur. No evidence of occupation was found during biological surveys conducted before, during and after the species breeding period. Therefore, it is unlikely that this species will occupy the site.
Golden eagle <i>Aquila chrysaetos</i>	BGEPA BLM:S CDF:S CDFW:FP CDFW:WL USFWS-BCC	Habitat typically rolling foothills, mountain areas. Tuolumne County is within the year-round range for the species at most elevations.	U – The CNDDDB does not include records for this species in Tuolumne County. The urbanized WWTP site with an adjacent highway to the south, roadway to the north, and industrial developments surrounding it does not provide suitable habitat for the species. It is unlikely to occur.
Oak titmouse <i>Baeolophus inornatus</i>	USFWS-BCC	Common resident in a variety of habitats, but is primarily associated with oaks. Occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California, Range encircles San Joaquin Valley onto	<b>P</b> – The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project’s western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		the western slope of the Sierra Nevada.	
Wrentit <i>Chamaea fasciata</i>	USFWS BCC	Prefers dense stands of chaparral. Sometimes found in sparse or open conifers or other woodlands with a heavy shrub understory. The species range extends into Tuolumne County year-round.	U – The project site and adjacent parcels lack the species preferred chaparral habitat, conifers and woodlands with heavy understory. It is not expected to occur.
Olive-sided flycatcher <i>Contopus cooperi</i>	USFWS BCC	Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. Extent and density of forest habitat less important than the amount of air space that can be scanned from its highest perches. Breeds approx. May 20 – Aug. 31.	U – The project site is below the elevation supporting the species preferred habitat. The species was not identified during surveys and is not expected to occur.
Nuttall’s woodpecker <i>Dryobates nuttallii</i>	USFWS BCC	Common, permanent resident of low-elevation riparian deciduous and oak habitats. Occurs in the lower portions of the Sierra Nevada.	P - The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project’s western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.
Prairie falcon <i>Falco mexicanus</i>	CDFW-WL	Uncommon permanent resident that ranges from southeastern deserts northwest throughout the Central Valley and along the inner Coast Ranges and Sierra Nevada. Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands,	U – The area is within species’ winter range; however, the urbanized/industrial setting of the WWTP lacks suitable habitat for the species which is not expected to occur.

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		savannahs, rangeland, some agricultural fields, and desert scrub areas. Mostly absent from northern coastal fog belt. Not found in upper elevations of Sierra Nevada. Requires sheltered cliff ledges for cover.	
Common yellowthroat <i>Geothlypis trichas sinuosa</i>	USFWS BCC	Mostly breeds and winters in wet meadow, fresh emergent wetland, and saline emergent wetland habitats; also breeds in valley foothill riparian, annual grassland, and perennial grassland habitats.	<b>P</b> – Suitable habitat exists in the Valley foothill riparian habitat along Woods Creek adjacent to the project site. Mitigation Measures include preconstruction surveys and avoidance measures for nesting species.
Cassin’s finch <i>Haemorhous cassinii</i>	USFWS-BCC	Common montane resident; breeds in most higher mountain ranges in CA. Prefers tall, open coniferous forests, in lodgepole pine, red fir, and subalpine conifer habitats, particularly in breeding season. Most numerous near wet meadows and grassy openings; also frequents semi-arid forests. Requires conifers for nesting, resting, singing perches, other cover needs. Prefers tall trees in open, montane coniferous forests for nesting and resting, and nearby grassy meadows or other openings for foraging. Breeds approx. May 15 to Jul 15.	<b>U</b> – The project site is below the elevation supporting the species preferred habitat. The species was not identified during surveys and is not expected to occur.
Bald Eagle <i>Haliaeetus leucocephalus</i>	CE BLM-S	Lake margins, & rivers for both nesting & wintering. Most nests	<b>U</b> – The nearest CNDDDB record is more than two miles from the project site. The site

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
	CDF-S CDFW-FP USFS-S USFWS BCC	within 1 mi of water. Lower montane coniferous forest, Old growth; Nests in large, old-growth, or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.	lacks suitable large lakes/rivers for the species. It is not expected to occur.
Bullock's oriole <i>Icterus bullockii</i>	USFWS-BCC (some regions)	A fairly common to common, summer resident throughout most of California. Breeds primarily in valley foothill riparian, valley foothill hardwood, and valley foothill hardwood-conifer habitats, and corresponding montane habitats, especially in open stands of large trees. Frequents riparian deciduous trees and deciduous oaks. Breeding in coniferous forests limited to stands with substantial numbers of hardwoods. Breeds most commonly in interior northern California and coastal southern California; common locally in southern deserts, and absent from higher mountains. Rare to uncommon in winter in southern coastal areas, primarily in introduced flowering trees and shrubs, especially eucalyptus.	P - The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.
California gull <i>Larus californicus</i>	USFWS-BCC	A fairly common nester at alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades, and an abundant visitor to coastal	U - The site lacks suitable habitat for the species, it is unlikely to occur.

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		<p>and interior lowlands in nonbreeding season. California's nesting population is scattered across the northeastern plateau region and at Mono Lake. Negit Island colony in Mono Lake was estimated at 25,000 pairs in 1976, but continued survival of this population is threatened by receding water. Evidence of former breeding exists for the Central Valley . In late summer, migrates westward across the Sierra Nevada from interior nesting grounds to winter in California and the Pacific Northwest (Cogswell 1977). Preferred habitats along the coast are sandy beaches, mudflats, rocky intertidal, and pelagic areas of marine and estuarine habitats, as well as fresh and saline emergent wetlands. Inland, frequents lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. Throughout the winter range in California, often among the most abundant species.</p>	
<p>Santa Barbara (Channel Island) song sparrow <i>Melospiza melodia graminea</i></p>	<p>USFWS-BCC (some regions only)</p>	<p>Currently known from San Miguel and Santa Rosa Islands; believed extirpated from Santa Barbara and San Clemente Islands. Needs</p>	<p>U – The nearest CNDDDB records are in Los Angeles and Santa Barbara counties. The project site is outside the range of the species, lacks the dense shrubs and thickets preferred</p>

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
		moderately dense scrubby vegetation for nesting, a water source, and exposed ground for foraging. Dense shrubs and thickets of Giant Coreopsis ( <i>C. gigantea</i> ) and/or dense grasslands with scattered shrubs. Nests often located on leeward side of shrubs avoiding prevailing winds. Chaparral Coastal scrub, Riparian scrub.	and was not present during surveys. It is not expected to occur.
Western Screech owl <i>Megascops kennicottii cardonensis</i>	USFWS-BCC (some regions only)	Uncommon to common, yearlong resident of open oak, pinyon-juniper, riparian, redwood, and mixed conifer habitats. Tolerant of humans; found in small towns, suburbs, farms, ranches, and meadows. Uses edges of oak, riparian, or conifer habitats with snags, tree cavities, or woodpecker holes for nesting and roosting, and openings and meadows nearby for feeding. Roosts in woodpecker hole or other cavity in snag or tree, under moderate canopy.	P – The CNDDDB does not have records for this species in Tuolumne County; however, it is known to occur in urban areas in the County. The species was not present during surveys conducted for the species. Evidence of owl occupation on site was not identified. However, given the surrounding oaks; the species could occupy the site prior to construction. Therefore, preconstruction surveys shall occur to reconfirm absence prior to commencing site disturbances.
Osprey <i>Pandion halieatus</i>	CDF-S CDFW-WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water. Riparian forest.	P – The nearest CNDDDB species record is 2.4± miles from the project site. None were present during surveys conducted in 2024. however, the species has the potential to occur in association with Woods Creek. They are unlikely to occur in association with the large

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
			reservoir at the former mine site (no fish occur in that reservoir). Preconstruction surveys and mitigation will ensure species protection, if present prior to project construction.
Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i>	USFWS-BCC (some regions)	Occurs primarily in grassland, saline emergent wetland, and wet meadow habitats. Coastal breeders restricted to saline emergent wetlands and, in northern California, to moist grasslands within the fog belt. In the interior, breeding occurs mostly in valleys, in moist grasslands and meadows. Montane valleys are occupied locally, as are hay fields. Breeds locally on western slope of Cascade Range, in upper Kern Basin, Kern Co., and at Baldwin Lake in San Bernardino Mts. Mostly withdraws from Great Basin in winter; common then in most other foothill and lowland areas throughout the state. At Salton Sea, winters uncommonly in desert riparian habitat, primarily in saltcedar scrub at river mouths. East of Sierra Nevada, winters locally north through Owens Valley. Belding's savannah sparrow, <i>P. s. beldingi</i> , lives year-round in scattered southern coastal wetlands.	U – The industrialized WWTP site lacks the species preferred habitats. It was not identified during surveys and is not expected to occur.
Lawrence's goldfinch	USFWS BCC	Nests in open oak or other arid	<b>P</b> – The species was not identified during site

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
<i>Spinus lawrencei</i>		woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks. Broadleaved upland forest, Chaparral, Pinon & juniper woodlands, riparian woodland.	surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.
California thrasher <i>Toxostoma redivivum</i>	USFWS-BCC	A common resident of foothills and lowlands in cismontane California. Occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open valley foothill riparian habitat. In southern California, occurs in montane chaparral up to 1500-2000 m (5000-6600 ft). Avoids dense tree canopy. Occurs from Mexican border north to Shasta, Trinity, and southern Humboldt cos., and into the Shasta Valley of Siskiyou Co. Along the coastal fog belt north of San Francisco, occurs only on drier sites. Frequents chaparral habitat with dense canopy and openings next to ground. Also uses similar riparian thickets, especially with California blackberry and California wild grape.	P - The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.
<b>Mammals</b>			
Pallid bat <i>Antrozous pallidus</i>	BLM-S CDFW-SSC	Deserts, grasslands, shrublands, woodlands and forests. Most	P - The site is within a CNDDDB occurrence buffer. Suitable roosting habitat is not

Woods Creek Species	Status	Preferred habitat(s)/a/	Likelihood to Occur on Site O= Present on Site (Occupied) U = Unlikely to Occur P = Potential to Occur
	USFS-S WBWG-H	common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	present on site. However, the species could forage in the vicinity.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	BLM-S CDFW-SSC USFS-S	Wide variety of habitats throughout CA, most common in mesic sites. Roosts in open hanging from walls and ceilings. Very sensitive to human disturbance. During the winter months, they hibernate either individually or in groups composed of several hundred bats, in mines or caves. In summer, bats roost in a caves, lava tubes, and man-made structures. In the summer, the females form nesting roosts. Males are solitary during the maternity periods.	P – The site is within a CNDDDB occurrence buffer. Suitable nesting habitat is not present on site. However, the species could forage in the vicinity.
Western mastiff bat <i>Eumops perotis californicus</i>	BLM-S CDFW-SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels. Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland.	U – The nearest CNDDDB record is 1.7 miles from the project site. The site lacks the high perches/cliffs required by the species for take-off. No evidence of species occupation was found on site. The species is not expected to occur.

**KEY:**

**State of California**

CT: California endangered species act listed threatened

CE: California endangered species act listed endangered

C-E: California candidate for listing as endangered

C-R: California endangered species act candidate for listing as rare (plants only)

C-T: California endangered species act Candidate for listing as threatened

CDFW-FP: Fully protected species – California Fish and Game Code

CDFW-SSC: CA Dpt. Fish and Wildlife Species of Special Concern

S1: Critically Imperiled. Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled. Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

**United States**

FE: Federal endangered species act listed endangered

FT: Federal endangered species act listed threatened

F-T: Federally proposed threatened species

F-C: Federal candidate for listing under the federal endangered species act

PE: Federal endangered species act petitioned for listing endangered

BLM-S: U.S. Bureau of Land Management Sensitive Species

USFWS BCC: United States Fish and Wildlife Service Bird of Conservation Concern

USFS-S: United States Forest Service Sensitive Species

MBTA: Migratory Bird Treaty Act

BGEPA: Bald and Golden Eagle Protection Act

**Other Organizations**

WBWG: Western bat working group

-H: High Priority

-M: Moderate Priority

IUCN-V: International Union for the Conservation of Nature - Vulnerable

CNPS: California Native Plant Society

List 1B: Rare, threatened, or endangered in California and elsewhere

List 1B.1 - Seriously endangered in California

List 1B.2 – Fairly/Moderately endangered in California

List 1B.3 - Not very endangered in California

List 3 – Needs more information  
List 4 – Plants of limited distribution

AFS: American Fisheries Society  
TH - Threatened  
EN - Endangered

### 2.4.3 Analysis

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

Tables 4 and 5 provide an analysis of species identified by CDFW and USFWS, and CNPS for evaluation at Woods Creek and Quartz sites, respectively. In summary, special status species from these databases that occur or have the potential to occur are as follows:

#### Quartz

Western pond turtle  
Oak titmouse  
Nuttall's woodpecker  
Osprey  
Western screech owl  
Pallid bat  
Townsend's big eared bat

#### Wood's Creek

Central California roach  
Foothill yellow-legged frog  
Western pond turtle  
Oak titmouse  
Nuttall's woodpecker  
Osprey  
Western screech owl  
Lawrence's goldfinch  
Common yellowthroat  
Bullock's oriole  
California thrasher  
Pallid bat  
Townsend's big eared bat

Based on the analysis in Tables 4 and 5 and the following, impacts to all species identified above are expected to be **Less Than Significant With Mitigation Incorporated**.

Per the Biological Study, the following State and/or Federally Listed and Candidate Species identified by state and federal agencies as potentially occurring in the Project area were determined Unlikely to be Present:

#### **A. State and/or Federally Listed and Candidate Species Potentially Present**

##### **Foothill yellow-legged frog (FYLF)**

###### Woods Creek

The FYLF is listed as threatened under the California endangered species act (CESA). The species is also a U.S. Bureau of Land Management and U.S. Forest Service sensitive species and a California Department of Fish and Wildlife Species of Special Concern.

FYLFs occur in or near rocky streams in valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, mixed chaparral, and wet meadow types. Per the CDFW, unlike most other ranid frogs in California, FYLFs are rarely encountered (even on rainy nights) far from permanent water—not even seasonally or to and from breeding areas. Normal ranges are believed to be less than 33 feet with only occasional “long” distance movements up to 165 feet during periods of high water. In California, breeding and egg laying may commence any time from mid-March to May depending on local water conditions. Bullfrogs are implicated in the reduction of foothill yellow-legged frog populations

in the Sierra. (California Wildlife Habitat Relationships System California Department of Fish and Wildlife California Interagency Wildlife Task Group, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1500&inline=1>).

The nearest CNDDDB occurrence is more than five miles from the project site. Regional FYLF species surveys were conducted in September 2023 including areas just upstream of the project site along Woods Creek (upstream and downstream of the Rawhide Road Bridge). Surveys for the species were negative. Bullfrogs were identified.

The Woods Creek WWTP is bordered by Woods Creek along its west/northwest parcel boundaries. The stream has segments of rocky streambed suitable for the species. Woods Creek adjacent to the WWTP is bordered by a north and westerly bank (away from the WWTP) with a relatively gently sloped flood-plain and along a south and easterly bank (adjacent to the WWTP) that is high and steep. The high, steep bank cannot be climbed easily (without assistance) by humans. Therefore, movements away from the creek likely would be towards the gentle slopes of the banks opposite from the WWTP rather than up the steep high bank adjacent to the WWTP. And, while potential habitat for the species may occur at the WWTP parcel, frogs would be likely to confine themselves to within 35 feet of the centerline of Woods Creek (i.e., not extending into the boundaries of the developed WWTP where improvements are proposed). While the potential for the species to occur within the WWTP boundaries is very low, it remains a potentially significant adverse impact. The following mitigation measure is proposed to minimize this potential impact to a level of less-than significant:

**Mitigation Measure BIO-1: Preconstruction FYLF Surveys (Woods Creek)**

Preconstruction surveys should be conducted prior to site disturbance to re-confirm absence of FYLF within 24 hours of commencing site disturbances (including staging). The JSD, or its representative, shall have a qualified biologist survey for FYLF within all potential habitats. If surveys are negative (i.e., no FYLF), mitigation measure BIO -2 will be implemented. If surveys are positive (FYLF are identified), mitigation measures BIO-2 through BIO-5 shall be implemented *and* a qualified biologist shall be present on site during all construction activities within 200 feet of Woods Creek. The qualified biologist shall have the authority to stop work at any time as may be necessary to protect FYLFs or their habitat.

**Mitigation Monitoring BIO-1:** The measure shall be implemented by a qualified biologist (within 24 hours of commencing site disturbances (including staging)). If construction is delayed or occurs in phases, a re-survey must be completed prior to recommencing work after a shut-down period of more than three months. The construction contractor is responsible for ensuring that the Project Biologist is notified with ample time to complete the survey and consult with CDFW, if necessary. If on-site biological monitoring is required throughout project construction for any activity within 200 feet of Woods Creek, a monitoring schedule shall be executed prior to commencing construction between the Project Biologist and the contractor.

**Avoidance and Minimization Measure BIO-2: ESA Fencing (Woods Creek)**

Prior to commencing staging, construction, ground-disturbing or other project activities, install Environmentally Sensitive Area (ESA) fencing shall be installed at the top of the bank along Woods Creek. Fencing shall remain in place until all project activities are

completed. Any fencing falling down during construction shall be re-installed immediately. No parking shall occur adjacent to ESA fencing. No construction-related materials, equipment, trash or other related debris shall be allowed, stored, or staged within the fenced area. ESA fencing shall be shown on the final construction documents.

**Mitigation Monitoring BIO-2:**

ESA fencing shall be shown on final construction documents. ESA fencing shall be installed prior to commencing any staging, construction, ground disturbances or other project activities in the locations identified. The Project Biologist shall be notified by the construction contractor to confirm that ESA fencing has been properly installed prior to commencing site disturbances. Unannounced site visits by JSD and/or the Project Biologist will occur to confirm fencing remains in place throughout project construction. The construction contractor is responsible for maintaining the fencing throughout project construction and reinstalling any fencing that is knocked down during construction immediately.

**Avoidance and Minimization Measure BIO-3: Staging and Spill Prevention (Woods Creek)**

Staging, fueling and maintenance activities less than 50 feet from the top of the bank of Woods Creek will only be allowed with authorization of the project biologist. The project proponent will prepare a spill prevention and clean-up plan.

