Final Initial Study/Mitigated Negative Declaration

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County

SCH#2025090436

Department of Resource Recycling and Recovery (CalRecycle)

1001 I Street
Sacramento, CA 95812

December 2025

NCE

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NCE Project No. 870.04.55

Collaboration. Commitment. Confidence.℠

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Prepared for:

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Table of Contents

1 Introduction 1

1.1 CEQA Process 1

2 Comments Received on the Draft IS/MND and Responses 2

2.1 Introduction 2

2.2 Public Comments on the Draft IS/MND 2

3 Text Revisions to Public Review Draft IS/MND 11

4 Text Revisions to Public Review Draft MMRP 11

5 Public Review Draft IS/MND 20

1 Introduction

1.1 CEQA Process

Pursuant to Section 15085 of the California Environmental Quality Act (CEQA) Guidelines, CalRecycle submitted a Notice of Intent to Adopt (NOI), a Notice of Completion, and a Public Review Draft Initial Study/Mitigated Negative Declaration (IS/MND) to the California State Clearinghouse for the proposed CalRecycle Rotelli Burn Dump Remediation Project (Project) on September 10, 2025. In addition, and consistent with Section 15072 of the CEQA Guidelines, CalRecycle posted the NOI with the Tuolumne County Clerk. In accordance with Section 15105(b) of the CEQA Guidelines, the IS/MND and NOI were available for public review until October 10, 2025. In response to the publication of the IS/MND for public review, 3 agency comment letters were received. These comment letters are presented and responded to in this document, and the original letters are available for public review on any business day between 8:00 a.m. and 4:00 p.m. at CalRecycle's offices at 1001 I Street in Sacramento. Please contact Phillip Kovacs by email at phillip.kovacs@calrecycle.ca.gov if you would like to schedule review of the documents in person.

As discussed in the following section, the comments received did not identify any additional significant effect(s), any increase in the severity of an impact identified in the Draft IS/MND, or any significant new information. Consistent with CEQA Guidelines Section 15073.5, recirculation of the IS/MND is not required (CEQA Guidelines Section 15073.5).

2 Comments Received on the Draft IS/MND and Responses

2.1 Introduction

This section includes transcriptions of the comments received during the public review period on the Draft IS/MND and responses to those comments. Changes to the Draft IS/MND based on CalRecycle's consideration of public comments address substantive CEQA issues and are outlined in Section 3. The comments and responses plus the Public Review Draft IS/MND (as amended) comprise the Final IS/MND.

2.2 Public Comments on the Draft IS/MND

The following comments on the Project were submitted during public review of the IS/MND. Comments have been transcribed and are followed by technical responses to each comment. Each comment is assigned a unique identifier (i.e., coding). Comments and responses are ordered by sender affiliation and by date received.

2.2.1 State Agency Comments

Comment Letter S1: Department of Toxic Substances Control (DTSC), October 1, 2025

Comment S1-1

The Department of Toxic Substances Control (DTSC) reviewed the Mitigated Negative Declaration (MND) for the CalRecycle Rotelli Burn Dump Remediation Project (Project). The Project would remove surficial waste (if found to be present at the time of remediation) and excavate waste materials from 2 burn dump areas, consolidate the waste, and cap it with clean fill from an adjacent area. The Project Area is composed of 5 distinct areas: 1) Rotelli Primary Burn Dump Area (Primary Area), 2) Secondary Burn Dump Area (Secondary Area), 3) Borrow Area, 4) Consolidation Area, and 5) Construction Staging Area, as well as access roads and stream areas receiving improvement. At the start of remediation activities, the Primary Area, Secondary Area, Consolidation Area, and Borrow Area would be cleared and grubbed, and all trees would be removed. Transport of waste and clean soil within the Project Area would occur along the existing access roads between the Staging Area, Borrow Area, the 2 burn dump areas, and the Consolidation Area. The grading of the final soil cover would consist of an approximately 60-foot-wide by 200-foot-long flat area that slopes to the east at approximately 4 percent.

DTSC has reviewed the provided documents outlining the proposed activities by CalRecycle at a site adjacent to State Route 49 southwest of the City of Sonora in Tuolumne County known as the Rotelli Burn Dump on EnviroStor. The draft Initial Study/Mitigated Negative Declaration states: "The Project is proceeding according to the Burn Dump Protocol in coordination with the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB), who are providing regulatory oversight."

To clarify, DTSC has not been identified as the lead oversight agency for the Project. On July 18, 2024, DTSC received a Remediation Project Notification from CalRecycle in accordance with the Burn Dump Protocol describing the proposed activities. DTSC responded on August 15, 2024 requesting a site consultation to determine a lead agency and subsequently met with staff from CalRecycle and RWQCB on August 26, 2024. On August 27, 2024, DTSC requested additional information from CalRecycle for consideration. To date, a response to DTSC's request has not been received. As DTSC does not have the requested information, we cannot provide additional comments at this time. DTSC recommends continuing to work with DTSC and CVRWQCB, as necessary

under the Burn Dump Protocol to determine a lead agency and ensure the proposed activities are protective of human health and the environment.