**Mitigation Monitoring BIO-3:** Prior to commencing site disturbance or staging equipment, the construction contractor shall provide a staging and spill prevention plan to JSD for compliance with this measure. Reduced setbacks must be approved prior to staging by the Project Biologist.

**Avoidance and Minimization Measure BIO-4: Environmental Awareness Training (Woods Creek)**

All contractors involved in site development, affected JSD personnel, will attend a mandatory Environmental Awareness Training prior to any site disturbances, including staging. A training log sign-in sheet will be maintained. The program will address proper implementation of minimization and avoidance measures contained herein. A video shall be prepared and is mandatory viewing prior to entering the project site for contractors or personnel not participating in initial training. Construction personnel shall be informed that if a FYLF is encountered in the work area, construction will stop and CDFW will be contacted for guidance.

**Mitigation Monitoring BIO-4**

The required mitigation measure will be implemented prior to site disturbance and for new employees prior to commencing site work. The Project Biologist or other environmental consultant may be contracted by JSD to accomplish this task. JSD is responsible for contracting with a qualified entity to provide Environmental Awareness Training. Ensuring that all on-site workers have received training prior to working on site is the responsibility of the construction contractor.

**Avoidance and Minimization Measure BIO-5: Stop Work (Woods Creek)**

If FYLFs are found at any time during project work, construction will stop and CDFW will be contacted immediately for further guidance.

### **Mitigation Monitoring BIO-5**

The measure shall be implemented throughout project construction and is the responsibility of the construction contractor. The project biologist has the authority to issue a stop work order pursuant to this measure.

Proper implementation of the preceding is expected to minimize the potential direct and indirect impacts to the species to a level of less than significant.

## **B. State and/or Federally Listed and Candidate Species Unlikely to be Present**

### **Chinese Camp brodiaea**

#### Quartz and Woods Creek

The wildflower is federally listed threatened and state listed endangered. It is a California Native Plant Society (CNPS) List 1B plant. It occupies vernal streambeds, often serpentinite; cismontane woodlands and Valley and foothill grasslands blooming between May and June. The nearest CNDDDB occurrence is more than four miles from the project sites. The urbanized WWTP sites lack serpentine soils, vernal wetlands, woodlands and grasslands. Prior studies have failed to identify the species on or adjacent to the sites. Potential species habitat off-site adjacent to the Quartz WWTP is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present. Based on the lack of habitat on site, it is not expected to occur and will not be affected by the proposed projects.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Red Hills Vervain**

#### Quartz and Woods Creek

The wildflower is state and federally listed as threatened. It is a CNPS List 1B plant. It occupies mesic, usually serpentinite, seeps or creeks; cismontane woodlands, Valley and foothill grasslands and blooms May – September. The nearest CNDDDB occurrence is more than three miles from the project site. The WWTP project sites lack suitable habitat for the species (i.e., serpentine soils, serpentinite seeps do not occur within the project footprints). Biological surveys previously sought this species outside the project footprints and failed to confirm presence of this species. Due to lack of suitable habitat, the species is unlikely to occur. Potential species habitat occurs off-site adjacent to the Quartz WWTP, but is protected by permanent fencing that separates the WWTP/project footprint from the serpentine ridge where potential species habitat is present. Therefore, due to a lack of on-site habitat, the species is not expected to occur and will not be affected by the proposed projects.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Vernal Pool Fairy Shrimp**

#### Quartz and Woods Creek

The crustacean is federally listed as threatened. It occupies Valley and foothill grasslands, Vernal pools, wetlands; small, clear-water sandstone-depression pools and grassed swales, earth slumps, or basalt-flow depression pools. The nearest CNDDDB occurrence is more than

four miles from the project sites. The project footprints lack vernal pools. Suitable habitat for this species does not exist on site. Therefore, it is not expected to occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Crotch bumble bee**

#### **Quartz and Woods Creek**

The insect is a candidate for listing under the California endangered species act. It occurs from Coastal California east to the Sierra-Cascade crest and south into Mexico. It occurs near its favorite food plant genera including *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. The project sites are within a CNDDDB buffer for the species. However, per the site record, the occurrence is more than 0.5± mile from the project sites dating to 1919 with an uncertain location, but references to a valley well outside both project boundaries. The project footprint lacks all of the species' preferred food plants due to the industrialized nature of the WWTPs. Given the lack of suitable food sources and industrialized uses at the WWTPs, the species is not expected to occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Monarch butterfly**

#### **Quartz and Woods Creek**

The monarch butterfly is a candidate for listing under the federal endangered species act for California overwintering populations. Adults require a diversity of blooming nectar resources, fed on throughout migration routes and breeding grounds (spring through fall). The butterfly requires milkweed (primarily *Asclepias* spp.) for both laying eggs and feeding larvae and uses a variety of roosting trees along the fall migration route. Monarchs primarily overwinter in groves along the coast of California and Baja CA in trees including blue gum eucalyptus (*Eucalyptus globulus*), Monterey pine (*Pinus radiata*), and Monterey cypress (*Hesperocyparis macrocarpa*), that all serve as roost trees. Preferred locations receive indirect sunlight for overwintering, moisture for hydration, defense against freezing temperatures, and protection against strong winds with a mild winter climate which must be warm enough to prevent freezing yet cool enough to prevent lipid depletion.

The study area lacks the species' preferred milkweed. Winter temperatures within the project area can drop below freezing and the area receives snow making the site unsuitable for wintering populations of the species. Therefore, it is not expected to occur in overwintering populations in the project area.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **California tiger salamander**

#### **Quartz and Woods Creek**

The amphibian is federally listed as threatened. It occupies cismontane woodlands, meadows and seeps, riparian woodlands, Valley & foothill grasslands, and Vernal pool wetlands. The species requires underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. The nearest CNDDDB occurrence is more than ten

miles from the project site. The WWTP sites lack the moist habitat and refugia required by the species which was not identified during project surveys. It is not expected to occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Foothill yellow-legged frog (FYLF)**

#### Quartz

See preceding life history.

The nearest CNDDDB occurrence is four miles from the project site. Regional FYLF species surveys were conducted in September 2023 including areas upstream of the project site along Woods Creek. Surveys for the species were negative. The Quartz WWTP site lacks rocky streams suitable for the species on or adjacent to the project site. The nearest marginally suitable habitat for the species occurs along Woods Creek 0.4± mile from the project site and is separated from the WWTP by a steep dry, rocky ridge with a climb of more than 100 feet in elevation with no habitable areas at the WWTP. Therefore, the species is not expected to occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **California red-legged frog (CRLF)**

#### Quartz and Woods Creek

The species is federally listed as threatened and is a California Department of Fish and Wildlife Species of Special Concern. The species prefers quiet pools of streams, marshes, and occasionally ponds. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. CNDDDB records for the species in Tuolumne County place its range here between 1,500± and 5,030± feet in elevation. The species requires 11-20 weeks of permanent water and access to estivation habitat. The species was not present during surveys.

At Quartz, the nearest CNDDDB potential habitat is 0.39 mile from the project site (note: most of Woods Creek is identified as potential habitat). The WWTP site lacks deep water sources with dense shrubbery. On site "habitat" is urbanized/industrial. The nearest potentially suitable habitat for the species occurs at a pond 0.34± mile from the project site separated from the WWTP by a steep dry rocky ridge with a climb of more than 100 feet in elevation with no habitable areas at the WWTP. Therefore, the species is not expected to occur.

At Woods Creek, the project site is located within a CNDDDB buffer for this species (all of Woods Creek is identified as potential CRLF habitat). The nearest documented location of a CRLF is more than five miles from the project site. No deep pools exist within the portion of Woods Creek bordering the project site. Previous surveys have failed to identify the species at this location within Woods Creek. It is not expected to occur.

A review of the *History and Status of the California Red-Legged Frog (Rana draytonii) in the Sierra Nevada California, USA* (Barry and Fellers 2013) confirms that both sites are not historically or currently known to support CRLF.

Based on the preceding, the species is not expected to occur within the project boundaries.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Tricolored blackbird**

#### **Quartz and Woods Creek**

The bird is listed as threatened under the California endangered species act. It is a United States Bureau of Land Management (BLM) sensitive species, a California Department of Fish and Wildlife (CDFW) species of special concern (SSC) and a United States Fish and Wildlife (USFWS) bird species of conservation concern (BCC). The species requires protected nesting substrate and foraging area with insect prey within a few kilometers of the colony.

At Quartz, the nearest suitable habitat for the species occurs 0.34± mile from the project boundaries. The project site itself lacks nesting substrate. The project boundaries do not provide foraging ground for the species. No evidence of occupation was found during biological surveys conducted before, during, or after the species breeding period (on or off-site). Therefore, it is unlikely that this species will occupy the site.

At Woods Creek, the nearest CNDDDB record for this species is approximately four miles from the project site. The project site lacks nesting substrate. The project site and adjacent sites do not provide foraging ground for the species. No evidence of occupation was found during biological surveys conducted before, during and after the species breeding period. Therefore, it is unlikely that this species will occupy the site.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Bald eagle**

#### **Quartz and Woods Creek**

The bald eagle is listed as endangered under the California endangered species act. It is a BLM sensitive species, a CDFW fully protected species, a California Department of Forestry sensitive species, a United States Forest Service (USFS) sensitive species and a United States Fish and Wildlife (USFWS) bird species of conservation concern (BCC). The species inhabits lake margins and rivers for both nesting and wintering. Most nests are within one mile of water. It occupies lower montane coniferous forest, old growth and nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. The species roosts communally in the winter.

At Quartz, the nearest CNDDDB record is more than two miles from the project site. The species' preferred habitat exists at the TUD reservoir west of the project site. Past observations of bald eagles feeding at the TUD reservoir have been made, but not in recent years. There are no nesting records for the species at the TUD reservoir. Suitable nesting habitat does not occur at the WWTP which is highly urbanized. Activities within the proposed project footprint are unlikely to affect the species given the ongoing mechanized activities undertaken almost daily at the existing WWTP and the existence of a physical ridge/barrier between the proposed work area

and the wetted surface at TUD's Quartz Reservoir (150 feet minimum). While the species could occasionally feed off-site to the west of the WWTP, it would relocate to its preferred habitats (or move to the opposite side of the reservoir) in response to site disturbances at the WWTP and therefore, no impacts to the species are anticipated. The species was not identified during surveys and is not expected to occur on site or to be indirectly impacted off-site.

At Woods Creek, the nearest CNDDDB record is more than two miles from the project site. The site lacks suitable large lakes or rivers for the species (the reservoir to the north does not support wildlife). It is not expected to occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

### **Valley elderberry longhorn beetle (VELB)**

#### Quartz and Woods Creek

The VELB is listed as threatened under the federal endangered species act. The species Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Riparian scrub. The nearest CNDDDB occurrence record is 1.7± (Woods) and 2.6± miles (Quartz) from the project site. The project footprints lack elderberry shrubs. The US Fish and Wildlife Service has amended the range for this species to encompass areas in Tuolumne County below 500 feet in elevation. The sites are located above 1300± feet in elevation. Therefore, the project is outside the range of this species and no impacts to the species will occur<sup>7</sup>.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## **C. State and/or Federally Listed and Candidate Species with Potential to be Present**

### **Northwestern pond turtle (WPT)**

#### Quartz and Woods Creek

The WPT is a USFS sensitive species and a Priority 3 CDFW SSC. It is also a BLM sensitive species in the southern portion of its range and has been petitioned for listing under the federal endangered species act (where it remains under review since 2015). The species is not listed pursuant to either the state or federal endangered species acts. The species is not a fully protected animal pursuant to Fish and Game Code Sections 3511, 4700, 5050 and 5515.

WPTs occur in a broad range of habitats including flowing streams, permanent lakes, ponds, reservoirs, settling ponds, marshes and other wetlands. The species may remain active year-round; however, this tends to occur only in the southern part of its range.

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<sup>7</sup> <https://ecos.fws.gov/ecp0/profile/speciesProfile?sld=7850#currentRange>

WPTs require upland habitat suitable for nesting and overwintering. The species can persist, at least over moderate periods of time, in modified habitats with high human traffic (i.e. wastewater treatment plant settling ponds).

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

At Woods Creek, the nearest potential habitat for the species is Woods Creek itself which forms the northern and western project borders. Settling ponds on site do not retain water for long periods of time and provide no upland habitat for nesting. No vegetation removal is planned that could impact WPTs. However, given the proximity of the site to Woods Creek and the potential habitat (settling ponds) for temporary use, the species has the potential to occur (but not nest) within the developed boundaries of the WWTP. A mitigation measure is included to ensure that no turtles occur within the construction boundaries for the proposed project and will be relocated, if found.

At Quartz the species occurs on a pond 0.34± mile from the project site. The WWTP site includes some small settling ponds which could provide habitat for the species; however, there is no adjacent upland habitat suitable for nesting within the project boundaries. No vegetation removal is planned that could impact WPTs. More suitable habitat for the species occurs at the pond 0.34± mile from the project site separated from the WWTP by a steep dry rocky ridge with a climb of more than 100 feet in elevation. The species was not present during 2024 surveys at the WWTP. However, because the site does include some settling ponds, the low potential for the species to occupy the site prior to project construction exists. Therefore, mitigation is included requiring a preconstruction survey to ensure that the species remains absent prior to commencing construction with provisions for relocation, if necessary.

To ensure that no turtles are present near the proposed construction area or present during construction, the following measure is proposed:

**Mitigation Measure BIO-6: Preconstruction Survey/Relocation for Northwestern Pond Turtles (WPT)**

Prior to the start of earth-disturbing activities (e.g., clearing, grading, trenching, etc.) in and/or adjacent to the wastewater treatment ponds and other aquatic habitats (i.e., Woods Creek) in which turtles could be present, a qualified biologist shall conduct a survey for western pond turtles. The preconstruction surveys shall be conducted on the day that earth-disturbing activities are initiated adjacent to aquatic habitats in which turtles could be present. The surveys shall include an evaluation of all portions of the work areas and an appropriate upland buffer. If western pond turtles are observed in these work area at any time during the construction period, California Department of Fish and Wildlife (CDFW) staff shall be contacted to identify actions to be taken to ensure that the turtle(s) is/are not adversely affected.

Although not planned, if any dewatering should occur (i.e., ponds, drying beds), it will be limited to between October and January. Supplemental dewatering of subsequent precipitation accumulations may be conducted on a periodic basis between the initial

dewatering and the start of construction to minimize the potential for pond turtle occupation.

**Mitigation Monitoring BIO-6:** The measure shall be implemented on the date of earth-disturbing activities adjacent to WWT ponds and other aquatic habitats by a qualified biologist. The construction contractor is responsible for ensuring that the Project Biologist is notified immediately when a WPT is found within the construction boundaries during construction. The Project Biologist is responsible for notifying CDFW.

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

#### **D. Special Status Species (Non-Listed, non-candidates) Present or Potentially Present**

##### **Central California roach**

The fish is a CDFW species of special concern. They are generally found in small streams and are particularly well adapted to life in intermittent watercourses; dense populations are frequently observed in isolated pools. Roach are most abundant in mid-elevation streams in the Sierra Nevada foothills.

At Quartz, The nearest CNDDDB occurrence is more than  $\frac{3}{4}$  mile from the project site. The WWTP site lacks the intermittent watercourses in which the species is normally found. The lack of suitable habitat makes it unlikely to occur.

At Woods Creek, the fish has been identified within Woods Creek near the project site. No work is proposed in-stream, therefore, direct impacts to the species are not anticipated. Erosion or runoff could affect water quality, a potentially significant adverse indirect impact. Mitigation measures are included to protect water quality within Woods Creek as follows:

##### **Mitigation Measure BIO-3: Staging and Spill Prevention (Woods Creek)**

##### **Mitigation Measure BIO-7: Erosion Control**

The Contractor shall prepare an Erosion Control Plan for JSD review and approval to address soil erosion within those areas. All soils disturbed by grading shall be reseeded or hydromulched or otherwise stabilized 48 hours in advance of a rain event. A likely rain/precipitation event is any weather pattern that is forecasted to have a 30% or greater chance of producing precipitation in the project area. The discharger shall obtain likely precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <https://www.weather.gov/forecastmaps>. A qualifying rain event is one that produces 0.5 inch or more of precipitation within a 48 hour or greater period between rain events. Emergency erosion control measures shall be used as reasonably requested by JSD.

##### **Mitigation Monitoring BIO-7**

The required plan will be implemented prior to site disturbance and implemented 48 hours in advance of any rain event. The measure is the responsibility of the construction contractor.

### **Mitigation Measure BIO-8: NPDES/SWPPP**

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

Silt fencing or other materials, as required, will be installed consistent with the applicable water quality requirements specified in the Project's Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP). Fencing or other erosion control materials or devices shall be shown on the final construction documents. Erosion control devices will be avoided throughout Project construction and shall be monitored and maintained by the project manager throughout construction.

### **Mitigation Monitoring BIO-8**

The Notice of Intent to obtain Coverage shall be submitted prior to any site disturbances. The measure is the responsibility of the construction contractor.

### **Oak titmouse (*Baleophus inornatus*)**

The oak titmouse is a USFWS Bird Species of Conservation Concern. No CNDDDB records are currently maintained for the species. It is a common resident in a variety of habitats, but is primarily associated with oaks. And occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats in cismontane California. The species' range encircles San Joaquin Valley onto the western slope of the Sierra Nevada. While not observed during surveys, the species is widespread throughout the project areas and there is a high potential for the species to occupy the large oaks on site at the Quartz WWTP and the riparian corridor associated with Wood's Creek at the Woods Creek WWTP. The following measures are proposed to ensure no impacts to the species will occur:

### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

Prior to construction occurring between February 1<sup>st</sup> and August 30<sup>th</sup> (e.g., excavation, ground disturbance, or vegetation removal) a preconstruction survey for nesting birds will be conducted in accordance with the CDFW guidelines and a no-disturbance buffer will be established, if necessary.

If equipment staging, site preparation, vegetation removal, grading, excavation or other project-related construction activities are scheduled during the avian nesting season (generally February 1 through August 30), a focused survey for active nests would be conducted by a qualified biologist within 14 days prior to the beginning of project-related activities.

Surveys shall be conducted in all suitable habitats in the area.

If the pre-construction surveys identify nesting bird species within areas that are within 500 feet of construction activities for non-raptors and within 0.5 mile for raptors, the following shall be implemented:

- A. Project-related construction impacts shall be avoided by establishment of appropriate no-work buffer zones to limit construction activities near the nest site. The no-work buffer zone shall be delineated by highly visible temporary construction fencing and shall be a minimum of 500 feet from non-raptor nests and 0.5 mile from raptor nests, unless a qualified biologist, in consultation with CDFW, determines that alternative buffers are permissible due to the nature and location of the specific species, its nest, and existing conditions to which the species has been habituated. Alternative buffers shall be established for special status non-raptor nests in consultation with CDFW.
- B. In consultation with CDFW, monitoring of nest activity by a qualified biologist shall be required if the construction activity has potential to adversely affect the nest or nesting behavior of the bird.
- C. No construction activity shall commence within the no-work buffer zone until a CDFW-approved qualified biologist confirms that the nest is no longer active (e.g., young have fledged).
- D. Canada geese depredation and cliff swallow nest management are exceptions to these provisions per **Mitigation Measure BIO-10** and **Mitigation Measure BIO-11**.

**Mitigation Monitoring BIO-9:** The measure shall be implemented prior to any construction occurring between February 1<sup>st</sup> and August 30<sup>th</sup> of the construction year. If construction is delayed or occurs in phases, a re-survey must be completed prior to recommencing work after a shut-down period of more than three months if construction occurs between February 1<sup>st</sup> and August 30<sup>th</sup> of the construction year. The construction contractor is responsible for ensuring that the Project Biologist is notified with ample time to complete the survey and consult with CDFW, if necessary.

### **Nuttall's woodpecker**

The Nuttall's woodpecker is a USFWS Bird Species of Conservation Concern. The species is a common, permanent resident of low-elevation riparian deciduous and oak habitats. While not observed during surveys, the species is widespread throughout the project areas and there is a high potential for the species to occupy the large oaks on site at the Quartz WWTP and the riparian corridor associated with Wood's Creek at the Woods Creek WWTP. The following measures are proposed to ensure no impacts to the species will occur:

### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

### **Lawrence's goldfinch (Woods Creek)**

The bird is a USFWS Bird Species of Conservation Concern. It nests in open oak or other arid woodland and chaparral habitats, near water. It requires nearby herbaceous habitats used for feeding and is closely associated with oaks, broadleaved upland forests, chaparral, pinon and

juniper woodlands and riparian woodlands. The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's northern and western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site as follows.

#### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

##### **Common yellowthroat**

The bird is a USFWS Bird Species of Conservation Concern. It mostly breeds and winters in wet meadows, fresh emergent wetlands, and saline emergent wetland habitats. It also breeds in Valley foothill riparian, annual grasslands, and perennial grassland habitats. Suitable nesting habitat exists in the Valley foothill riparian habitat along Woods Creek adjacent to the project site. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site as follows.

#### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

##### **Bullock's oriole**

The bird is a USFWS Bird Species of Conservation Concern. It is a fairly common to common, summer resident throughout most of California. It breeds primarily in Valley foothill riparian, Valley foothill hardwood, Valley foothill hardwood-conifer habitats, and corresponding montane habitats, especially in open stands of large trees. It frequents riparian deciduous trees and deciduous oaks. The bird breeds in coniferous forests limited to stands with substantial numbers of hardwoods. Breeding occurs most commonly in interior Northern California and coastal southern California; where it is common locally in southern deserts, and absent from higher mountains. The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's northern and western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site

#### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

##### **Western screech owl**

###### **Quartz and Woods Creek**

The owl is a USFWS bird species of conservation concern in some regions. It is an uncommon to common, yearlong resident of open oak, pinyon-juniper, riparian, redwood, and mixed conifer habitats. Tolerant of humans; found in small towns, suburbs, farms, ranches, and meadows. Uses edges of oak, riparian, or conifer habitats with snags, tree cavities, or woodpecker holes for nesting and roosting, and openings and meadows nearby for feeding. It roosts in woodpecker holes or other cavities in snags or trees, under moderate canopy. The CNDDDB does not have records for this species in Tuolumne County; however, it is known to occur in urban areas in the County. The species was not present during surveys conducted for the species. Evidence of owl occupation on site was not identified. However, given the surrounding oaks and urban setting; the species could occupy the site prior to construction. Therefore, preconstruction surveys shall occur to reconfirm absence prior to commencing site disturbances.

## Mitigation Measure BIO-9: Preconstruction Survey Birds

### Osprey

#### Quartz and Woods Creek

The osprey is a California Department of Forestry sensitive species and is on the California Department of Fish and Wildlife's watch list. It inhabits ocean shores, bays, freshwater lakes, and larger streams. Large nests are built in tree-tops within 15 miles of a good fish-producing body of water. Riparian forests also provide habitat.

The nearest CNDDDB species record is 2.4± miles from the Woods Creek project site. None were present during surveys conducted in 2024. However, the species has the potential to occur in association with Woods Creek. They are unlikely to occur in association with the large reservoir at the former mine site northwest of the site which lacks fish. Preconstruction surveys and mitigation will ensure species protection, if present prior to project construction.

The nearest CNDDDB species record is 2.6± miles from the Quartz project site; however, prior to treating the WWTP waters which discourages fish in the Quartz Reservoir (west of the Quartz project site); ospreys were known to occur around the reservoir. None were present during surveys conducted in 2024; however, the species has the potential to occur within ¼ mile of the project site. Preconstruction surveys and mitigation will ensure species protection, if present prior to project construction.

## Mitigation Measure BIO-9: Preconstruction Survey Birds

### California thrasher

The bird is a USFWS Bird Species of Conservation Concern. A common resident of foothills and lowlands in cismontane California. It occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open Valley foothill riparian habitat. The thrasher avoids dense tree canopy and occurs from the Mexican border north to Shasta, Trinity, and southern Humboldt counties and into the Shasta Valley of Siskiyou County. The bird frequents chaparral habitats with dense canopy and openings next to ground and uses similar riparian thickets, especially with California blackberry and California wild grape. The species was not identified during site surveys, but suitable habitat exists in the riparian woodlands associated with Woods Creek along the project's northern and western boundary. Pre-construction surveys required for mitigation will ensure that the species is protected, if found nesting on site.

## Mitigation Measure BIO-9: Preconstruction Survey Birds

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

### Other Birds

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued

pursuant to Federal regulations. The migratory bird species protected by the Act are listed in 50 CFR 10.13. Most bird species are protected pursuant to the MBTA. Some birds have additional protections under state and federal laws. The following species were identified in April 2024 at or adjacent to the sites:

Cliff swallow (*Petrochelidon pyrrhonata*)  
Killdeer (*Charadrius vociferus*)  
Phainopepla (*Phainopepla nitens*)  
Northern flicker (*Colaptes auratus*)  
Yellow-rumped warbler (*Dendroica coronata*)  
Acorn woodpecker (*Melanerpes formicivorus*)  
Western kingbird (*Tyrannus verticalis*)  
Turkey vulture (*Cathartes aura*)  
Canada goose (*Branta canadensis*)  
Bufflehead (*Bucephala albeola*)  
European starling (*Sturnus vulgaris*) - not protected pursuant to the MBTA  
Eurasian collared-dove (*Streptopelia decaocto*) - not protected pursuant to the MBTA

Most native bird species are protected pursuant to the MBTA including. To protect any of these that may occupy the site prior to construction, the following mitigation measure is required for other bird species protected pursuant to the MBTA:

#### **Mitigation Measure BIO-9: Preconstruction Survey Birds**

The following species protected pursuant to the MBTA found on or adjacent to the project sites require additional measures and exceptions allowed under the MBTA:

#### **Canada geese**

##### Quartz

Canada geese were observed at the TUD reservoir off-site, but in close proximity to the Quartz WWTP. Although unlikely to be necessary, it is possible that a Canada Goose could attempt nesting within the WWTP project footprint. They are protected pursuant to the Migratory Bird Treaty Act; but unlike many other MBTA-protected species, 50 Code of Federal Regulations Section 21.50 allows some flexibility for depredation under specific circumstances for resident Canada geese by registering online with the USFWS<sup>8</sup>. Depredation normally occurs in the form of a qualified biologist treating unhatched eggs to ensure that they do not hatch. To ensure that this option is included for this project should nesting occur outside of existing open space boundaries, the following measure is incorporated:

#### **Mitigation Measure BIO-10 Canada Goose Depredation (Quartz)**

Pursuant to 50 Code of Federal Regulations Section 21.50, should a nesting Canada goose be identified within proposed work boundaries, depredation may occur by registering online with the USFWS<sup>9</sup>. Depredation will occur, if necessary, in the form of a qualified biologist treating unhatched eggs to ensure that they do not hatch.

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<sup>8</sup> <https://epermits.fws.gov/eRCGR/> and <https://www.fws.gov/forms/3-200-13.pdf>

<sup>9</sup> <https://epermits.fws.gov/eRCGR/> and <https://www.fws.gov/forms/3-200-13.pdf>

### **Mitigation Monitoring BIO-10:**

The measure shall be implemented based on preconstruction surveys conducted by the Project Biologist. Because the species can nest post-surveys, the construction contractor is responsible for reporting any new nesting activity to the Project Biologist if it is observed within the work area. The Project Biologist is responsible for determining the appropriate measures and implementing them.

### **Cliff swallow**

#### **Quartz and Woods Creek**

A large colony of cliff swallows were viewed flying through the project boundaries. Fake great-horned owls (*Bubo virginianus*) were observed hanging at the Quartz WWTP to discourage cliff swallow nests. Remnants of mud nests were seen on some WWTP buildings. The swallows are foraging at the TUD reservoir and in mud nests at a nearby church property. The Quartz WWTP is located between the nesting and foraging habitat. To ensure that cliff swallows do not nest on site prior to project construction (and thereby delay construction), the following mitigation measure is included. The measure will apply at both Quartz and Woods Creek (although nests have not yet been located at that site).

As per the USFWS (<https://www.fws.gov/story/nuisance-swallows>) active nests with eggs or chicks inside may not be touched or destroyed without a permit from the U.S. Fish and Wildlife Service. Inactive (empty) nests do not require a permit to destroy. Based on this guideline, the following mitigation measure, as per the USFWS, is proposed:

### **Mitigation Measure BIO-11 Cliff Swallow Nest Management (Quartz and Woods Creek)**

The following methods may be used to remove and discourage cliff swallow nests where eggs or chicks are not present:

#### **Before birds arrive:**

- Old nests can be reused. Get rid of any potential nests before the birds arrive from winter migration. Get rid of old nests including any traces of mud.
- Place physical barriers on potential nesting sites to prevent birds from nesting. Appropriate products including, but are not limited to: coroplast, polytetrafluoroethylene (Teflon), Bird Slide™, plexiglass, plastic sheeting, or silicon-based paint coated to the surface. Physical barriers may be a permanent deterrent in preventing birds from nesting in nuisance locations.
- Netting should have a maximum size of ¾" squares. Netting or wire mesh should be hung diagonally to cover areas where swallows could build nests — typically anyplace like an eave or where a roof and wall meet.
- Surfaces can also be covered with materials hung vertically to prevent birds from getting to their preferred building sites.
- Bird spike sticks and bird barriers can be purchased and installed to prevent birds

from building nests.

- For places where there is an open entry way, vinyl plastic hung in overlapping strips may be used. This is essentially a doorway curtain similar to what you may see in a grocery store for workers in refrigerated areas.

**After birds arrive:**

- Wash away mud nests frequently, in between nest construction. They may eventually give up on that site if they are not successful in building a nest. JSD may only destroy nests that do not have eggs or chicks within.
- Play sounds of alarm and distress calls of cliff and barn swallows to disrupt nest construction. This provision may only be used with noise aimed at nest building activities and not towards adjoining landowners. It is subject to the same noise mitigation measures as the overall project.

**NOTE: Use protective gear (i.e., N95 masks or respirator and gloves) to protect workers performing these tasks from parasites, mites, and feces that may be present.**

**Mitigation Monitoring BIO-11:**

The measure shall be implemented throughout the year preceding project construction and is the responsibility of the JSD.

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

**Bats**

The following bat species have the potential to forage in the study areas at both Woods Creek and Quartz:

**Pallid bat**

The bat is a BLM sensitive, CDFW species of special concern, USFS sensitive and Western bat working group (WBWG) high priority species. It inhabits deserts, grasslands, shrublands, woodlands and forests. It is most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. The species is very sensitive to disturbance of roosting sites.

**Woods Creek**

The WWTP site is within a CNDDDB occurrence buffer. Suitable roosting habitat is not present on site (i.e., no rocky area for roosts and too much activity at the site for this sensitive species). However, the species could forage in the vicinity during evening hours. Therefore, mitigation is proposed to address potential foraging habitat disturbance during evening foraging hours.

**Quartz**

The nearest CNDDDB occurrence buffer encompasses the project site. Rock crevices found along the outcroppings generally near the serpentine chaparral habitat west of the project site coupled, with the presence of the pond off-site and adjacent grassland, make the adjacent property site potential habitat for this species. No appropriate roosting habitat exists on site (i.e., no rocky areas for roosts and too much activity at the site for this sensitive species).

Indications of species presence were not found at the WWTP, but the species could potentially forage in or around the project footprint in the evening. Based on a prior evening survey, this species was not detected. However, mitigation is proposed to address potential foraging habitat disturbance during evening foraging hours.

**Avoidance and Minimization Measure BIO-12: Hours of Construction.**

Project construction shall be limited to 7:00 a.m. to 7:00 p.m. unless an emergency situation exists.

**Mitigation Monitoring BIO-12:**

The measure shall be implemented throughout project construction and is the responsibility of the construction contractor. JSD has the authority to determine if an emergency situation exists and alternative hours may be implemented. JSD is responsible for enforcing the measure if complaints are received.

**Townsend's big eared bat**

The bat is a BLM sensitive, CDFW species of special concern and USFS sensitive species. Wide variety of habitats throughout CA, most common in mesic sites. Roosts in open hanging from walls and ceilings. Very sensitive to human disturbance. During the winter months, they hibernate either individually or in groups composed of several hundred bats, in mines or caves. In summer, bats roost in a caves, lava tubes, and man-made structures. In the summer, the females form nesting roosts. Males are solitary during the maternity season.

**Woods Creek**

The site is within a CNDDDB occurrence buffer. Suitable roosting habitat is not present on site due to high activity levels at the site which would discourage this sensitive species. However, the species could forage in the vicinity in the evenings.

**Quartz**

A documented breeding site is located within one aerial mile. Potential exists for the species to forage on site. However, neither the project site nor adjacent habitat provides opportunities for colonial roosting. The project parcel is exposed to human disturbance likely to discourage species occupation (e.g., existing TUD activities, JSD activities, adjacent residential traffic, and nearby home occupations). There is a small potential for the species to forage on the western parcel more isolated from human disturbance. No evidence of colonial bat roosting sites was detected during surveys. Based on an evening survey, this species was not detected. However, mitigation is proposed to address potential disturbances should the species forage at night in proximity to the WWTP.

**Avoidance and Minimization Measure BIO-12: Hours of Construction.**

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

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

*c) Have a substantial adverse effect on state or federally protected wetlands (including, but not*

*limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

### **Quartz – No Impact**

There are no wetlands within the project boundaries, therefore, no impacts are anticipated.

### **Woods Creek - Less Than Significant with Mitigation Incorporated**

As shown in **Figure 14**, the Woods Creek WWTP is bordered to the north and west by Wood's Creek.

No fill or alterations within the banks of Woods Creek is proposed or anticipated in conjunction with the proposed project. However, the introduction of machinery and construction materials to the site has the potential to introduce non-native invasive species and runoff from site construction could indirectly impact water quality in Woods Creek—a potentially significant adverse impact. The following mitigation measures are proposed:

**Mitigation Measure BIO-2: ESA Fencing (Woods Creek)**

**Mitigation Measure BIO-3: Staging and Spill Prevention (Woods Creek)**

**Mitigation Measure BIO-7: Erosion Control**

**Mitigation Measure BIO-8: NPDES/SWPPP**

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

*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 migratory deer habitat occurs in the study area. Woods Creek provides a wildlife corridor at the Woods Creek site; however, that corridor will be maintained during project construction and after the project completion with project activities confined to areas within the developed WWTP boundaries outside of the riparian corridor. Therefore, no short or long-range alterations to habitat will occur or interfere with established resident or migratory corridors. No wildlife corridors exist within the boundaries of the Quartz WWTP.

However, open trenching or construction materials (e.g., pipes) could inadvertently trap common wildlife, a potentially significant adverse impact. The following mitigation measure is proposed to minimize or avoid this impact and ensure the protection of both wildlife and construction workers:

### **Mitigation Measure BIO-13: Avoid Inadvertent Animal Trapping During Construction**

To avoid inadvertently trapping special status or common animal species during construction, all excavated steep-walled holes or trenches more than two feet deep shall be covered at the end of each working day with plywood or similar material, or provided with

one or more escape ramps constructed of earth fill or wooden planks, or equivalent, at each end of the trench. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped animal is discovered, the contractor shall place an escape ramp or other appropriate structure to allow the animal to escape. Alternatively, the contractor shall contact the project biologist or California Department of Fish and Wildlife for assistance. Similarly, stored pipes or other materials providing potential cover for animals will be inspected prior to installation or use to ensure that they are unoccupied.

**Mitigation Monitoring BIO-13:** The measure shall be implemented throughout project construction. The project biologist and/or JSD staff are responsible for making unannounced inspections to ensure that the measure is being properly implemented and maintained. It is the responsibility of the construction contractor to implement the measure.

Proper implementation of the preceding measure is expected to reduce the potential impact to species movements to a level of less-than-significant.

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

**Less than Significant.** Tuolumne County does not have a tree preservation ordinance, per se. It has an anticipatory tree removal ordinance. No trees have been removed in anticipation of the proposed Project; therefore, the local tree ordinance is inapplicable.