Once a response to DTSC's request has been received, DTSC reserves the right to comment on any future circulated documents related to this Project based on our review or proposed or incorporated changes, measures, or project features. Furthermore, any development and/or activity should be discussed with DTSC moving forward. The contact for this site is Abraham Serrato. Abraham can be reached via phone (916) 2553657 or email.

DTSC would like to thank you for the opportunity to comment on the MND for the CalRecycle Rotelli Burn Dump Remediation Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions regarding these comments, please contact us via our CEQA Review email.

Response S1-1

The comment states that DTSC has not been identified as the lead oversight agency for the Project and was waiting for further information from CalRecycle that was requested on August 26, 2024. CalRecycle responded directly to DTSC's 2024 request for information in a letter, "Rotelli Burn Dump Remediation Project Consultation – Response to Request For Information," dated October 6, 2025. This response provided additional information regarding proposed cleanup levels, security, testing protocols during remediation, and deed restriction consistent with that discussed in the Initial Study, and provided the results of the requested radiation survey. A radiation survey was conducted on October 2, 2025; measured radiation levels at the Project site were within normal background radiation levels. More specifically, gamma radiation levels ranged from 3.9 microroentgen per hour (uR/hr) to 8.5 uR/hr. No additional measures for remediation are required based on these findings. The response simply provided further clarification of the existing conditions at the site which did not constitute a new potentially significant effect on the environment and therefore did not change the conclusions in the Initial Study.

Subsequent communications between CalRecycle and DTSC also confirmed that CalRecycle is the lead oversight agency for the Project. To clarify for this Final IS/MND, in addition to acting as a "lead agency" pursuant to the burn dump protocol noted above, CalRecycle is the lead agency for this Project pursuant to CEQA. Section 21067 of the Public Resources Code defines the lead agency for the purposes of CEQA as the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment. CalRecycle has caused this IS/MND to be prepared, consistent with that role, and DTSC was provided a copy of the IS/MND for review consistent with CEQA requirements as a potential responsible and/or interested public agency.

Comment S2: Department of Transportation (Caltrans), October 9, 2025

Comment S2-1

The California Department of Transportation (Caltrans) appreciates the opportunity to review and comment on the Rotelli Burn Dump Remediation Project Initial Study.

The proposed project site is located near Mill Villa Court adjacent to State Route 49 (SR-49), southwest of the City of Sonora (City) in unincorporated Tuolumne County. The Project Area is defined as the areas that would be disturbed by remediation activities or used for access. The Project Area is located predominately within 2 parcels

owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), and 056-020-027 (Smith), with a small part of the drainage crossing through the lower corner of APN 059-010-034 (Bureau of Land Management). Remediation access would further cross portions of APN 056-020-029 (Hattler) and Caltrans right of way (ROW) on the west side of SR 49.

Caltrans has the following comments:

Caltrans suggests that the California Department of Resources Recycling & Recovery (CalRecycle) continue to coordinate with Caltrans in identifying and addressing potential pedestrian safety and cumulative transportation impacts from this project and other developments near this location. This will assist Caltrans in ensuring that pedestrian, traffic safety, and quality standards are maintained for the traveling public on existing and future state transportation facilities in Tuolumne County.

Hydrology

The proposed development indicates a significant increase in impervious surface area, which will result in higher stormwater runoff. Any increase in runoff generated by the development must be managed onsite through appropriate storage or mitigation measures. Per Caltrans regulations, additional runoff shall not be discharged into the State ROW or cause significant disruption to existing drainage patterns.

Response S2-1

The comment provides introductory information related to Caltrans review of the Project, a request for future coordination related to pedestrian safety and transportation near the Project location, and concerns related to runoff associated with Project development.

Figure 3 of the IS/MND, page 9, identifies the location of the Caltrans ROW in relationship to the Project area. A small area in the northeast corner where the drainage is being restored encroaches into the ROW. With respect to future coordination with Caltrans, CalRecycle will coordinate with Caltrans where necessary and appropriate related to Project development/implementation. At a minimum, this will include interagency coordination regarding an encroachment permit for work within Caltrans ROW, as stated on page 12 of the Public Review Draft of the IS/MND.

With respect to hydrology, the majority of the Project site would remain unpaved following Project implementation and would be designed to minimize changes in stormwater flows and future erosion potential. As noted on page 14 of the IS/MND, implementation of the Project would include development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with National Pollutant Discharge Elimination System Requirements (NPDES). Consistent with these requirements, any additional stormwater flows would be detained/retained on-site in order to minimize potential off-site drainage impacts, including to Caltrans facilities. Existing stormwater facilities within the Project Area would be maintained/improved as part of the Project in order to enhance their function and ensure adequate performance into the future. As a result, no significant disruptions to existing drainage patterns would occur, consistent with the statements made in this comment.

Comment S2-2

Environmental

If there are any construction-related activities that will encroach into Caltrans ROW as a result of the project, the project proponent must apply for an Encroachment Permit with the Caltrans District 10 Encroachment Permit

Office. All California Environmental Quality Act (CEQA) documentation, including the final Initial Study with supporting technical studies, must be submitted with the Encroachment Permit Application. These studies may include an analysis of potential impacts to any cultural sites, historic properties, biological resources, hazardous waste/materials, scenic highways, and/or other environmental resources within Caltrans ROW, at the project site(s).

Evidence of consultation with local Native American tribes and interested parties will need to be presented within the technical documents for approval of encroachment in the Caltrans ROW. If any previously unknown cultural resources are discovered during construction in Caltrans ROW, all work must stop within a 100-foot radius of the discovery. The Caltrans D10 Environmental Office must be notified immediately. The Caltrans Professionally Qualified Staff (PQS) will investigate the discovery. No work shall resume within the 100-foot radius until authorized by the Caltrans PQS.

Response S2-2

The comment provides guidance in the event that an encroachment permit for the project is necessary. As noted on page 12 of the IS/MND and Figure 3 on page 9, CalRecycle anticipates that an encroachment permit will be necessary as part of the Project. As part of the encroachment permit application, CalRecycle will provide supporting information, including technical information related to cultural and tribal cultural resources, biological resources, hazards and hazardous materials, and scenic highways, as analyzed throughout the Initial Study. This will include CalRecycle records related to tribal consultation conducted to date in accordance with CEQA requirements. Although not anticipated, construction work would be halted in the event of discovery of cultural or tribal cultural resources at the site. Should that discovery occur within Caltrans ROW, appropriate Caltrans staff (as noted in this comment) would be notified. No further response is necessary.

Comment S2-3

There are mature trees within and/or near Caltrans ROW that could provide suitable nesting habitat. Mitigation Measure BIO-4 in the Initial Study describes the nesting season as February 1–September 1; however, Caltrans considers the nesting season to be between February 1–September 30. If work will occur between February 1 and September 30 of any year, a pre-construction bird survey must be conducted by a qualified biologist prior to the start of any construction related activities in Caltrans ROW. If an active nest is observed, a protective buffer must be established around the nest per CDFW guidelines. No work is allowed within the protective buffer limits until the young have fledged and until authorized by the Caltrans District 10 Environmental Office. Results of the pre-construction bird survey(s) must be provided to the Caltrans District 10 Environmental Office prior to the start of construction. If there are impacts to water resources within Caltrans ROW, Caltrans will need to review the correspondence with the permitting authorities (California Department of Fish and Wildlife [CDFW], United States Army Corps of Engineers, Regional Water Quality Control Board) and/or be provided copies of any required permits prior to the start of any construction in Caltrans ROW. If there are impacts to any special status species, critical habitat, or Essential Fish Habitat that exist within Caltrans ROW, evidence of consultation with CDFW, U.S. Fish & Wildlife Service, and/or National Marine Fisheries Service shall be provided to Caltrans with the Encroachment Permit application.

The results of any pre-construction surveys performed in Caltrans ROW must be provided to Caltrans for review prior to the start of any construction related activities.

Response S2-3

The comment provides information related to work within Caltrans ROW as it pertains to biological resources. As noted in the IS/MND, preconstruction surveys shall be conducted prior to initiation of construction activities, including those within Caltrans ROW. Should construction within Caltrans ROW be scheduled for initiation between September 1 and September 30, CalRecycle will conduct a preconstruction survey (per Mitigation Measure BIO-4) and provide the results to Caltrans, as appropriate. However, as construction is anticipated to require 6 weeks to complete, initiation of construction after September 1 is not anticipated at this time. CalRecycle will provide any information required as part of compliance with the encroachment permit to Caltrans in accordance with the terms of the encroachment permit and Caltrans regulations for work within Caltrans ROW.

In response to this comment, and in an abundance of caution, Mitigation Measure BIO-4 has been modified as follows:

> ***Mitigation Measure BIO-4***: If Project work must occur during the nesting season (February 1 – September ~~1~~ 30), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of remediation activities.
>
> If nesting birds are detected within the survey area during the survey, a protective, activity-free buffer shall be established around the nest. The buffer shall remain in place until the young have fledged the nest and a qualified biologist has determined the nest is no longer actively being used. The buffer shall be a minimum of 200 feet unless otherwise approved by a qualified biologist. A reduction in the size of the buffer may be deemed suitable based on-site conditions, species behaviors or other specific criteria determined by the qualified biologist. This measure would ensure that no nesting birds are impacted by remediation activities. If the nesting bird species is subject to special state or federal protections CDFW and USFWS consultations are recommended to ensure the nesting species is adequately protected.

Comment S2-4

Unpaved areas adjacent to the State Highway System may contain Aerially Deposited Lead (ADL) from past tail pipe emissions. Best Management Practices should be implemented when working in these areas. Any excess soil generated during the course of work in Caltrans ROW shall be redistributed on-site. If soil cannot be appropriately redistributed, then it must be tested and classified prior to transport out of Caltrans ROW for disposal. The Caltrans District 10 Environmental Office must be notified before any soil exceeding regulatory threshold is exported out of Caltrans ROW. The project must adhere to all local tree ordinances.