The state adopted Public Resources Code 21083.4 addressing the conversion of oak woodlands statewide. Impacts to oak woodlands protected pursuant to PRC 21083.4 are considered potentially significant pursuant to CEQA. No native oak trees are proposed for removal within the Project boundaries. Therefore, no impacts to native oak woodlands are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

Quartz

Project construction could occur within the root zones of two large native oaks. In accordance with best management practices, the following bmp is proposed:

**Best Management Practices – Large Native Oak Preservation (Quartz)**

To the maximum extent feasible and practicable, throughout project construction activities occurring within one and one-half times the driplines of native oaks (e.g., black oaks, *Quercus kelloggii*) measuring 24” or greater in diameter at breast height:

- Limit ground-disturbing activities to outside the dripline of native oaks and preferably outside one and one-half times the dripline;
- No storage equipment, supplies, vehicles, debris, construction wastewater, paint, stucco, concrete or any other clean-up waste, and temporary or permanent structures shall be placed within the driplines

- Avoid cutting oak roots
- Use boring or trenchless installation rather than open trenching within driplines where possible
- Avoid equipment damage to limbs, trunks, and roots of oaks trees
- Do not attach signs, ropes, cables or other items to trees

The measure will be implemented throughout project construction activities occurring within the one and one-half times the driplines of native oaks measuring 24” or greater in diameter at breast height. The measure is the responsibility of the construction contractor.

***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?***

Neither a Habitat Conservation Plan (HCP) nor a Natural Community Conservation Plan (NCCP) exists for the area within the Project boundaries or the vicinity. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.5 Cultural Resources

V. CULTURAL RESOURCES. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a <a href="#">historical resource</a> as defined in <a href="#">§ 15064.5</a> ?	<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 <a href="#">§ 15064.5</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.5.1 Background and Setting

#### Wood's Creek

The current WWTP was built on land purchased in 1950 by JSD. The plant was constructed circa 1951-52. The existing WWTP parcels are in the vicinity of the McCann or Trio (Harvard) Quartz Mines. Adits and prospect pits were recorded south of the highway from the WWTP and undoubtedly the site itself was mined intensively. However, any evidence of past mining history would have been obliterated by the current WWTP.

#### Quartz

The first gold find was at Woods Crossing southwest of Jamestown and in the vicinity of the Quartz site. The intensively mined Woods Diggings adjoin the Quartz parcels on the north. It “was considered one of the earlier Gold Rush settlements in the Mother Lode” (Davis-King 1996). Two sites were identified on the WWTP project parcel:

1. A stone foundation, originally identified in 1993, the remains of a possible chimney (Mann site).
2. A boundary of the Sweeney Quartz Mine Claim and Sweeney Mill Site (P-55-003370) adjacent (to the south/southeast) of the eastern Quartz parcel. The only artifact on the Quartz site potentially from the Sweeney site included an 8-foot segment of rusted iron pipe co-located with the existing fence line within the site boundary.

A cultural resources study previously incorporated by reference (Solano Archaeological Resources, 2024), is summarized herein. The study included creation of Area of Potential Effects (APEs), a records search, literature review and Native American consultations, and re-examination of the preceding project boundaries. Results of that study are as follows:

The SAS survey noted that the majority of the APE has been heavily developed with the Woods and Quartz WWTF facilities. Small undeveloped portions of the APE were generally covered in heavy seasonal grasses that in general, severely restricted the ground surface visibility. The SAS survey revisited both of the previously documented sites within the APE but did not encounter any previously unrecorded prehistoric or historic period cultural sites, features, artifacts, or potentially sensitive landforms or soil types. Updated records and photographs for sites 55-003370, and 55-009531 are provided in (SAS, 2024, Attachment D).

55-003370/CA-TUO-2396H

This site was previously documented in 1982, and 2001, and consists of remains associated with the Nyman Consolidated Quartz Mine patented in 1899 by the Santa Ysabel Gold Mining Company. The SAS field team relocated the site area and noted several fragments of white earthenware, window glass, and fragments of solarized vessel glass. Comparable materials were noted on the site surface in 2001 site record and in general, the site condition within the APE does not appear to have changed since that time. Additional artifacts and possibly features may be obscured by the heavy growth of seasonal grasses.

55-009531 (Mann Site)

The rock feature was originally documented in 1993 as a two-courses high (1-18 inches tall) and approximately 12' x 6' in dimension. A piece of cut ferrous metal approximately 12" long, flattened with a rolled edge, a section of steel cable, and miscellaneous debris such as amber, clear and solarized glass fragments. The site area was revisited in 2015 and generally found to be in the same condition as previously documented. SAS relocated this site and while the rock feature appeared to be somewhat smaller and more degraded than initially documented (10' X 14'), the site and visible surface artifacts were largely the same as when last recorded.

## **NRHP/CRHR SIGNIFICANCE EVALUATIONS**

### **Summary and Recommendations**

Archival research and intensive field survey did not identify any historic properties or historical resources (per NRHP/CRHR criteria) within or adjacent to the APE. Due to this lack of significant cultural resources within/adjacent to the APE, SAS recommends the proposed Project would have no effect on historic properties per Section 106, and no impact on historical resources per CEQA.

If presently unrecorded prehistoric or historic-era archaeological sites, features, or artifacts are encountered during Project implantation, ground disturbing work in the vicinity of the find must cease until a qualified archaeologist can assess the find and make appropriate mitigation recommendations. If human remains or any associated funerary artifacts are discovered during Project construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Tuolumne County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission, which will in turn appoint a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with the MSD and a qualified archaeologist to determine the proper treatment of the human remains and any associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via Project construction design change.

### **2.5.2 Analysis**

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

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

**Less Than Significant with Mitigation Incorporated.**

In 2015, it was determined that the Sweeney site (P-55-00370) may be considered eligible for listing to the National Register of Historic Places and the California Register of Historical Resources or to be important resources for the purposes of CEQA, however, the portion of the site within the project boundaries is devoid of features and artifacts with the exception of a water pipe. Therefore, the area of P-55-003370, located within the project boundaries is outside those portions of the resource that may be potentially eligible and no impacts to that resource are anticipated.

**55-003370 / CA-TUO-2396H**

In 2024, it was determined again, that only a very small portion of 55-003370 lies within the APE and the few artifacts documented by SAS (white earthenware and glass fragments) are probably associated with this resource. Although the larger site may be directly associated with specific historical events (NRHP/CRHR Criterion A/1), the artifacts within the APE are generally isolated from larger site components and their associations are far from certain and lack integrity. As such, they cannot be associated with any a historically important event and as a result, they are recommended not eligible for NRHP/CRHR listing. Similarly, the sparse materials noted by SAS cannot be directly associated with any important individual or individuals and therefore are recommended not eligible for NRHP/CRHR listing under Criterion B/2. Furthermore, the artifacts associated (presumably) within 55-003370 are sparsely scattered and do not possess any unique or unusual characteristics nor are they particularly early or outstanding examples of their kind.

Consequently, SAS recommends these artifacts and the portion of 55-003370 they might represent, not eligible for NRHP/CRHR listing under Criterion C/3. Further archival and field research might definitively link the artifacts documented by SAS to the mining operations that occurred at 55-003370. It is, however, unlikely that any new data would elevate these sparse materials to a historically significant status and that the important data potential has been exhausted through the current level of documentation and research. Therefore, SAS recommends this presumed component of 55-003370 not eligible for NRHP/CRHR listing under Criterion D/4.

No further mitigation is proposed or required for this site.

**55-009531 (Mann Site)**

In 2024, it was determined: Archival research conducted in 1993, 2015, and for this investigation have not provided any indications that this site is directly associated with any specific historically important event (NRHP/CRHR Criterion A/1) or person(s) (NRHP/CRHR Criterion B/2) and as such, SAS recommends site 55-009531 not eligible for NRHP/CRHR listing. Also, 55-009531 does not retain any physical integrity, does not appear to be a particularly early or outstanding example of its kind and does not exhibit any unique or unusual characteristics. Consequently, SAS recommends site 55-09531 not eligible for NRHP/CRHR listing under Criterion C/3. Further research might shed light on who

constructed and used the original building and the purpose(s) it served. It is unlikely, however, that any new data would elevate this site to a significant level per NRHP CRHR criteria and that the important data potential has been exhausted through the current level of study. As such, SAS recommends 55-009531 not eligible for NRHP/CRHR listing under Criterion D/4.

However, because the Mann site, on the easterly Quartz parcel, was, in 2015, considered potentially eligible for listing to the National Register of Historic Places and the California Register of Historical Resources due to its potential for subsurface deposits; the following mitigation measure is retained herein.

The Mann site is composed of a 6'± X 12'± rectangular alignment of unaltered stacked native rock (10-18" high) and a piece of cut sheet metal (likely a portion of a bucket). Artifacts previously noted at the site in 1993 (earthenware sherds, hand-painted porcelain sherds, barrel strapping, ferrous metal fragments, amber and clear glass, sun-colored amethyst bottle base, barbed wire, six strand cable and numerous bucket parts), were no longer evident in 2015. The 1993 discovery noted a possible room or other addition extending from the foundation 20± feet west and speculated that two rooms may have been located at the site and that a portion of the site may be the remains of a chimney base. Aerial views of the site show it to be relatively undisturbed in 1998 and 2005. However, it appears that the site may have been disturbed in the process of converting the tree farm back to pasture. The site is located in approximately the same location as the existing :H (Historic combining) district boundary.

Disturbance of the Mann site would result in a potentially significant adverse impact to an historical resource pursuant to CEQA. The following mitigation was proposed in 2015 to minimize those potential impacts and is retained herein:

#### **Mitigation Measure CULT-1: Mann Site**

On the Quartz site, prior to initiating any new site disturbances, environmentally sensitive area (ESA) fencing shall be installed, monitored, and maintained from the start to end of construction surrounding the Mann cultural resource site. No construction or equipment shall intrude into the Historic (:H) combining zone district on the project site. Should fencing fall down, it shall be immediately replaced before continuing with construction activities. If the site is to be maintained, it shall be fully avoided throughout the life of the project, the :H (Historic Combining District) zone shall be maintained, and the site shall be incorporated into project design.

Alternatively, prior to site disturbance within 50' of the site, (including removal of the irrigation system and/or fill soil associated with the previous tree farm), conduct archaeological testing to evaluate the Mann Site for eligibility for the California Register/National Register of Historic Places. The evaluation shall be completed by a professional meeting the Secretary of the Interior's Qualification Standards. If archaeological testing demonstrates that the site is essentially surface in nature or that it is not eligible, no further work will be necessary and the results of the study shall be submitted to the County in support of removing the :H (Historic Combining District) zone. If the resource is recommended as eligible, then mitigation may include, but not be limited to, one or a combination of the following: a) protection from adverse impacts, b) data recover, c) incorporating the feature into project design, or some other method to be developed of

addressing adverse effects as recommended by the qualified professional.

#### **Mitigation Monitoring CULT-1**

The :H (Historical) combining district was previously added to the site for its protection. The mitigation measure shall be implemented prior to commencing any new site disturbances. The measure is the responsibility of the construction contractor.

Proper implementation of the preceding mitigation measure is expected to reduce the potential impacts to the resource to a level of less-than-significant.

Surveys were conducted for surface evidence of resources. Site disturbances could uncover additional resource features below surface that could be damaged or destroyed prior to assessing their importance—a potentially significant adverse impact. The following Mitigation Measure is proposed to reduce that impact:

#### **Mitigation Measure CULT-2: Inadvertent Discoveries**

If a cultural resource is discovered during construction activities, the contractor shall comply with the following provisions:

- A. The Contractor’s project manager shall notify the Jamestown Sanitary District by telephone within 1 hour of the discovery or the next working day if the department is closed. JSD shall promptly notify their qualified professional archaeologist.
- B. When the cultural resource is located outside the area of disturbance, a qualified professional shall be allowed to photodocument and record the resource and construction activities may continue during this process.
- C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by a qualified professional may continue. A qualified professional archaeologist shall be allowed to do a site survey to ascertain the need for evaluation work.
- D. When the cultural resource is determined to not be significant, the qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from a qualified professional.
- E. When a resource is determined to be significant, the resource shall be avoided with said resource having boundaries established around its perimeter by a qualified professional or a cultural resource management plan shall be prepared by a qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on the resource. The qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from a qualified professional.

For the purposes of implementing this measure, a “qualified professional” is an individual previously determined to be a qualified professional by the Tuolumne County Community

Development Department Planning Division (<https://www.tuolumnecounty.ca.gov/DocumentCenter/View/9984>) and a “cultural resource” is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Tuolumne County, the State of California, or the nation which is 50 years of age or older or has been listed on or is eligible for listing on the National Register of Historic Places, the California Register of Cultural Resources, or any local register.

**Mitigation Monitoring CULT-2:** The required mitigation measure will be implemented throughout project construction. The measure is the responsibility of the construction contractor with input from a qualified cultural resources professional, if necessary.

Proper implementation of this mitigation measure will result in a less-than-significant impact.

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

**Less Than Significant With Mitigation Incorporated.** Based on the cultural resources study performed for the project, there are no cemeteries located in close proximity to the Project site and no burials are known to have occurred on the site. However, grading and excavation in conjunction with site development has the low potential to uncover unanticipated subsurface resources—a potentially significant adverse impact. The following Mitigation Measure is proposed to reduce that impact:

**Mitigation Measure CULT-3 Treatment of Human Remains and Sacred Objects**  
No human remains or sacred objects have been identified in the project area, but there is always a possibility that excavation, or other actions could expose human burials previously unknown. Such remains are protected by state and federal laws and all project personnel must comply fully with applicable laws regarding the treatment of human remains including contacting the County coroner. The policies set forth in the American Indian Religious Freedom Act of 1978 and amendments (92 Stat. 469) should be honored by JSD and its contractors. If the discovery is on private land, provision for treatment and disposition of any human remains will be in accordance with Section 7050.5 of the California Health and Safety Code, Sections 5097.94, 5097.98, of the California Public Resources Code, and Section 15064.5 of the California Code of Regulations implementing the California Public Resources Code, Sections 21000-21177.

**Mitigation Monitoring CULT-3.** The required mitigation measure will be implemented throughout project construction. The measure is the responsibility of the construction contractor and, where necessary, the County Coroner, and/or qualified archaeologist.

Proper implementation of this mitigation measure will result in a less-than-significant impact.

## 2.6 ENERGY

VI. ENERGY. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact to wasteful, inefficient, or unnecessary consumption of energy resources during project consumption or operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.6.1 Background

The project will result in the use of energy during construction and operations.

### 2.6.2 Analysis

*a) Result in potentially significant environmental impact to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

**Less Than Significant with Mitigation Incorporated.**

Construction is expected to consume fossil fuels. Inefficient use of fossil fuels may incrementally contribute to cumulatively significant adverse impacts to energy availability. Implementation of the following mitigation measures, incorporating Best Performance Standards, would ensure that equipment uses energy efficiently.

#### Mitigation Measure AQ-4 Construction Emissions

Proper implementation of the preceding is expected to reduce energy consumption during construction. Impacts would be less than significant with mitigation incorporated.

Project operations will consume energy. The 2022 California Energy Code (Building Energy Efficiency Standards) govern this project. The project is required to and will comply with all state mandated energy efficiency standards. The District does not have alternative energy efficiency standards. Therefore, the project is not anticipated to result in wasteful, inefficient or unnecessary energy consumption during operations.

*b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiencies.*

**No Impact.**

Project operations will consume energy. The 2022 California Energy Code (Building Energy Efficiency Standards) govern this project. The project is required to and will comply with all state mandated energy efficiency standards. The District does not have alternative energy efficiency standards. Therefore, the project is not anticipated to conflict with state or local plans for energy efficiency.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.7 Geology and Soils

VI. GEOLOGY AND SOILS. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 geological feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.7.1 Background and Setting

Pursuant to the USDA/NRCS Soil/Vegetation Survey for Tuolumne County, on-site soils are classified as identified in Section 2.2.1.

*a) Expose people or structures to potential substantial adverse effects, including the risk of*

*loss, injury, or death involving:*

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*
- ii) Strong seismic ground shaking?*
- iii) Seismic-related ground failure, including liquefaction?*
- iv) Landslides?*

### **No impact**

Tuolumne County is not identified as being at risk of rupture of a known earthquake fault pursuant to Special Publication 42 (August 2007 Revision). Therefore, impacts related to fault rupture, strong seismic ground shaking, seismic related ground shaking, or seismic related ground failure or landslides are not anticipated at the Project site.

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

### **Less Than Significant with Mitigation Incorporated.**

The erosion potential for Woods Creek and the Quartz Sites, per the USDA NRCS Soils Survey are shown in **Figures 15-16** and **Tables 6-7** respectively. Woods Creek soils are urbanized and disturbed and, therefore, unrated relative to erosion for that area subject to disturbance for the proposed project. At Quartz, soils have a relatively moderate erosion potential in the area potentially subject to disturbance.

Regardless of ratings, construction activities associated with the Project at both sites may disturb soil and result in loss of topsoil that could run off-site. The following mitigation measures require preparation and implementation of an erosion control plan and compliance with state and federal water quality protection measures to minimize these potential impacts:

**Avoidance and Minimization Measure GEO-1 (See BIO-7): Erosion Control**

**Avoidance and Minimization Measure GEO-2 (See BIO-8): NPDES/SWPPP**

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

- c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*
- d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

### **Less Than Significant.**

#### Woods Creek

Improvements at Woods Creek include primarily minor structures (i.e., adding a canopy to protect some existing facilities) or improving or replacing existing facilities rather than constructing new facilities. Construction will occur on previously disturbed/urbanized soils.

Based on the nature and location of the improvements, it is unlikely that these improvements would result in landslides, lateral spreading, subsidence, liquification or collapse. Similarly, failure of any of the proposed minor structures would not create a substantial risk to life or property.