If you have any questions or concerns, please contact Dariana Villamil (209) 986-5762 (email: dariana.villamil@dot.ca.gov) or me [Gregoria Ponce] at (209) 639 -8832 (email: Gregoria.ponce@dot.ca.gov).

Response S2-4

With respect to on-site soils, the Project Area, including areas within Caltrans ROW, would be returned to pre-project conditions contours and topography upon completion of construction. This would include redistribution of soils where appropriate. At present, no excess soil is anticipated to be generated within Caltrans ROW, however, as noted above in Response S2-3, work within Caltrans ROW would comply with appropriate and applicable Caltrans regulations.

Tree removal within Caltrans ROW is not anticipated as part of the Project. As noted on page 37 of the IS/MND, up to 27 trees within the riparian corridor may be removed as part of the Project. Figure 5 of Appendix C identifies the trees within the Project area that would be removed, and none of these are identified in the Caltrans ROW. Further, as noted on page 38 of the IS/MND, local ordinances related to tree preservation would not apply to the Project. Under Section 9.24.040 of the County Code, the Project is exempt from the County ordinance regarding oak tree preservation because it involves construction for which a permit has been issued by a state agency (CalRecycle and CDFW).

Comment Letter S3: State Water Resources Control Board (SWRCB), October 10, 2025

Comment S3-1

Pursuant to the State Clearinghouse's 10 September 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the Request for Review for the Mitigated Negative Declaration for the CalRecycle Rotelli Burn Dump Remediation Project, located in Tuolumne County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, please visit our website:

http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation

Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification,

visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:
https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain an NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me [Peter Minkel] at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Response S3-1

The comment presents a summary of plans and regulations that fall within the purview of the Central Valley Water Board and may apply to the Project. The comment is noted but does not raise issues related to the adequacy of the environmental analysis presented in the IS/MND. No further response is necessary.

3 Text Revisions to Public Review Draft IS/MND

No revisions to the Public Review Draft IS/MND are necessary based on comments received. In addition, no new information has been acquired, and no new analysis has been conducted since issuance of the IS/MND on September 10, 2025, that would require revision of the IS/MND.

In an abundance of caution, at the request of Caltrans, Mitigation Measure BIO-4 has been modified as follows:

> ***Mitigation Measure BIO-4***: If Project work must occur during the nesting season (February 1 – September ~~1~~ 30), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of remediation activities.
>
> If nesting birds are detected within the survey area during the survey, a protective, activity-free buffer shall be established around the nest. The buffer shall remain in place until the young have fledged the nest and a qualified biologist has determined the nest is no longer actively being used. The buffer shall be a minimum of 200 feet unless otherwise approved by a qualified biologist. A reduction in the size of the buffer may be deemed suitable based on-site conditions, species behaviors or other specific criteria determined by the qualified biologist. This measure would ensure that no nesting birds are impacted by remediation activities. If the nesting bird species is subject to special state or federal protections CDFW and USFWS consultations are recommended to ensure the nesting species is adequately protected.

4 Text Revisions to Public Review Draft MMRP

As noted above in Section 3, Mitigation Measure BIO-4 was revised at the request of Caltrans. The MMRP has been updated with the same change and a copy of the Final MMRP is set out below.

Mitigation Measure	Mitigation Activities	Implemented By	Monitored By	Timing and Frequency	Verification of Compliance
BIO-1	The following general conservation measures shall be implemented by CalRecycle during remediation activities to protect wildlife species and their habitats: • Areas for fuel storage, refueling and servicing of equipment shall be located in an upland location outside of delineated aquatic resources. • Equipment washing areas shall be located in upland locations to ensure wash water does not flow into stream channels or wetlands. • All construction equipment shall be in good working condition, showing no signs of fuel or oil leaks. All motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals that are questionable shall be replaced. The mechanical equipment shall be inspected daily to ensure no leaks. Any leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of remediation activity. • Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a release or spill occurs from the mechanical equipment, no additional work using that equipment shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) if spill materials reach the waterway, CDFW, CVRWQCB, and CalRecycle have been notified. • To avoid debris contamination into drainages and other aquatic resources, silt fencing or other sediment control devices shall be placed around remediation activities in these areas to contain spoils from excavation activities. • Due to the potential for SSS to occur or move through or into the Project Area, an on-site biological monitor shall be present during initial ground disturbance and tree removal, and at least weekly thereafter. Equipment operators and crews shall be trained to, at a minimum, check the ground	Contractors	CalRecycle	Throughout remediation	Verified by: Date:

	beneath all equipment and stored materials each morning prior to work activities and during earth disturbing activities to prevent take of SSS. All pipes or tubing with diameter 4 inches or larger shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering at night. All trenches and other excavations shall be backfilled the same day they are opened or shall have an exit ramp built into the excavation to allow animals to escape. SSS identified on the site we be allowed to leave the area on their own accord, or an appropriate no-activity buffers surrounding the SSS determined by the qualified biologist will be implemented. • Environmental Awareness Training shall be presented to all personnel working in the field in the proposed Project Area. Training shall consist of a brief presentation in which biologists who have knowledge of endangered species biology and legislative protection shall explain SSS concerns. Topics to be discussed include the biology of the SSS that may be encountered in the Project Area, their habitat needs, their identification, their status under the CESA and ESA, and any relevant protection measures. As part of the training, an environmental awareness handout will be provided to all personnel that describes the SSS at the site, including photographs, and lists applicable permit conditions identified by local, state, and federal agencies to protect these resources. If any Project personnel are added to the proposed Project, they shall receive the mandatory training before starting work. • Project Area boundaries shall be clearly delineated by stakes and/or flagging to minimize inadvertent degradation or loss of adjacent habitat areas during Project operations. Staff and/or contractors shall post signs and/or place fencing around portions of the Project Area as necessary to restrict access of vehicles and equipment unrelated to Project operations. Access to the Project Area by unauthorized vehicles and equipment shall remain restricted by the gate at the main entrance off SR-49 (primary gate) and an				

	additional gate (secondary gate) along with fencing for the Rotelli Primary Burn Dump Area. • To avoid entanglement of wildlife, CalRecycle shall not use plastic mono-filament netting, jute netting, or any material with cross joints that are bound/stitched (such as that found in straw wattles/fiber rolls and some erosion control blankets) on the Project Area for any purpose. CalRecycle shall ensure that all fiber rolls and erosion control blankets or netting are made of loose-weave mesh that is not fused at the intersections of the weave, such as coconut (coir) fiber, or other products without welded weave. CalRecycle shall cover the edges of erosion control blankets or netting with soil, sandbags, or similar materials to prevent wildlife from crawling underneath the material and becoming entrapped.				
BIO-2	A qualified botanist shall conduct protocol-level field surveys to identify populations of special-status plant species within the site prior to the initiation of any remediation activities. These surveys shall coincide with the appropriate flowering periods of the special-status plant species that have potential to occur in the Project Area. If any population(s) of special-status plant species is identified directly adjacent to the Project Area, a qualified biologist retained by CalRecycle shall clearly delineate the location of the plant population and install protective fencing between the disturbance zone and the population to ensure that the population is adequately protected. CalRecycle shall consult with CDFW and USFWS to determine the appropriate measures to avoid or mitigate for impacts to the species or population. CalRecycle shall adjust the boundaries of the disturbance zone where feasible to avoid impacts to the plant species/population. The special-status plant species that shall be surveyed for are listed below with their flowering season. These species have been identified as having potential to occur within the Project Area. • beaked clarkia (*Clarkia rostrata*), flowering period: April - May	Qualified botanist Contractors and/or CalRecycle	CalRecycle	Prior to and during remediation during the flowering periods of the special-status plant species that have potential to occur in the Project Area	Verified by: Date:

	• Mariposa cryptantha (*Cryptantha mariposae*), flowering period: April - June • red hills cryptantha (*C. spithamaea*), flowering period: April - May • yellow-lip pansy monkeyflower (*Diplacus pulchellus*), flowering period: April - July • tansy-flowered woolly sunflower (*Eriophyllum confertiflorum* var. *tanacetiflorum*) , flowering period: May - July • Tuolumne button-celery (*Eryngium pinnatisectum*), flowering period: May - August • spiny-sepaled button-celery (*E. spinosepalum*), flowering period: April - June • Kings River monkeyflower (*Erythranthe acutidens*), flowering period: April - July • Gray's monkeyflower (*E. grayi*), flowering period: May - July • small-flowered monkeyflower (*E. inconspicua*), flowering period: May - June • serpentine bluecup (*Githopsis pulchella* ssp. *serpentinicola*), flowering period: May - June • delicate bluecup (*G. tenella*), flowering period: April - June • Parry's horkelia (*Horkelia parryi*), flowering period: April - June • Tuolumne iris (*Iris hartwegii* ssp. *columbiana*), flowering period: May - June • foothill jepsonia (*Jepsonia heterandra*), flowering period: August - December • Layne's ragwort (*Packera layneae*), flowering period: April - August • Michael's rein orchid (*Piperia michaelii*), flowering period: April - August • Hernandez bluecurls (*Trichostema rubisepalum*), flowering period: June - August Where avoidance of such impacts is not feasible, CalRecycle shall implement 1 or more of the following measures: • Transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, 2 additional plants				