Figure 15: Woods Creek Erosion Potential



**Table 6: Woods Creek Erosion Potential**

**K Factor, Whole Soil**

Map unit symbol	Map unit name	Rating	Area (A/D)	Percent of A/D
7211	Milvilla-Lucky mine complex - 15 to 30 percent slopes	.24	0.1	3.4%
5110	Cumula Hummersept-Riverwash complex - 0 to 8 percent slopes	.28	0.9	16.0%
9013	Utcon land-Milleria complex - 1 to 25 percent slopes		5.4	60.5%
Totals for Area of Interest			4.2	100.0%

**Description**

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

**Figure 16: Quartz Erosion Potential**



**Table 7: Quartz Erosion Potential**

**K Factor, Whole Soil**

Map unit symbol	Map unit name	Rating	Acres in ADI	Percent of ADI
7034	Loatercreek-Bonanza complex, 3 to 15 percent slopes	.15	0.4	4.5%
7035	Loatercreek-Gopheridge complex, 15 to 30 percent slopes	.37	2.8	27.9%
7185	Cornucopia-Sabit complex, 15 to 30 percent slopes	.15	1.6	15.6%
7210	Deerflat-Milvilla complex, 3 to 15 percent slopes	.33	8.3	80.4%
Totals for Area of Interest:			10.1	100.0%

**Description**

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

## Quartz

Improvements at Quartz include two new filters, increasing capability to inject chemicals upstream of filters, piping modifications, a lined emergency storage pond and new pump station in addition. Much of the remaining project involves improvements to existing facilities. Some of these facilities involve the use of chemicals which could damage the environment if spilled, or released. USDA/NRCS soils information pertaining to soils suitability for sewage treatment facilities (e.g., sewer lagoons), **Figure 17** indicates limited suitability of the soils on site (**Table 8**). Given the marginal suitability of the site's soils for some uses and the potential for environmental damage associated with accidental spills or release, a potential significant adverse impact could occur without reflecting soil stability in project design. Therefore, as with all prior development on site, the following mitigation measure is required:

### **Mitigation Measure GEO-3: Geotechnical Studies - Quartz**

Prior to commencing construction at the Quartz site, the project proponent shall conduct testing for expansive soils and soil suitability in accordance with District standards to identify and incorporate any necessary design considerations. A previously prepared geotechnical study may be used, if soils studies were conducted in proposed disturbance areas.

### **Mitigation Monitoring GEO-3:**

The studies shall be completed prior to commencing construction and finalizing construction plans. The District is responsible for this measure.

- e) *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** The Project involves improvements to an existing wastewater treatment system that allows for public sewer avoiding the necessity for development to rely on septic tanks or alternative wastewater disposal systems. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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


**No Impact.** There are no unique geological features known on the site. Paleontological resources are unknown in this area and there is no surface evidence that such resources could exist. Previous project construction did not identify any such resources. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

**Figure 17: Quartz Soils Suitability for Sewage Lagoon**



 **Natural Resources Conservation Service**

Web Soil Survey  
National Cooperative Soil Survey

4/1/2024  
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**Table 8: Quartz Soil Suitability for Sewer Lagoon**

Rating	Area (ACI)	Percent ACI
Very Limited	10.1	100.0%
<b>Total for Area of Interest</b>	<b>10.1</b>	<b>100.0%</b>

## 2.8 Greenhouse Gas Emissions

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

### 2.8.1 Background and Setting

The GHG significance threshold applied in this report is based on the Tuolumne County Climate Action Plan (County of Tuolumne 2022). The Climate Action Plan presents a series of significance thresholds expressed in:

- metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per capita per year, which is primarily applied to residential land uses;
- MTCO<sub>2</sub>e per employee per year, which is primarily applied to non-residential employment land uses; and
- MTCO<sub>2</sub>e per service population per year, which is primarily applied to land uses that include both residential and non-residential land uses. Service population is calculated as the sum of residents and employees.

The Climate Action Plan significance thresholds are primarily intended to apply to projects that result in residents or employees. The WWTF Upgrade project would not directly result in a change in the number of residents or employees (i.e., it does not expand capacity, but rather implements improvements that allow the facility to realize its design capacity). However, for this air quality report, the Climate Action Plan significance thresholds expressed as MTCO<sub>2</sub>e per capita are applied.

The Climate Action Plan presents different thresholds for projects anticipated to be operational in the years 2030, 2040, and 2050. As noted earlier in this report, the WWTF Upgrade project is estimated to be completed in the year 2026. As a result, the Climate Action Plan significance the year 2030 is applied in this report. The Climate Action Plan significance threshold expressed as MTCO<sub>2</sub>e per service population for the year 2030 is 4.72 MTCO<sub>2</sub>e per capita per year. This threshold is applied in this report.

Based on the threshold categories presented in the CAP, the 2030 threshold is applied here for short-term construction related emissions. The Climate Action Plan significance threshold expressed as MTCO<sub>2</sub>e per service population for the year 2030 is 4.72 MTCO<sub>2</sub>e per capita per

year.

### **2.8.2 Analysis**

Construction of the proposed project would result in the generation 0.01 MTCO<sub>2</sub>e per capita per year in 2025 and 0.01 MTCO<sub>2</sub>e per capita per year in 2026. These amounts are less than the 4.72 MTCO<sub>2</sub>e per capita per year significance threshold for GHG emissions. Therefore, this impact is considered less than significant, and no mitigation measures are required.

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

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.9 Hazards and Hazardous Materials

<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.9.1 Background and Setting

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

Materials associated with the construction and rehabilitation of the wastewater collection system are required to be handled, stored, transported, and disposed of according to a framework of federal, state and local regulations. Regulatory bodies include, but are not limited to, the California Environmental Protection Agency, Department of Toxic Substances Control, Tuolumne County Environmental Health, U.S. and California Department of Transportation and the California Division of Occupational Safety and Health.

## 2.9.2 Analysis

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*
- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Disinfection and other WWTP processes use chemicals that require care in handling and may be considered hazardous materials. Per the project study, the predominant chemical used for at the WWTFs is sodium hypochlorite solution for disinfection. Per the California Water Resources Control Board, Sodium hypochlorite is commonly used in WWTP operations. Sodium hypochlorite is available in solution concentration ranging from 1.5 to 15 percent, and is the active ingredient in household bleach (3 to 6 percent) and in pool sanitizers (11 to 15 percent)<sup>10</sup>. The WWTP typically uses a 12% solution. The substance is not defined as a hazardous air pollutant per 40 CFR 112. Because the disinfectant is in solution (i.e., liquid form) rather than gas form, dangers associated with chlorine gas leaks are not a concern. Proper implementation of state regulations for handling this material as established in the Material Safety Data Sheet (MSDS)<sup>11</sup> for the product would ensure that public exposure to any hazardous WWTP chemicals is less-than-significant. To assist in verifying enforcement of these conditions, the following local regulation is included:

### **Local Regulation: Hazardous Materials Disclosure Statement/Plan**

Prior to completing project construction; submit a completed Hazardous Materials Disclosure Statement to the Environmental Health Division of the Community Resources Agency. If reportable quantities of hazardous materials or waste will be handled, stored or generated on the property, a Business Plan shall be submitted to the Environmental Health Division for review and approval. A reportable quantity is defined as any hazardous material or a mixture containing hazardous materials in amounts greater than or equal to 500 pounds, 55 gallons or 200 cubic feet at standard room temperature and pressure.

Some special status wildlife species are highly susceptible to changes in the chemical composition of water and soils. For example, Mariposa cryptantha and Rawhide Hill onion depend on the unique chemical composition of serpentine soils. Changes to soil chemistry as might occur through the disposal of treated effluent could enhance the ability of invasive species to thrive and outcompete special status plants dependent on serpentine soils. Similarly, changes to the chemical composition or pH of water could affect reproductive success of

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<sup>10</sup> [http://www.waterboards.ca.gov/water\\_issues/programs/owts/docs/disinfection.pdf](http://www.waterboards.ca.gov/water_issues/programs/owts/docs/disinfection.pdf)

<sup>11</sup> OSHA Classification, 29 CFR §1900-1910; CERCLA AND SARA REGULATIONS, 40 CFR §300-373; and FDA 21 CFR 178.1010

amphibians. Indications have been found that some special status bat species drinking from water sources that receive treated effluent are adversely affected (Piersen, 1991). In short, the disposal of effluent on unique soils or into water sources used for breeding or drinking by special status species has the potential to create a potentially significant adverse impact.

#### Wood's Creek

With previously completed improvements, potential spills into Wood's Creek have been eliminated. No spray fields are proposed at the Wood's Creek WWTP site, therefore, potential impacts to special status species are not anticipated.

#### Quartz

The Quartz Site is large enough to provide redundant systems and increased storage reducing the likelihood of inadvertent discharges.

Because the WWTP is located on the easterly Quartz parcel, accidental discharges into waterways would not occur because such waterways do not exist on or adjacent to this portion of the site. Coupled with the availability of land for expanded storage capacity and redundant systems, the potential for damage from inadvertent spills is less than significant. Even in the unlikely event that a spill occurred, it would come into contact with 20± acres of surrounding annual grassland. These annual grasslands are not inhabited by special status plants or animals. Therefore, even if an inadvertent discharge occurred at the site, it would have a less than significant impact on common and special status species.

Based on the preceding, significant adverse impacts are not anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

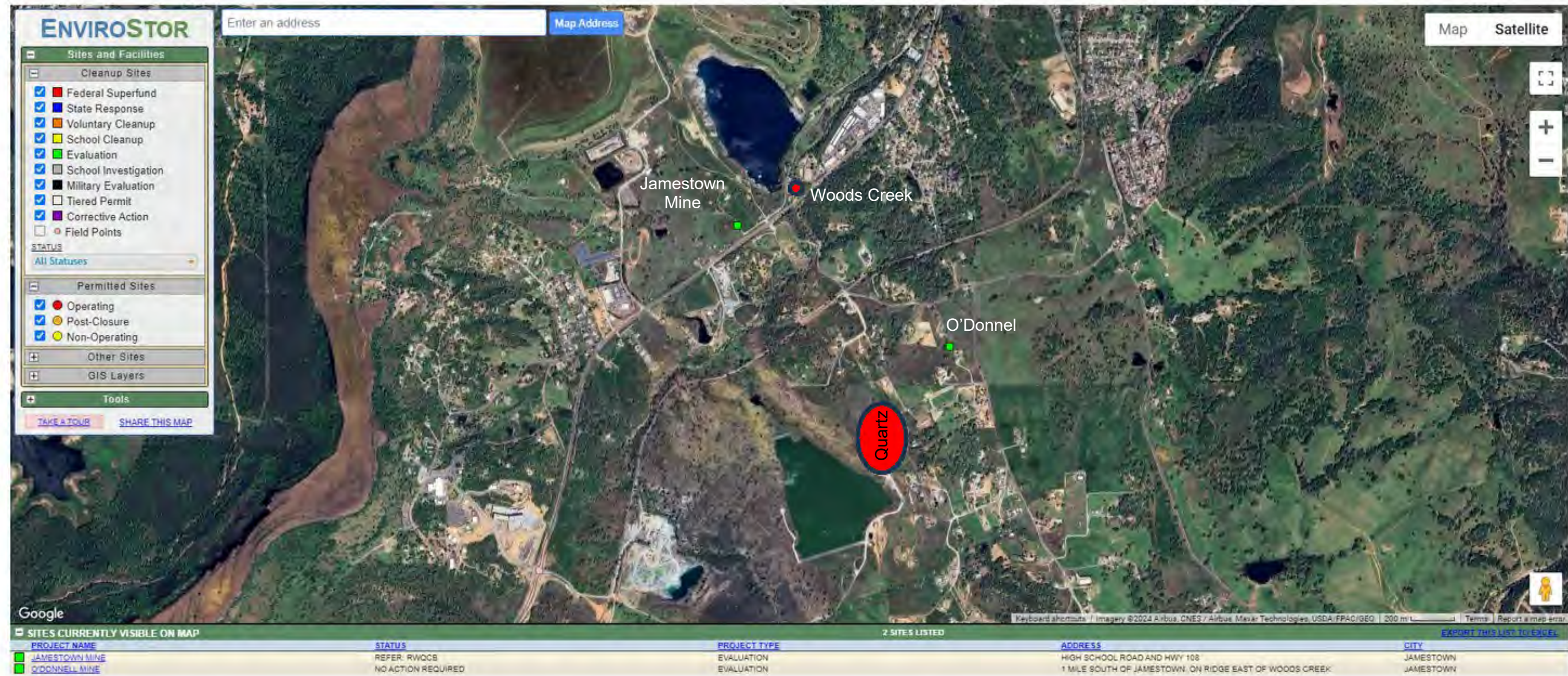
*d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

#### **No Impact**

A review of Envirostor (California Department of Toxic Substance Control) and the RCRAInfo (Envirofacts) site (Resource Conservation and Recovery Act) at the EPA shows no known contamination at either project site. Envirostor includes all federal superfund sites, state response sites, voluntary cleanup sites, school clean up sites and corrective action sites as well as hazardous waste facilities. A review of the California Solid Waste Information System (SWIS) shows no record of a contaminated site at the project locations. A review of the National Response Center (NRC) database shows no incidents recorded near the project sites. No records were identified by the EPA's Toxic Release Inventory (EPCRA TRI) in the vicinity of either site. Therefore, no significant hazards related to hazardous materials on the sites are identified.

Within one mile of the project sites, the following hazardous or potentially hazardous materials sites are identified (**Figure 18**):

Figure 18: Hazardous Materials Sites



### Sonora Mine

It is noted that Envirostor lists the former Sonora Mine Site (northwest of the Woods Creek WWTP), which operated between 1989 and 1993, as an evaluation site with potential arsenic, lead, soil and surface water affected. The CVRWQCB Region 5 is listed as the lead agency for the site. Mining operations did not extend onto the Wood's Creek WWTP site and the mine site is separated from the existing WWTP by at least one parcel, a roadway, and Wood's Creek.

### O'Donnel Mine.

This site, located off Woods Way. is less than one mile from the Quartz WWTP. The mine is identified as a former mine with the potential for arsenic contaminated soils. A cooperative agreement with the California Department of Toxic Substances Control has been executed for the site.

Neither WWTP project site will involve transport through or disturbance of soils in the vicinity of either of the preceding sites. Therefore, it is not anticipated that these sites would interfere with existing or planned WWTP operations at either Woods Creek or Quartz.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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

**No Impact.** The Project is not located within the boundaries of an Airport Land Use Plan. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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

**No Impact.**

### Wood's Creek:

This site is located adjacent to SR 108/49 which could serve as a major evacuation route during an emergency. The existing WWTP has operated since 1952 without interfering with the operation of SR 108/49. The site does not physically obstruct the highway. Proposed alternatives are expected to remain within the existing footprint of the existing WWTP. Therefore, the WWTP is expected to continue to operate without interfering with SR 108/49 operations and without interference to the use of the major transportation corridor as an emergency evacuation route.

### Quartz:

The parcels are not located along or adjacent to any major evacuation route or facility. Therefore, development at this site is not anticipated to physically interfere with either emergency response or evacuation plans, therefore, no impacts are anticipated.

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

**No Impact.** The Project will not introduce residential uses into the urban/wildland interface. At the Quartz site, the project will replace potentially flammable grasslands with a storage pond—a potential beneficial impact. No other significant structures will be built in conjunction with the Project. Therefore, due to the size, nature and location of the Project, impacts associated with wildland fires are not anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.10 Hydrology and Water Quality

IX. HYDROLOGY AND WATER QUALITY. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete 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 type="checkbox"/>	<input checked="" 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 that would?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Result in substantial erosion or siltation on-or off-site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Impede or redirect flood flows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.10.1 Background and Setting

Pursuant to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) Community Panel # 06109C0850C (effective date April 16, 2009), both project site footprints are within a Flood Zone X, an area determined to be outside the 0.2% annual chance (or 500-year) floodplain (**Figure 14**).

Woods Creek forms the western boundary of the Woods Creek WWTP. The eastern parcel at the Quartz WWTP does not encompass drainages.

### 2.10.2 Analysis

*a) Violate any water quality standards or waste discharge requirements?*

**Less than Significant with Mitigation Incorporated.**

The purpose of the project is to allow for permitted tertiary discharge as necessary to comply with waste discharge requirements. In effect, the project is mitigation to minimize a potentially significant adverse impact to a level of less than significant.

The introduction of machinery and construction materials to the site has the potential to disturb soils and increase disturbed-soil runoff from site construction that could indirectly impact water quality off-site waterways—a potentially significant adverse impact. To minimize and avoid these impacts, the following measures are included:

**Mitigation Measure HYDRO-1 (See BIO-7): Erosion Control**

**Mitigation Measure HYDRO-2 (See BIO-8): NPDES/SWPPP**

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

*b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?*

**No Impact.** The proposed Project involves improvements to existing wastewater treatment facilities. No use of new groundwater sources will be required. Therefore, based on the nature of the proposed Project, no impact will occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

*c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would:*

*i. Result in substantial erosion or siltation on- or off-site?*

**Less than Significant with Mitigation Incorporated.**

The introduction of machinery and construction materials to the site has the potential to disturb soils and increase disturbed-soil runoff from site construction into off-site water

resources that could result in erosion or siltation that indirectly impacts water quality in the off-site ponds and creeks--a potentially significant adverse impact. To minimize and avoid these impacts, the following measures are included:

**Mitigation Measure HYDRO-1 (See BIO-7): Erosion Control**  
**Mitigation Measure HYDRO-2 (See BIO-8): NPDES/SWPPP**

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

- ii. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?*
- 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*
- iv. Impede or redirect flood flows*

**No Impact.**

No new impervious surfacing is proposed. Therefore, runoff will not be increased. No alterations to drainages are proposed, therefore, no impediments or redirection of flood flows is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

**No Impact**

Pursuant to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) Community Panel # 06109C0850C (effective date April 16, 2009), both project site footprints are within a Flood Zone X, an area determined to be outside the 0.2% annual chance (or 500-year) floodplain (**Figure 19**). Therefore, the proposed Project will not occur within a 100-year flood hazard area and no impact is anticipated.

The Woods Creek site is near a large reservoir – a remnant of the Jamestown Mine. The reservoir is too small to generate a risk of tsunami, but could conceivably generate a seiche. However, Woods Creek provides a natural defense from such an occurrence and would direct flows away from the Woods Creek WWTP. Therefore, significant impacts related to the release of pollutants due to inundation at the Woods Creek WWTP are not anticipated.

The Quartz WWTP is located near the TUD Quartz Reservoir (Wastewater Treatment). The reservoir is too small to generate a risk of tsunami, but could conceivably generate a seiche. However, an elevated ridge divides the Quartz Plant from the Quartz Reservoir. Seiche flows would necessarily have to travel uphill, rather than follow a natural gravity flow downhill as would be anticipated. Therefore, significant impacts related to the release of pollutants due to inundation at the Quartz WWTP are not anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

- e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**No Impact.**

Based on the size, nature and location of the project, replacing waterlines to improve fire flow, the project will not conflict with a water quality control plan. Because no groundwater is required for the project, it will not conflict with any sustainable groundwater management plan.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

- f) *Otherwise substantially degrade water quality?*

**Less Than Significant with Mitigation Incorporated.**

Temporary construction activities associated with the Project may disturb soils and result in loss of topsoil and soil erosion. Runoff could carry eroded soils into off-site waterways thereby degrading water quality, a potentially significant adverse impact. The following mitigation measures are proposed.

**Mitigation Measure HYDRO-1 (See BIO-7): Erosion Control**

**Mitigation Measure HYDRO-2 (See BIO-8): NPDES/SWPPP**

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

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*
- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*
- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

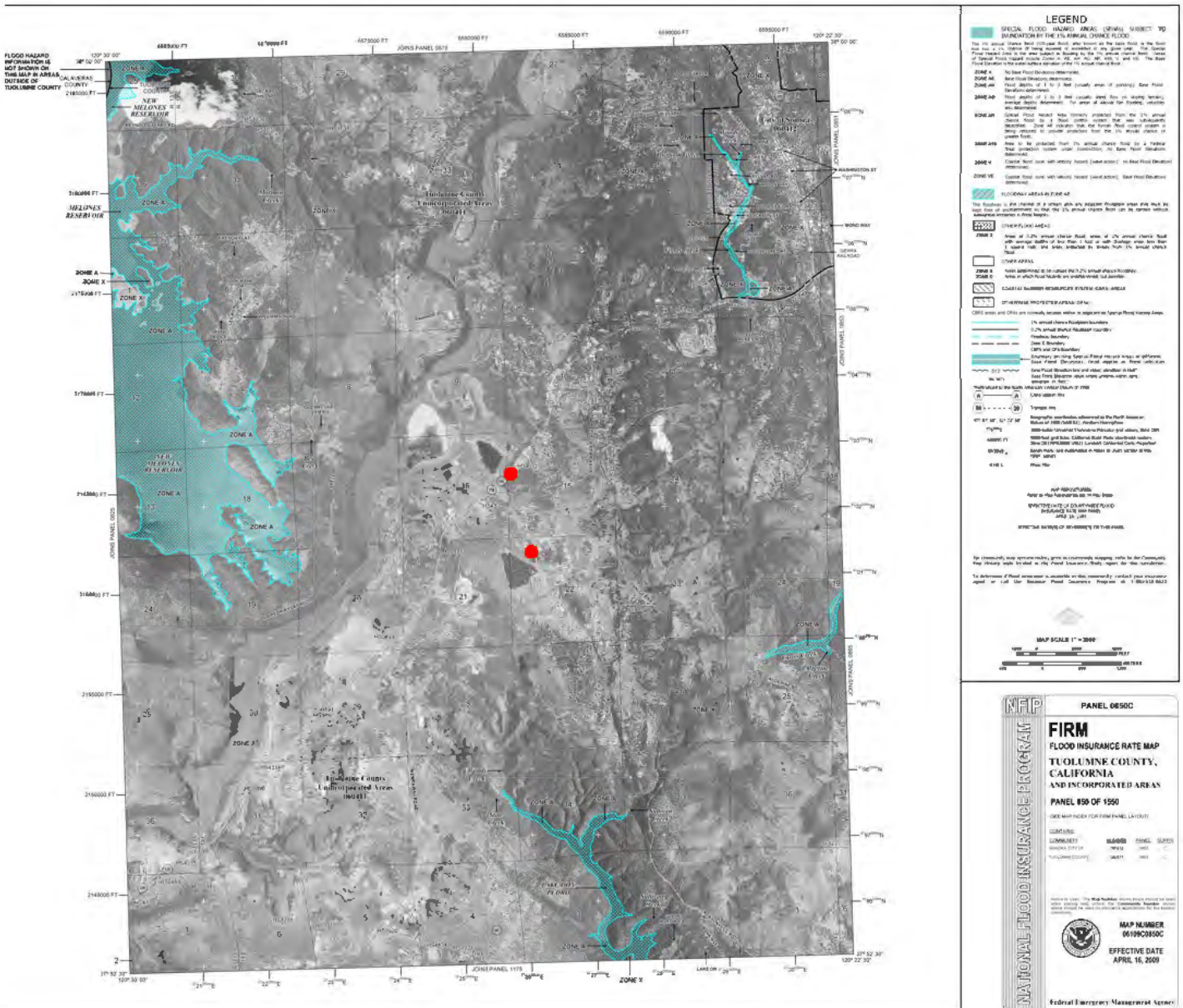
**No Impact.** Pursuant to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) Community Panel # 06109C0850C (effective date April 16, 2009), identifies that the entire Project footprint is within a Flood Zone X, an area determined to be outside the 0.2% annual chance (or 500-year) floodplain (**Figure 19**). Therefore, the proposed Project will occur within a 100-year flood hazard area and no impact is anticipated.

No housing is proposed in conjunction with the proposed Project, therefore no impacts associated with placing housing in a flood hazard area are anticipated. No flood zones exist; therefore, no structures will be placed in a flood hazard area that could impede or redirect flood flows. Based on the nature of the project, people and structures will not be exposed to significant loss, injury or death due to flooding, including flooding from levee or dam failure, because the project is not introducing people or structures to the area, but is improving existing infrastructure to improve fire flow. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

Figure 19: FEMA FIRM ( ● = Project Sites)



## 2.11 Land Use and Planning

X. LAND USE AND PLANNING. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<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"/>

### 2.11.1 Background and Setting

Existing (and planned) land uses adjacent to the Woods Creek Project site are business park, mine, and agricultural as illustrated in **Figure 20**. Existing (and planned) land uses surrounding the Quartz Project Site are large lot and rural residential, agricultural and other public facilities (e.g., Tuolumne Utilities District Quartz Reservoir) as illustrated in **Figure 21**. Both facilities currently carry a general plan land use designation of Public with consistent zoning (Public, Open Space, and Historic Combining).

Jamestown has an adopted community plan and adopted design guidelines. The Woods Creek WWTP facility is located outside of the design review boundaries, but within the Jamestown Community Plan boundaries.

Quartz has neither design review guidelines nor a community plan.

### 2.11.2 Analysis

#### a) *Physically divide an established community?*

**No Impact.** The Project includes improvements to the existing WWTP on property owned and previously developed by the District. No new structures associated with the proposed project will occur outside the boundaries of those footprints and, therefore, will not divide communities. Therefore, no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

#### 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 upgrade is being undertaken so that the existing facility can realize its design capacity and serve parcels within the existing JSD boundaries consistent with the Tuolumne County General Plan and Jamestown Community Plan.

Per Tuolumne County General Plan, Community Identity Element, the overriding goal of the Jamestown Community Plan is:

## **GOAL JT-B:**

**Provide a mechanism for growth in an orderly manner that balances the needs and interests of the Jamestown community. (formerly 14.B)**

The following policy supports this goal:

***Policy JT-B.5:*** *Require public services to be provided at their existing or higher level of service to all residents of the Jamestown community as the community continues to grow.*

The proposed JSD project will allow the sanitary district to provide required public services to the Jamestown community consistent with the Jamestown Community Plan existing and planned land uses. Without the ability to realize the existing design capacity of the plant, growth in accordance with the general plan and community plan could be halted.

The following applicable policies apply to the Woods Creek facility:

***Policy JT-F.3:*** *Protect Woods Creek for the valuable opportunities it provides, such as nature study, scientific research, education, open space, and recreational pursuits such as hiking and mining, which attract visitors, a major source of revenue for the local economy.*

***Policy JT-F.4:*** *Maintain Woods Creek and the riparian vegetation along its banks as part of the continuous network of valuable wildlife habitat throughout the County in order to provide habitat corridors for wildlife that move back and forth between the larger tracts of high-quality habitat.*

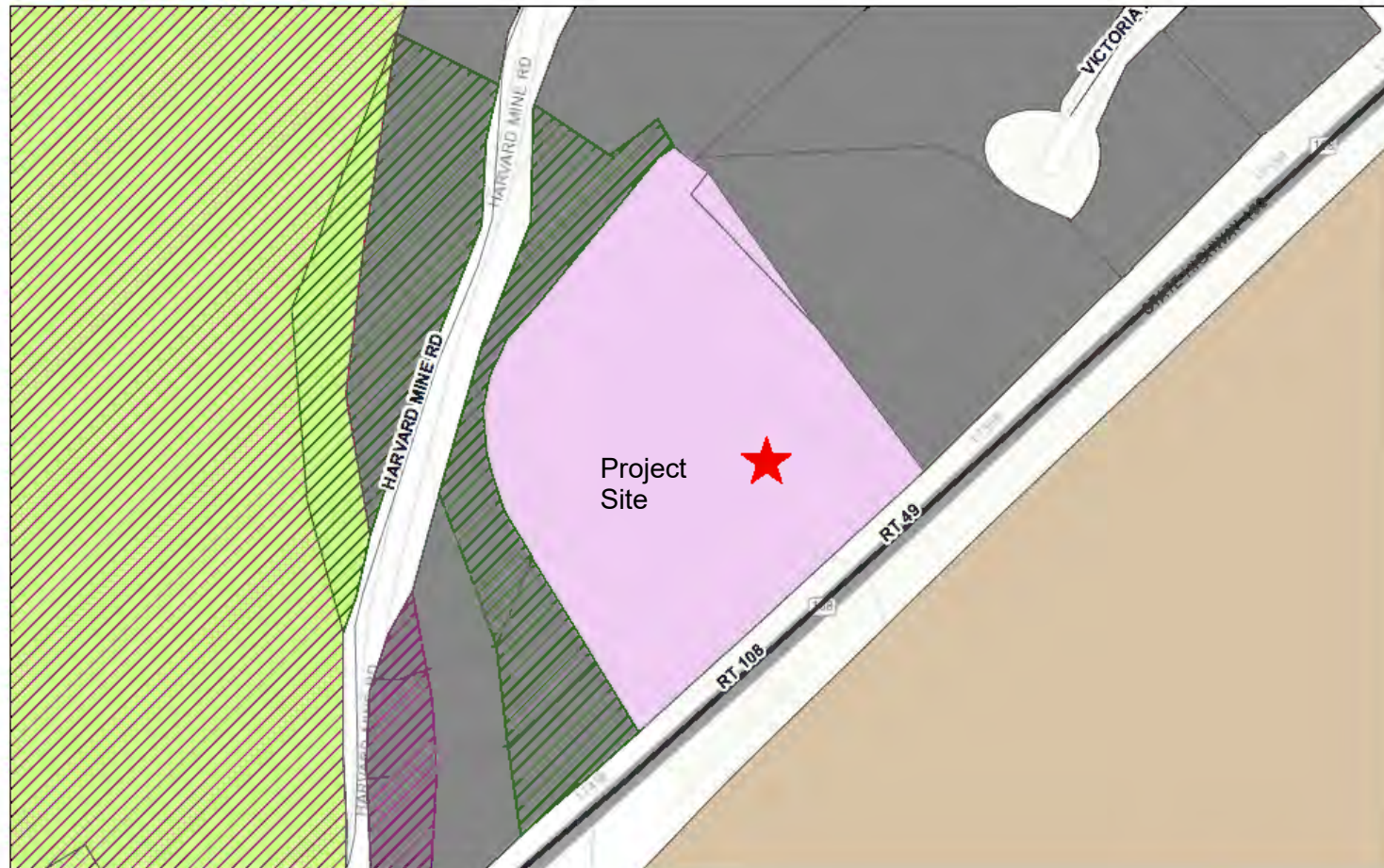
As previously discussed, prior upgrades to the Woods Creek WWTP and the establishment of the JSD Quartz WWTP minimized the potential for accidental discharges into Woods Creek, thereby increasing water quality protection for Woods Creek. For the current project, improvements are not proposed near or bordering the creek at the Woods Creek facility (**Figure 5**), and, at the Quartz Facility, Woods Creek does not occur within the project boundaries. No vegetation in or near the riparian zone of Woods Creek will occur, therefore, no potential impacts are anticipated.

Pursuant to the 2018 General Plan Update Mitigation Monitoring and Reporting Plan, Table 2-1, the proposed project does not conflict with any of the general plan land use measures that were adopted for the purpose of avoiding or mitigating environmental effects as described in the Agricultural Resources, Air Quality, Greenhouse Gas, Biological Resources, Noise, and Transportation and Circulation sections of this report.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

Figure 20: Woods Creek Land Uses



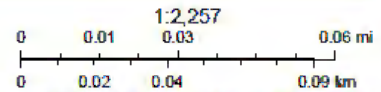
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Open Space Zoning  
 Roads  
 Hwy

Local Traffic  
 Other Roads  
 Parcels\_WithSiteAddress

General Plan Overlay Designations\_VIEW  
 MPZ  
 General Plan Land Use Designations  
 BP

ER  
 P  
 AG



Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

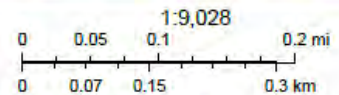
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 Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA | This dataset is provided courtesy of the County of Tuolumne, GIS Division. The County of Tuolumne cannot guarantee reliability or suitability of this information. Original data

Figure 21: Quartz Surrounding Land Uses



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- |                   |                                    |    |    |
|-------------------|------------------------------------|----|----|
| Open Space Zoning | Other Roads                        | ER | P  |
| Roads             | Parcels_WithSiteAddress            | RR | AG |
| Secondary Road    | General Plan Land Use Designations | LR |    |
| Local Traffic     | LDR                                |    |    |



Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

Tuolumne County GIS

Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA | This dataset is provided courtesy of the County of Tuolumne, GIS Division. The County of Tuolumne cannot guarantee reliability or suitability of this

## 2.12 Mineral Resources

XI. MINERAL RESOURCES. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.12.1 Background and Setting

#### Woods Creek:

Pursuant to Mineral Land Classification of a Portion of Tuolumne County, California, for Precious Metals, Carbonate Rock and Concrete-Grade Aggregate (DMG Open-File Report 97-09, 1997); the existing WWTP is located in the middle of the Mother Lode belt and is designated as MRZ-2b indicating that the site supports economically important deposits of precious metals that should be conserved for future extraction.

#### Quartz:

Pursuant to Mineral Land Classification of a Portion of Tuolumne County, California, for Precious Metals, Carbonate Rock and Concrete-Grade Aggregate (DMG Open-File Report 97-09, 1997); the Mother Lode belt traverses the northeastern two-thirds of the easterly parcel and is designated as MRZ-2b indicating that the site supports economically important deposits of precious metals that should be conserved for future extraction.

Neither site carries the County's Mineral Preserve Zone (MPZ) overlay.

### 2.12.2 Analysis

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

#### **Less than Significant.**

##### Woods Creek

The site was developed as a WWTP nearly 45± years prior to its designation as an important mineral resource zone. The proposed project will not expand the existing footprint of the WWTP nor are proposed improvements expected to result in any alteration of subsurface mineral resources. Therefore, continued use of the site for WWTP purposes will not result in a

loss of availability of known mineral resources, but will instead maintain the current status of the site with respect to the availability of mineral resources for future extraction. This maintenance of the status quo is a less than significant impact.

Quartz:

Pursuant to the Tuolumne County General Plan (2018), Managed Resources Element, Policy 7B, the county will support existing and intermittently operating, and promote new, commercial mining operations within areas suitable for mineral extraction *when compatible with adjacent land uses* (emphasis added).

Per the General Plan, mineral lands, to be targeted for conservation and possible extraction, the significant classified mineral lands must be considered as to their location, relationship to their surrounding land uses, and economic viability under a set of established criteria. That criteria are established in Implementation Program 7.B.c which includes the following criteria applicable to the Quartz site:

***7.B.c - Any classified mineral lands which meet the following criteria will be designated as Mineral Preserve (MPZ) overlay on the General Plan Land Use Diagrams:***

- *Within 1,000 feet of the property there is no property designated as any one or a combination of the following: HDR, MDR, LDR, ER, NC, GC, HC, SC or MU by the General Plan.*

The Quartz WWTP is located within 1,000 feet of lands designated ER on the General Plan. Therefore, the MPZ overlay is not applicable for the proposed project site. Appropriately, the site does not carry the County's Mineral Preserve Zone (MPZ) overlay.

As with the Woods Creek site, continued use of the site for WWTP purposes with minimal improvements proposed will not result in a loss of availability of known mineral resources, but will instead maintain the current status of the site with respect to the availability of mineral resources. This maintenance of the status quo is a less than significant impact.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.13 Noise

XII. NOISE -- Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a Project within the vicinity of a private airstrip, or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.13.1 Background and Setting

The Project involves upgrades to existing WWTP facilities. Proposed improvements are not anticipated to increase the overall ambient noise levels, except temporarily during project construction.

Potential noise receptors include single-family residences east of the project site along Karlee Lane at the Quartz site.

### 2.13.2 Analysis

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

#### **Less Than Significant with Mitigation Incorporated.**

##### Construction

Exterior noise is anticipated in conjunction with ground disturbances and other building activities that may occur during project construction—could result in a potentially significant adverse temporary impact. The following mitigation measure is proposed:

#### **Mitigation Measure Noise-1**

- All construction equipment will have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust system.
- All equipment (i.e., construction equipment and trucks) will be limited to ten (10) or fewer minutes of idling time.
- Construction activities shall be limited to between the hours of 7:00 A.M. and 7:00 P.M. Monday through Saturday. Exterior construction shall be prohibited on Sunday and JSD holidays except in cases of emergency.