	shall be planted for a total of 3. Plantings shall be managed and monitored and shall survive to 5 years after planting. • Seed or purchase plants and place them in an area adjacent to the disturbance zone. • Purchase credits at an approved mitigation bank at a ratio approved by CDFW, USFWS, and CalRecycle.				
BIO-3	In order to prevent impacts to, or mortality of individual special-status amphibians or reptiles, CalRecycle shall retain the services of a qualified biologist approved by CDFW and USFWS. The qualified biologist shall implement the following standard USFWS mitigation and avoidance measures: • Preconstruction surveys before remediation activities for CRLF and FYLF shall be completed within 48 hours prior to commencement of any earth-moving activity, remediation, or vegetation removal within the Project Area, whichever comes first. The preconstruction survey shall include 2 nights of nocturnal surveys in areas of suitable habitat before any remediation activities should occur. • If any CRLF and FYLF are encountered during the preconstruction surveys, the findings shall be reported to CDFW and USFWS to determine what, if any, further actions must be followed to prevent possible take of this species before remediation begins and if required by CDFW, CalRecycle shall obtain an Incidental Take Permit prior to remediation activities resuming. Any actions taken in regard to this species will follow the measures outlined in the Incidental Take Permit. • Prior to the commencement of Project activities, remediation work areas in or near special-status amphibian habitat shall be fenced in a manner that prevents equipment and vehicles from entering adjacent habitat areas. Vegetation removal or excavation needed to install the exclusionary fencing may occur first. A qualified biologist, in consultation with CalRecycle, USFWS, and CDFW, shall assist in determining the boundaries of the area to be fenced and the type of exclusionary fencing, and direct the installation of the fence. Exclusionary fencing shall be at least 24 inches in height, buried at least 6 inches	Qualified biologist Contractors and/or CalRecycle	CalRecycle	Prior to and during remediation	Verified by: Date:

	below the ground surface, reinforced with compacted soil against the bottom edge on both sides, and shall be permanent enough to ensure that it remains in good condition throughout the duration of Project activities. The exclusionary fencing shall be inspected daily, and any necessary maintenance or repairs of the fence shall be implemented immediately. All workers shall be advised that equipment and vehicles must remain within the fenced work areas. • Clearance surveys for special-status amphibians shall occur daily in the work area, especially along the interface between open space and remediation areas. If CRLF are found within the fenced work area, activities shall cease until the CRLF moves outside of the work area on its own volition. • A qualified biologist shall be present during all vegetation removal and ground disturbing activities immediately adjacent to or within habitat that supports CRLF or FYLF. • Prior to placement of any fill, the qualified biologist shall visually survey the area for CRLF and FYLF. • If any CRLF or FYLF are found in a remediation area where fencing was deemed unnecessary, work shall cease until the CRLF or FYLF moves of its own volition. The qualified biologist, in consultation with CDFW and USFWS, shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the qualified biologist. • Any CRLF or FYLF found during clearance surveys will be allowed to move outside of the work are on their own volition. • The qualified biologist shall have the authority to stop all activities until appropriate corrective measures have been completed. • Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when special-status amphibians may be present. Because special-status amphibians are often most actively foraging and dispersing during dusk and dawn, all activities shall				

	cease 30 minutes before sunset and shall not begin prior to one half hour before sunrise. • Traffic speed shall be maintained at 5 miles per hour or less in the work area.				
BIO-4	If Project work must occur during the nesting season (February 1 – September 30), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of remediation activities. If nesting birds are detected within the survey area during the survey, a protective, activity-free buffer shall be established around the nest. The buffer shall remain in place until the young have fledged the nest and a qualified biologist has determined the nest is no longer actively being used. The buffer shall be a minimum of 200 feet unless otherwise approved by a qualified biologist. A reduction in the size of the buffer may be deemed suitable based on-site conditions, species behaviors or other specific criteria determined by the qualified biologist. This measure would ensure that no nesting birds are impacted by remediation activities. If the nesting bird species is subject to special state or federal protections CDFW and USFWS consultations are recommended to ensure the nesting species is adequately protected.	Qualified biologist	CalRecycle	Prior to remediation	Verified by: Date:
BIO-5	A qualified biologist shall conduct a habitat assessment and survey of the Project Area and vicinity for special-status bats and common bats. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if (a) presence of bats is presumed, or documented during the surveys in trees with suitable bat	Qualified biologist	CalRecycle	Prior to and during tree removal	Verified by: Date:

	habitat, and removal using the 2-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 – April 15 or September 1 – October 15, or (b) after a qualified bat biologist, after first receiving written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats. • The 2-step tree removal shall be conducted over 2 consecutive days, as follows: o The first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting the 2-step tree removal process, the limbs and branches shall be removed from the tree using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided. o The second day, the entire tree shall be removed.				
BIO-6	Prior to remediation, CalRecycle shall obtain a USACE Section 404 CWA permit, CVRWQCB Section 401 Water Quality Certification, and CDFW Section 1602 Lake and Streambed Alteration Agreement for temporary and permanent impacts to waters of the U.S. and State. CalRecycle shall comply with all mitigation measures and requirements established in these permits.	CalRecycle	CalRecycle	Permits prior to remediation, and implement mitigation measures prior to, during and after remediation.	Verified by: Date:

5 Public Review Draft IS/MND

NOTICE OF INTENT TO ADOPT

AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

This is to advise that pursuant to Title 14 of the California Code of Regulations (CCR), §§ 15070 and 15071, the California Department of Resources Recycling and Recovery (CalRecycle), acting as Lead Agency, has prepared this Initial Study/Negative Declaration (IS/MND) for the project described below.