**Mitigation Monitoring Noise-1:** The measure shall occur throughout project construction. It is the responsibility of the construction contractor.

Proper implementation of the proposed mitigation measures is expected to reduce the potential impact associated with construction to a level of less than significant.

Woods Creek:

SR 108/49 Highway noise to the south and adjacent industrial uses to the east provide a relatively high daytime ambient noise level. It is unlikely that existing or proposed new equipment at this site will exceed these existing daytime ambient noise levels. However, new equipment at the site could raise night-time ambient noise levels. While very few sensitive noise receptors (single-family residences) are located nearby, the potential does exist, to a very limited extent, to create a potentially significant adverse impact with respect to nighttime ambient noise levels.

Quartz:

Ambient noise levels at this site are consistent with a rural atmosphere. The introduction of additional equipment associated with the WWTP could generate noise levels higher than ambient noise levels that would be heard by nearby residences– a potentially significant adverse impact.

To minimize these potentially significant noise-related impacts, the following mitigation measure is proposed:

**Mitigation Measure Noise-2**

Throughout the life of the project, for any expansion that increases the site's existing ambient noise levels, prepare an acoustical analysis for the proposed improvements. The acoustical analysis shall identify the site's ambient noise level and anticipated noise contours extending from the JSD property boundaries after the WWTP is fully operational. If necessary, the study shall identify any measures or construction techniques necessary to ensure that WWTP equipment and operations do not contribute to exceeding the following noise levels on surrounding properties:

Daytime (7 a.m. – 10 p.m.)		Nighttime (10 p.m. – 7 a.m.)	
Leq (h)/a/	Lmax/b	Leq (h)/a/	Lmax/b/
50	70	45	65

/a/ Hourly average level (dBA)

/b/ Maximum equivalent level (dBA)

Note: Each of the noise levels specified shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech, or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). The noise standard is to be applied at the property lines of the affected land use.

**Mitigation Monitoring Noise-2:** The measure shall occur throughout the life of the project. It is the responsibility of JSD.

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

*c) For a Project 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?*

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

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.14 Population and Housing

XIII. POPULATION AND HOUSING. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.14.1 Background and Setting

Jamestown is an unincorporated community in Tuolumne County. Jamestown is a census designated place with a 2020 population of approximately 3,478 persons.

### 2.14.2 Analysis

- 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)?*

**No Impact.**

Project Alternative #2 is not capacity-building, but rather focuses on upgrades to the facilities allowing them to operate at planned capacity to serve development *within the existing JSD Boundaries*. No new service lines will be constructed to extend service to new development.

Development within the existing JSD boundaries to be served has been evaluated to a program level under the Tuolumne County General Plan EIR. Therefore, the project is not anticipated to induce substantial unplanned growth either directly or indirectly.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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

**No Impact.** No existing housing will be eliminated, removed, or otherwise require relocation in conjunction with the proposed Project. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES.</b>				
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.15.1 Background and Setting

The Jamestown community is served by the Jamestown Fire Department, CalFire, the Tuolumne County Sheriff's Department, Jamestown Elementary School, Sonora High School, the Jamestown Sanitary District (wastewater), and Tuolumne Utilities District (water).

### 2.15.2 Analysis

**No Impact.** The proposed Project will not increase population and, therefore, will not increase demand for fire, police, schools, parks, or other public facilities. Therefore, no impact is anticipated. However, failure to complete the project could result in inadequate wastewater facilities for residents and businesses in the district boundaries.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.16 Recreation

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

### 2.16.1 Background and Setting

There are no park facilities in the general area of either facility. The nearest parks are located in the Jamestown Community—one a State Park (Railtown State Historic Park), Rocca Park (operated by Tuolumne County) and school playgrounds at Jamestown Elementary School.

### 2.16.2 Analysis

- a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b) *Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

#### No Impact.

The proposed Project will not increase population directly (See Section 2.13) and, therefore, will not increase demand for or use of recreational facilities. Based on the nature of the proposed wastewater system improvements, the Project will not increase the demand for recreational facilities. Therefore, no significant adverse impact on recreational facilities is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.17 Transportation

<b>XVI. TRANSPORTATION/TRAFFIC.</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Would the Project:</b>				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.17.1 Background and Setting

The Project does not propose any alterations to off-site roadways, trails, access routes or other transportation-related facilities. The proposed improvements will not result in increased traffic to or from either facility.

### 2.17.2 Analysis

*a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?*

**No Impact.**

The project will upgrade existing WWTP facilities and will not alter any transportation facility or route. Because the Project neither directly involves nor will indirectly influence transportation; plans, ordinances and policies related to transportation are inapplicable to the Project. Based on the nature and location of the proposed Project, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

*b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?*

**No Impact.**

The project will upgrade existing WWTP facilities within the footprint of the existing facilities. Therefore, the project will not alter or influence vehicle miles traveled and is therefore consistent with CEQA Guidelines Section 15064.3(b).

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

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

**No Impact.**

The project will upgrade existing WWTPs within the footprint of the existing facilities and will not alter any transportation facility or design. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

*d) Result in inadequate emergency access?*

**No Impact.**

The project will upgrade existing WWTPs within the footprint of the existing facilities and will not alter any transportation facility or design. No traffic obstructions are anticipated during construction. Therefore, no impacts are anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable.

## 2.18 Tribal Cultural Resources

XVII. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>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:</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>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</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>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.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.18.1 Background and Setting

A cultural resources study previously incorporated by reference (Solano Archaeological Resources, 2024) was conducted for this project and is summarized in Section 2.5.

#### Native American Community Outreach

The California Public Resources Code (PRC) Sections 21080.1, 21080.3.1, and 21080.3.2 requires public to consult with the appropriate California Native American tribes identified by the NAHC for the purpose of mitigating impacts to cultural resources. Similarly, Section 106 also requires outreach and consultation with the Native American community to mitigate potential Project effects on Native American archaeological sites and culturally significant properties To satisfy Section 106 and the PRC, on September 12, 2024, Solano Archaeological Services (SAS) e-mailed a letter and a map depicting the APE and surrounding vicinity to the Native American Heritage Commission (NAHC) requesting a review of the Sacred Lands File (SLF), and a list of Native American community representatives who might have an interest in concerns with the proposed Project (Attachment B to Solano Archaeological Services, 2024). The NAHC responded to SAS on September 24<sup>th</sup> and stated that no culturally significant sites or properties had been identified within or near the APE. The NAHC also provided contact

information for the following individuals and organizations:

- Jessalynn Pastran - Chair, Buena Vista Rancheria of Me-Wuk Indians
- Jesse Galvan-Tribal Historic Preservation Officer, Buena Vista Rancheria of Me-Wuk Indians
- Debra Grimes -Tribal Cultural Resources Specialist, Calaveras Band of Mi-Wuk Indians
- Adam Lewis - Tribal Cultural Resources Assistant
- Gloria Grimes -Chair, Calaveras Band of Mi-Wuk Indians
- Cynthia Reyes-Cultural Manager, Chicken Ranch Rancheria of Me-Wuk Indians
- Stephanie Suess - Community Resources Development Director, Chicken Ranch Rancheria of Me-Wuk Indians
- Joanna Portillo-Hsu - Environmental and Planning Manager, Chicken Ranch Rancheria of Me- Wuk Indians
- Monica Fox -Tribal Administrator, Chicken Ranch Rancheria of Me-Wuk Indians
- Sara Dutschke - Chair, Lone Band of Miwok Indians
- Jereme Dutschke- Cultural Resources Coordinator, Lone Band of Miwok Indians
- Adam Dalton - Chair, Jackson Rancheria Band of Miwok Indians
- Rolland Fillmore - Cultural Preservation Representative, Jackson Rancheria Band of Miwok Indians
- Cosme Valdez - Chair, Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Leland Valdez - Cultural Resources Director, Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Tina Goodwin - Chair, Pagan-yani Maidu of Strawberry Valley Rancheria
- Sandra Chapman - Chair, Southern Sierra Miwok Nation
- Jazzmyn Gegere - Director of Cultural Resources Preservation, Southern Sierra Miwok Nation
- Joey Garfield - Tribal Archaeologist, Tule River Indian Tribe
- Keri Vera - Environmental Department, Tule River Indian Tribe
- Neil Peyron - Chair, Tule River Indian Tribe
- Kenneth Woodrow-Chair, Wuksachi Indian Tribe/Eshom Valley Band

On September 26, 2024, SAS sent letters to each of the above-listed individuals or tribal organizations informing them of the proposed Project, and inquiring if they had any concerns or knowledge of Native American sites or cultural properties within or near the APE. No responses were received.

The NAHC was renotified on May 29, 2024, and responded June 3, 2024 (Appendix D) in response to a request from Augustine Planning Associates, Inc. All identified tribes were notified (Appendix D). The Chicken Ranch Band of Me-Wuk requested a site visit with the applicant. The site visit was conducted July 10, 2024, with Ms. Cynthia Reyes at both the Woods Creek and Quartz WWTFs. The results of that consultation are summarized in Appendix D and in the following.

## 2.18.2 Analysis

*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 with Mitigation Incorporated.** Based on the cultural resources study conducted, no tribal cultural resources were identified within the boundaries of the Project site; however, only surface surveys were conducted and subsurface resources could be uncovered during excavations occurring in conjunction with construction. This could result in damage to an unanticipated resource, a potentially significant adverse impact. The following mitigation measures, discussed in Section 2.5 (Cultural Resources) are proposed to address this potential impact:

### **Mitigation Measure CULT-2: Inadvertent Discoveries**

### **Mitigation Measure CULT-3: Treatment of Human Remains and Sacred Objects**

Based on a site visit conducted July 10, 2024, at both the Woods Creek and Quartz WWTFs with Ms. Cynthia Reyes, representing the Chicken Ranch Band of MiWuk and the applicant; no surface evidence of Native American resources were identified. Given the extensive disturbance areas at the Woods Creek WWTF, Ms. Reyes concluded that no further input is required. Because the proposed new pond at the Quartz WWTF will involve ground disturbance to a depth previously undisturbed, the tribe requests an on-site monitor during ground disturbance for the proposed new storage pond and connections to and from the WWTF to the pond. The applicant is in agreement and the following mitigation measure is proposed:

### **Mitigation Measure TCR-1: Native American Monitoring**

*Prior to issuance of a Grading Permit, the applicants shall contact the Chicken Ranch Band of MiWuk and arrange to have a Native American monitor present during site grading for the new on-site storage pond and its connections to and from the Quartz WWTF.*

### **Mitigation Monitoring TCR-1: Native American Monitoring**

The mitigation measure will occur prior to issuance of a Grading Permit. The project contractor is responsible for contacting the Chicken Ranch Band of MiWuks to arrange for a monitor. Payments or contracting between the parties, if it occurs, is the responsibility of the contractor and Native American monitor.

Proper implementation of the preceding measures is expected to minimize any potential impacts to a level of less-than-significant.

## 2.19 Utilities and Service Systems

<b>XVIII. UTILITIES AND SERVICE SYSTEMS.</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Would the Project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards or 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"/>

### 2.19.1 Background and Setting

Public sewer services are provided by the Jamestown Sanitary District. Public water services are provided by the Tuolumne Utilities District.

### 2.19.2 Analysis

*a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?*

**No Impact.** The Proposed project is intended to improve efficiency of the existing wastewater system to realize its design capacity and meet new (higher) standards for effluent treatment with improvements within the existing footprint of the existing facilities. The project will assist the District in realizing the existing design capacity of the existing system and, therefore, does not expand the District's ability to serve new system demands. Therefore, no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

*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 involves upgrades to an existing WWTP facilities within the footprints of those facilities; therefore, water supplies will not be affected and no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

*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?*

**No Impact.** The purpose of the proposed project is to allow the JSD to realize its existing design capacity as necessary to meet the JSD's existing commitments. Therefore, no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

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

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

**No Impact.** Based on the nature of the proposed Project, realizing the design capacity of a wastewater system, solid waste generation is not anticipated, therefore, no impact will occur.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

## 2.20 Wildfire

<b>XX. WILDFIRE.</b> 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 Incorporated	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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks including 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 type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.20.1 Background and Setting

The project footprints are located in the following fire hazard severity zones (**Figure 22**):

Woods Creek: High Fire Hazard Severity Zone.

Quartz: Very High Fire Hazard Severity Zone

### 2.20.2 Analysis

- a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** The project involves upgrading existing WWTP facilities within the footprint of the existing facilities. It will not alter roadways. Therefore, no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

- 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*

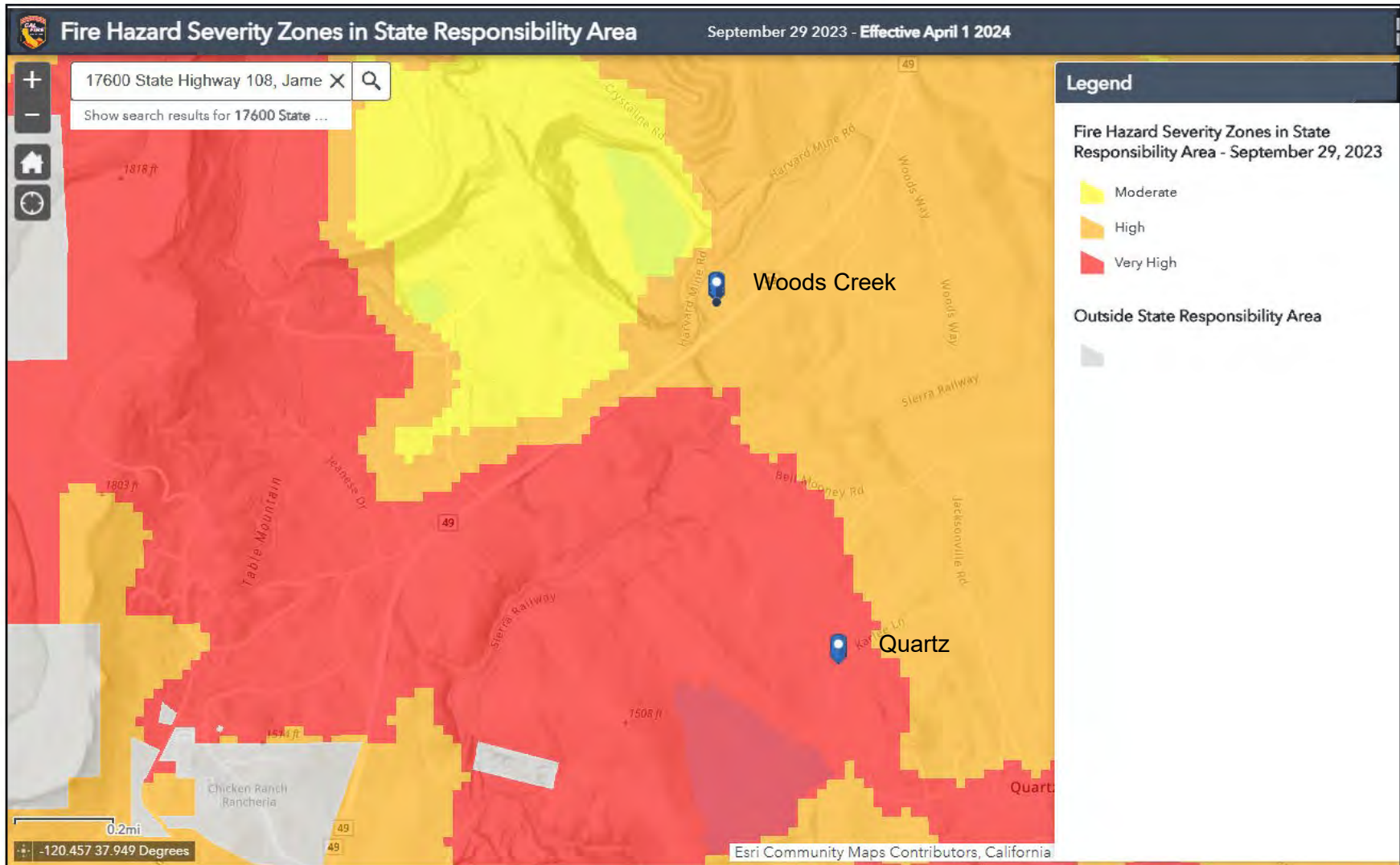
- spread of a wildfire?*
- c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
  - d) *Expose 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?*

**No impact.** The project involves upgrading existing WWTP facilities within the footprint of the existing facilities. The addition of a storage pond will convert grasslands to a pond structure, thereby reducing overall vegetation on site (a potential reduction in vegetation and fire fuels). Therefore, no impact is anticipated.

**Mitigation Measure:** None required.

**Mitigation Monitoring:** Not applicable

Figure 22: Fire Hazard Severity Zones



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## 2.21 Mandatory Findings of Significance

XIX. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<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 type="checkbox"/>	<input checked="" 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"/>

### 2.21.1 Analysis

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

**Less Than Significant with Mitigation Incorporated.** As detailed in this study, the proposed Project will not have a significant effect on the environment and will not result in any of the impacts requiring a mandatory finding of significance provided the mitigation measures identified herein are properly implemented and maintained as described in the Biological (**Mitigation Measure BIO 1 through BIO-13**) and Cultural Resources (**Mitigation Measures CULT-2 and CULT-3**) chapters of this study. The mitigation monitoring and reporting plan and its identified mitigation measures in **Appendix A** as applicable to Biological and Cultural Resources, if properly implemented and maintained, will reduce the identified potential impacts to biological and cultural resources to a level of less-than-significant.

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

**No Impact.** There have been no projects of a similar type, size, or nature that have occurred in the same general area over time. The Project itself will not increase system capacity, but instead will allow the system to realize its existing design capacity. Therefore, no cumulatively significant impacts related to successive projects are anticipated.

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

**Less Than Significant with Mitigation Incorporated.** As described herein, the proposed Project will not result in any substantial adverse effects on human beings either directly or indirectly except for temporary noise increases during project construction. **Mitigation Measure Noise-1 and Noise-2**, limiting the hours of construction and noise levels throughout project operations, will reduce that potential impact associated with temporary and ongoing noise increases to a level of less-than-significant.