Project Name: CalRecycle Rotelli Burn Dump Remediation Project

Project Location: The Project is located near Mill Villa Court adjacent to SR-49, southwest of the City of Sonora in unincorporated Tuolumne County. The Project Area is defined as the areas that will be disturbed by construction activities or used for construction access. The Project Area is predominately within 2 parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), and 056-020-027 (Smith), with a small part of the drainage crossing through the lower corner of APN 059-010-034 (Bureau of Land Management). Construction access would further cross portions of APN 056-020-029 (Hatler) and Caltrans right-of-way on the west side of SR-49.

Lead Agency Name and Address:

Department of Resources Recycling and Recovery (CalRecycle)
1001 I St, MS 10A
P.O. Box 4025
Sacramento, CA 95814

As mandated by Title 14 CCR § 15105(b), the minimum public review period for this document is 30 days. Prior to project approval, CalRecycle will consider all written comments regarding this proposed IS/MND that are received during the public review period; 30 days from the date of filing this document with the State Clearinghouse.

The proposed IS/MND is available for public review during regular business hours at the following locations:

- Tuolumne County Community Development Department, 48 Yaney Ave., 4th Floor, Sonora, CA 95370
- California Environmental Protection Agency, 1001 I Street, Second Floor Library, Sacramento, CA 95814

In addition, the IS/MND is available for public review on a CalRecycle webpage at https://www2.calrecycle.ca.gov/PublicNotices/

Project Description: The Project involves the removal and disposal of surficial waste and the excavation of waste materials (waste, ash, and contaminated soil) from two areas (main Primary area and minor Secondary area) that are either within or adjacent to two ephemeral drainages. The excavated waste will be consolidated in another location within the burn dump footprint and then capped with 2 feet of clean soil from a Borrow area to achieve final cover grades that are less steep than before. The areas within the two ephemeral streams that would be impacted by waste excavation would be remediated and restored.

Statement of Findings: In accordance with the requirements of the California Environmental Quality Act (CEQA), an IS/MND has been prepared for this project. CalRecycle has reviewed the project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the Project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. CalRecycle prepared and hereby proposes to adopt a Initial Study/Mitigated Negative Declaration for this project.

Public Review: A 30-day public review period for the IS/MND will commence on September 10, 2025 and will end on October 10, 2025 for interested parties and public agencies to submit written comments on the document.

Written comments may be submitted to:

Mark de Bie
Deputy Director
Waste Permitting, Compliance, and Mitigation Division
Department of Resources Recycling and Recovery (CalRecycle)
P.O. Box 4025, MS 10A
Sacramento, CA 95814

Or mark.debie@calrecycle.ca.gov

No public hearing will be held for the proposed project.

Signature of Lead Agency Representative

Mark deBie Digitally signed by Mark deBie Date: 2026.02.06 13:10:02 -08'00'

Date: _____

Mark de Bie
Deputy Director
Waste Permitting, Compliance, and Mitigation Division

PUBLIC REVIEW DRAFT



Initial Study/Mitigated Negative Declaration

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County

September 2025

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County

Initial Study/Mitigated Negative Declaration

Prepared for:

Department of Resource Recycling and Recovery (CalRecycle)
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MITIGATED NEGATIVE DECLARATION

California's Department of Resources and Recovery (CalRecycle), does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Project Name: CalRecycle Rotelli Burn Dump Remediation Project

Project Location: The Project is located near Mill Villa Court adjacent to SR-49, southwest of the City of Sonora in unincorporated Tuolumne County. The Project Area is defined as the areas that will be disturbed by construction activities or used for construction access. The Project Area is predominately within 2 parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), and 056-020-027 (Smith), with a small part of the drainage crossing through the lower corner of APN 059-010-034 (Bureau of Land Management). Construction access would further cross portions of APN 056-020-029 (Hattler) and Caltrans right-of-way on the west side of SR-49.

Project Description: The Project would remove surficial waste and excavate waste materials (waste, ash, and contaminated soil) from both a Primary and Secondary burn dump area, consolidate the waste in a Consolidation area, and cap it with clean fill from a soil Borrow area. Two ephemeral streams in the waste zones would be remediated and restored.

Findings: CalRecycle has reviewed the project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects CalRecycle's independent judgment and analysis as Lead Agency. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

Mitigation measures necessary to avoid the potentially significant effects on the environment are included in the attached Initial Study, which is hereby incorporated and fully made part of this Mitigated Negative Declaration. CalRecycle has hereby agreed to implement each of the identified mitigation measures which would be adopted as part of the Mitigation Monitoring and Reporting Plan.

This Mitigated Negative Declaration has been prepared pursuant to Title 14, Section 15070 of the California Code of Regulations.

Copies are also available for review at the CalRecycle Department of Resources and Recovery, 1001 I Street Sacramento, CA 95812.