## 2.22 Alternatives Analysis

### 2.22.1 Alternative 1 Project Description

Alternative #1 is the No Project/No Build Alternative. As noted in the Hydrology and Water Quality section of this report, the JSD WWTF produces disinfected, secondary treated effluent which discharges to the TUD Wastewater Reclamation System (adjacent Quartz Reservoir). JSD has equipment to treat a portion of the wastewater to disinfected tertiary standards. The JSD WWTF may use disinfected tertiary effluent at a recycled water fill station, for on-site washdown water, and irrigation of landscaping at the Quartz WWTF. However, the JSD WWTF is not currently producing disinfected tertiary effluent due to issues with short-circuiting in the tertiary chlorine contact tank.

JSD and TUD have an agreement under which TUD provides effluent outfall service to JSD (into the Quartz Reservoir) if the quality of the treated wastewater meets TUD's discharge permit requirements and as long as JSD complies with TUD's Wastewater Ordinance and the agreement. The TUD Sonora Regional Wastewater Treatment Facility (TUD Sonora WWTF) is being upgraded to produce disinfected tertiary effluent. The current configuration of the JSD WWTF will not be capable of treating all effluent to comply with the anticipated upcoming TUD waste discharge requirements.

The primary purpose of the project analyzed herein (Alternative #2) is to address JSD's ability to meet new waste discharge requirements in response to TUD system upgrades to tertiary treatment and discharges.

#### Analysis

##### **Potentially significant**

Based on the preceding, a potentially significant adverse impact will occur due to violation of waste discharge requirements without the project. The current configuration of the JSD WWTF will not be capable of treating all effluent to comply with the anticipated upcoming TUD waste discharge requirements. Unless the issue is resolved before the TUD Sonora WWTF goes online, TUD could refuse all effluent from JSD the moment the TUD Sonora WWTF goes online. Without the discharge to the TUD Water Reclamation System, JSD does not have sufficient discharge capacity for existing and future flows and will be unable to continue to operate while complying with the WDRs.

The Project (Alternative #2) is effectively the mitigation measure necessary to reduce this potentially significant impact to a level of less than significant.

### 2.22.2 Alternative 3 Project Description “Disinfected Secondary Storage Pond”

Alternative 3 will include a secondary effluent storage pond to temporarily store secondary effluent flows which are above the capacity of the existing tertiary filter and tertiary chlorine contact tank. The existing tertiary facilities will be used to produce disinfected tertiary effluent for discharge to TUD or reuse as part of JSD's recycled water program. Construction of improvements to existing facilities, as detailed for Alternative 2, are included with this

alternative.

The following summarizes the improvements required for this alternative in addition to those proposed under Alternative 2 (See **Figures 2** and **3**):

- Secondary effluent storage ponds with a total storage volume of 3.3 MG for existing users. Storage volume required is based on historical flow patterns for a wet year with a 20% safety factor.
- Piping and pump stations to convey the disinfected secondary effluent from the storage ponds to the irrigation areas.
- Pump station to return secondary effluent for tertiary treatment and/or re-treatment.
- Upgrade electrical and SCADA programming to integrate proposed facilities into existing WWTF.
- Improvements to existing facilities at the JSD Woods Creek Facility Site and Quartz Site as described in Alternative 2.

Approximately 3.3 MG of storage capacity can be constructed at the Quartz WWTF, assuming two storage ponds are constructed as shown in **Figure 23**. The ponds are assumed to have a water depth of 15 feet and side slope of 3:1.

**Figure 23: Alternative 3 Conceptual Site Plan (Revised)**

### **2.22.3 Alternative 4 Project Description “Expanded JSD Recycled Water System”**

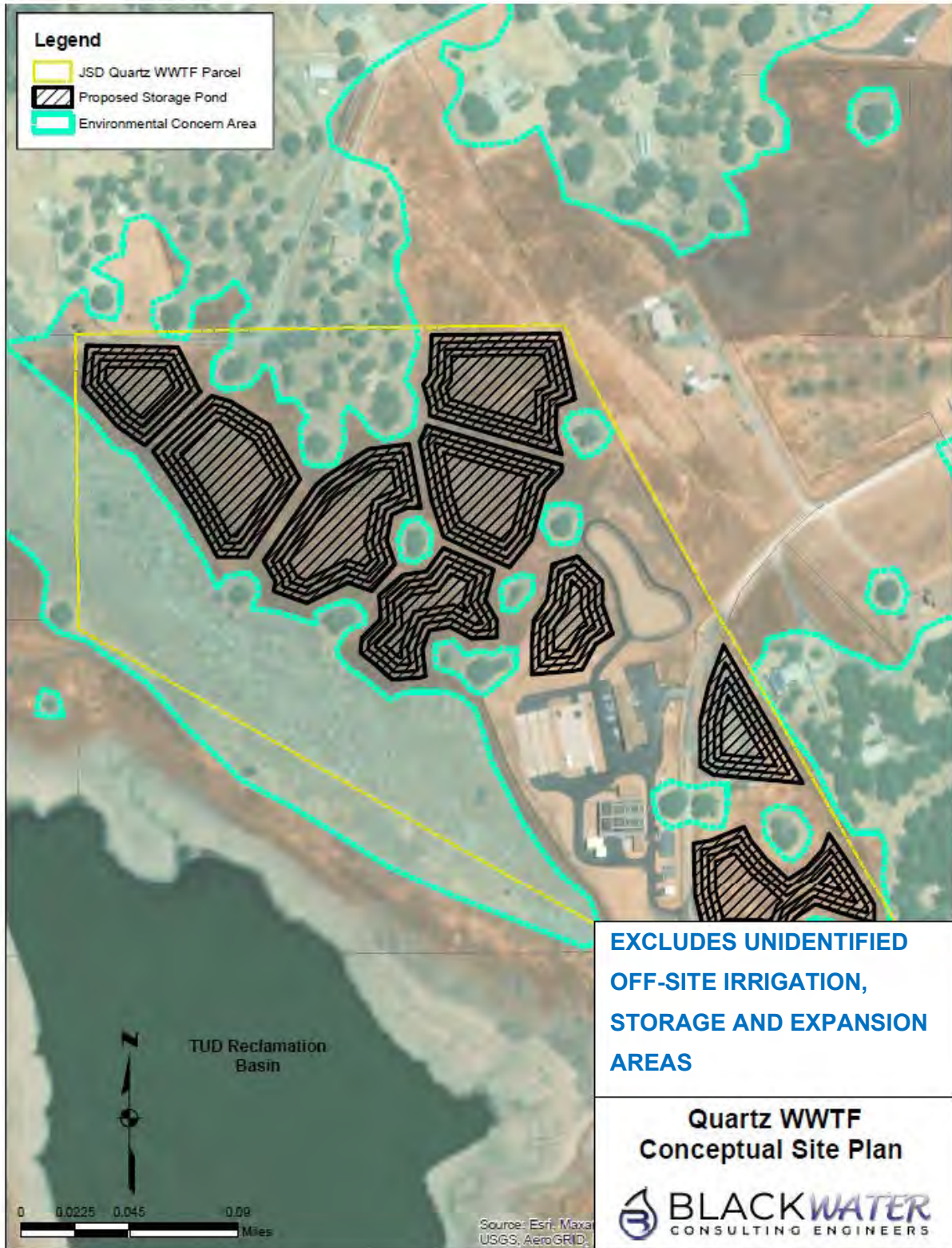
Alternative 4 consists of a recycled water disposal system for disinfected secondary-2.2 effluent that will be owned and operated by JSD and upgrades to address existing issues as well.

The following summarizes the improvements required for this alternative:

- Several secondary effluent storage ponds with a total storage volume of 118 MG for existing users. The storage volume was calculated based on a water balance for average and 100-year rainfall conditions. .
- Piping and/or pumping facilities to convey recycled water from storage ponds to recycled water irrigation areas.
- Approximately 138 acres of land to irrigate with disinfected secondary effluent for 100-year rainfall conditions for existing users.
- Pump station to return secondary effluent for tertiary treatment and/or re-treatment.
- Upgrade electrical and SCADA programming to integrate proposed facilities into existing WWTF.
- Improvements to existing facilities at the JSD Woods Creek Facility Site and Quartz Site as described in Alternative 2.
- Approximately 27.1 MG of storage capacity can be constructed at the Quartz WWTF, assuming the storage ponds are constructed in the areas shown in **Figure 24**, and the ponds have a water depth of 15 feet and side slope of 3:1.
- Because the Quartz WWTF does not have enough area to store the secondary effluent for this alternative, additional storage areas outside the Quartz WWTF are required. For Alternative 4, JSD will need to purchase additional land to store secondary effluent and will also need to purchase land or enter into agreements with landowners to irrigate land using disinfected secondary effluent.

Potential impacts associated with unidentified off-site storage areas under Alternative #4 are outside the scope of this study. Additional environmental analysis is required to proceed with Alternative #4 to address potential off-site impacts.

Figure 24: Alternative 4



**Table 9: Comparison of Alternatives**

<b>Alternative</b>	<b>Beneficial Impacts</b>	<b>Adverse Impacts (Direct/Indirect) Potentially foreseeable</b>	<b>Sensitive Environmental Issues</b>	<b>Cumulative Impacts</b>	<b>Mitigation Measures for Adverse Impacts</b>
No Project (#1)	Avoids temporary Project impacts, but replaces them with long-term adverse impacts	A. Direct – Water Quality – cannot meet waste discharge requirements	A. Waste discharge requirements cannot be met – significant water quality impacts	--	A. Implement Project Alternative #2
#2 Primary effluent storage pond, Two tertiary filters	Ability to continue providing wastewater services to the community	As per prior studies	As per prior studies		
#3 Secondary effluent storage pond	Ability to continue providing wastewater services to the community	Same as Alt 2.	Same as Alt 2.	.	Same as Alt #2.
#4 Additional storage ponds, off-site storage facilities, off-site irrigation	Ability to continue providing wastewater services to the community	Significant adverse biological impacts associated with irrigation outside the existing footprint of the project area on sensitive species	Significant adverse biological impacts associated with irrigation outside the existing footprint of the project		On-site: Significant adverse biological impacts associated with irrigation outside the existing footprint of the project area on sensitive species habitat

Alternative	Beneficial Impacts	Adverse Impacts (Direct/Indirect) Potentially foreseeable	Sensitive Environmental Issues	Cumulative Impacts	Mitigation Measures for Adverse Impacts
facilities		<p>habitat. Off site: potential impacts associated with potential off-site storage areas are outside the scope of this study and potential impacts cannot be determined until off-site locations are identified.</p>	<p>area on sensitive species habitat</p> <p>Off-site: Potential impacts associated with unidentified off-site storage areas under Alternative #4 are outside the scope of this study but could include impacts to biological resources, cultural resources, tribal cultural resources, agricultural resources, energy resources (if transport is required), hydrology and water quality from runoff, transportation (if transport is required)</p>		<p>Off-site: Outside project scope.</p>

**MITIGATION MEASURES, CONDITIONS:**

A list of Mitigation Measures and Conditions for the **Jamestown Sanitary District Wastewater Facilities Upgrades #1 (Alternative #2)** are included in **Attachment A** of this report and will be employed to minimize any impacts which might result from the proposed project.

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

\_\_\_\_\_  
Jamestown Sanitary District

\_\_\_\_\_  
Date

PREPARED BY: Amy Augustine, AICP

### 3.0 REFERENCES

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. *The Jepson manual: vascular plants of California*, second edition. University of California Press, Berkeley.
- Barry, S. J. and G. M. Fellers. 2013. History and Status of the California Red-legged Frog (*Rana draytonii*) in the Sierra Nevada, California, USA. *Herpetological Conservation and Biology* 8(2): 456-502.
- California Code of Regulations, Title 14. Natural Resources. Division 1. Chapter 5. Subsection 40. General Provisions Relating to Native Reptiles and Amphibians.
- California Department of Fish and Wildlife Habitat Relationship System (WHR). 2020. Life History and Range Maps for Special Status Species. Originally "California's Wildlife" edited by Zeiner, D.C. et al 1988-1990. <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>
- Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals, including the Consortium of California Herbaria. [web application]. 2020. Berkeley, California: The Calflora Database [a non-profit organization]. <http://www.calflora.org/>.
- CDFW. 2019. California Natural Diversity Database (CNDDDB; Commercial Version). California Department of Fish and Game, Sacramento, CA. February 2024.
- CDFW. 2018. Considerations for Conserving the Foothill Yellow-legged Frog. Published March 2018.
- CNPS. Inventory of Rare and Endangered Plants of California (online edition). 2024.
- Grinnell, Joseph and Miller, Alden. December 30, 1944. *The Distribution of the Birds of California*. Artemisia Press.
- Hayes, M. P. and M. M. Miyamoto. 1984. Biochemical, behavioral, and body size differences between *Rana aurora* and *R. a. draytonii*. *Copeia*, 1984(4), pp. 1018-1022.
- Hayes, Marc P.; Wheeler, Clara A.; Lind, Amy J.; Green, Gregory A.; Macfarlane, Diane C., tech. coords. 2016. Foothill yellow-legged frog conservation assessment in California. Gen. Tech. Rep. PSW-GTR-248. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 193 p.

- Jameson Jr., E.W. and Hans J. Peeters. 1988. *California Mammals*. Regents of the University of California.
- Jennings and Hayes 1994. *Amphibian and Reptile Species of Special Concern in California*. Rancho Cordova, California: California Department of Fish and Game, Inland Fisheries Division.
- Kupferberg, S. J. 1996. Hydrologic and geomorphic factors affecting conservation of a river-breeding frog (*Rana boylei*). *Ecological Applications*. 6: 1332–1344.
- Sibley, David Allen. 2000. *The Sibley Guide to Birds* (1<sup>st</sup> edition). *National Audubon Society*. Alfred A. Knopf, Inc. publisher.
- Thompson, Robert C. et al. 2016. *California Amphibian and Reptile Species of Special Concern*. University of California Press, Oakland, CA and co-published with the California Department of Fish and Wildlife.
- U.S. Fish and Wildlife Service. 2002. Recovery Plan for the California Red-Legged Frog (*Rana aurora draytonii*). Portland, OR.
- U.S. Fish and Wildlife Service. 2005. Revised Guidance on Site Assessment and Field Surveys for California Red-Legged Frogs. August. Sacramento, CA: Ecological Services, Sacramento Field Office.
- U.S. Fish and Wildlife Service. 2020. Environmental Conservation Online System - Information for Planning and Consultation. U.S. Fish and Wildlife Service. Queried on April 9, 2019, and November 15, 2020.
- United States Fish and Wildlife Service. 2024. Environmental Conservation Online System (ECOS). Information for Planning and Consultation (IPAC). <https://ecos.fws.gov/ipac/>.
- Waetjen DP and Shilling FM. 2017. Large Extent Volunteer Roadkill and Wildlife Observation Systems as Sources of Reliable Data. *Front. Ecol. Evol.* 5:89. doi: 10.3389/fevo.2017.00089 Accessed April 9, 2019.
- Wheeler, C. A. and H. H. Welsh, Jr. 2008. Mating strategy and breeding patterns of the foothill yellow-legged frog (*Rana boylei*). *Herpetological Conservation and Biology*. 3: 128–142.
- Whitson, Tom D. et al. 2012. *Weeds of the West*, 11<sup>th</sup> Edition. Western Society of Weed Science in cooperation with the Western States Land Grant Universities Cooperative Extension Services.
- Zeiner, D.C., W.H. Laudenslayer, K.E. Mayer, and M. White. 1990. *California's Wildlife*, volumes 1, 2, and 3. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Wildlife, Sacramento, California. As updated by California Wildlife Habitat Relationships (CWHR) staff as of April 8, 2019.

Zweifel, R. G. 1955. Ecology, distribution, and systematics of frogs of the *Rana boylei* group. University of California Publications in Zoology. 54: 207–292.

## County

All of the following are available for review at websites referenced except for the following:

The Tuolumne County Geotechnical Interpretive Maps are available at the Tuolumne County Community Resources Agency, 48 West Yaney Street, 4<sup>th</sup> Floor, Sonora, CA 95370, Monday – Thursday.

Tuolumne County Airport Land Use Compatibility Plan, 2003 Adopted by Tuolumne County Airport Land Use Commission January 22, 2003, Prepared by Shutt Moen Associates Santa Rosa, California <https://www.tuolumnecounty.ca.gov/135/Airport-Land-Use-Commission>

Tuolumne County General Plan, 2018. <https://www.tuolumnecounty.ca.gov/889/General-Plan-Update>

Tuolumne County Geotechnical Interpretive Maps. Geotechnical Research & Development. January 1996. *Updated Geotechnical Safety Issues Prepared for the Tuolumne County General Plan Update.*

Tuolumne County Ordinance Code, Zoning - Title 17

<https://www.tuolumnecounty.ca.gov/165/Tuolumne-County-Ordinance-Code>

Tuolumne County Ordinance Code Title 18 – Airport Influence Areas, Chapter 18.24

<https://www.tuolumnecounty.ca.gov/165/Tuolumne-County-Ordinance-Code>

## State

California Air Pollution Control Officers' Association (CAPCOA). 2015. *California's Progress Toward Clean Air*. Available at website url: <http://www.capcoa.org/wp-content/uploads/2015/04/2015%20PTCA%20CAPCOA%20Report%20-%20FINAL.pdf>.

California Department of Transportation, *The California Scenic Highway System List of Eligible and Officially Designated Routes*; 2017 <http://www.dot.ca.gov/design/lap/livability/scenic-highways/>

California Department of Fish and Wildlife. California Natural Diversity Database (CNDDB). 2024.

RareFind 5 [Internet]. <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>

**(CONFIDENTIAL)**

California Department of Conservation Division of Mines and Geology. August 2000. *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos*. <https://www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos>

California Environmental Quality Act, 1971 and as amended. <https://opr.ca.gov/ceqa/>

### **Federal**

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps.

<https://www.fema.gov/flood-maps>

United States Fish and Wildlife Service. Species list, IPAC. 2024. **(CONFIDENTIAL)**

## **4.0 List of Preparers**

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