Mark de Bie
CalRecycle Waste Management Deputy Director

Mark deBie
Digitally signed by Mark deBie
Date: 2026.02.06 13:09:07 -08'00'

If you need this document presented in an alternative format,

please contact:

Phillip Kovacs

(916) 341-6620

phillip.kovacs@calrecycle.ca.gov

Table of Contents

Executive Summary ..... **i**

1 Project Information **1**

2 Introduction **3**

2.1 Focus of the Environmental Review 3
2.2 Summary of Findings 3
2.3 Required Permits and Additional Approvals 4
2.4 Lead Agency Determination 5

3 Project Description **6**

3.1 Project Location 6
3.2 Background 6
3.3 Project Objectives 10
3.4 Project Features 11
3.5 Project Approvals 12
3.6 Remediation Schedule 13
3.7 Construction Controls 13

4 Environmental Evaluation **16**

4.1 Aesthetics 17
4.2 Agricultural and Forestry Resources 20
4.3 Air Quality 22
4.4 Biological Resources 25
4.5 Cultural Resources 39
4.6 Energy 42
4.7 Geology and Soils 43
4.8 Greenhouse Gas Emissions 49
4.9 Hazards and Hazardous Materials 53
4.10 Hydrology and Water Quality 56
4.11 Land Use and Planning 61
4.12 Mineral Resources 62
4.13 Noise 64
4.14 Population and Housing 66
4.15 Public Services 67
4.16 Recreation 69
4.17 Transportation 70

4.18 Tribal Cultural Resources 72
4.19 Utilities and Service Systems 75
4.20 Wildfire 77
4.21 Mandatory Findings of Significance 80
5 Mitigation Monitoring and Reporting Plan 83
6 References 90

List of Figures

Figure 1. Project Vicinity Map 7
Figure 2. Project Detail Map 8
Figure 3. Parcel Map 9
Figure 4. Very High Fire Hazard Severity Zones 77

List of Tables

Table 1. Anticipated Projected Emissions – Pounds Per Day Without Mitigation 24
Table 2: Anticipated Projected GHG Emissions – Pounds Per Day Without Mitigation 51
Table 3. Mitigation and Monitoring Plan 84

List of Appendices

Appendix A

Remediation Plans

Appendix B

Air Quality Calculations

Appendix C

Biological Resources Technical Memorandum

Appendix D

Aquatic Resources Delineation

Appendix E

Cultural Resources Technical Memorandum

Executive Summary

The Department of Resources Recycling and Recovery (CalRecycle) proposes implementing the CalRecycle Rotelli Burn Dump Remediation Project (Project). CalRecycle has been designated as Lead Agency under the California Environmental Quality Act (CEQA). The Project is proceeding according to the Burn Dump Protocol in coordination with the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (CVRWQCB), who are providing regulatory oversight. The Project is intended to reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed burn waste at the closed Rotelli Burn Dump (Dump) in unincorporated Tuolumne County. This would be accomplished by excavating and consolidating waste and then covering the area with soil and revegetating the area.

Project Description

The proposed Project is located near Mill Villa Court adjacent to State Route 49 (SR-49), southwest of the City of Sonora (City) in unincorporated Tuolumne County. The Project Area is defined as the areas that would be disturbed by remediation activities or used for access. The Project Area is located predominately within 2 parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), and 056-020-027 (Smith), with a small part of the drainage crossing through the lower corner of APN 059-010-034 (Bureau of Land Management). Remediation access would further cross portions of APN 056-020-029 (Hattler) and Caltrans right-of-way on the west side of SR-49.

The Project would remove surficial waste (if found to be present at the time of remediation) and excavate waste materials from 2 burn dump areas, consolidate the waste, and cap it with clean fill from an adjacent area. The Project Area is composed of 5 distinct areas: 1) Rotelli Primary Burn Dump Area (Primary Area), 2) Secondary Burn Dump Area (Secondary Area), 3) Borrow Area, 4) Consolidation Area, and 5) Construction Staging Area, as well as access roads and stream areas receiving improvement. At the start of remediation activities, the Primary Area, Secondary Area, Consolidation Area, and Borrow Area would be cleared and grubbed, and all trees would be removed. Transport of waste and clean soil within the Project Area would occur along the existing access roads between the Staging Area, Borrow Area, the 2 burn dump areas, and the Consolidation Area. The grading of the final soil cover would consist of an approximately 60-foot-wide by 200-foot-long flat area that slopes to the east at approximately 4 percent. The side slopes of the final cover would be between 3:1 and 3.5:1 horizontal to vertical (H:V). After placement and compaction of excavated burn waste and cover soil is completed, the final cover soil would be graded to achieve slope gradients of 3:1 H:V or less to promote positive drainage patterns and reduce erosion potential.

Following the placement of the final cover, the existing road near the southeastern corner of the Consolidation Area would be extended and reestablished on the final cover through the Consolidation Area. The portion of access road within the Consolidation Area would have a width of 16 feet and be resurfaced with an aggregate base. A ditch would be installed along the newly constructed access road that would direct stormwater runoff to the existing culvert (southern culvert) directly east of the Construction Staging Area that passes under the access road towards SR-49.

Stormwater improvements would include improvements to 2 existing ephemeral drainages that run through the existing waste limits. Within the Primary Area, after the waste is removed from the northernmost ephemeral drainage, the existing drainage would be reconstructed as a trapezoidal stream channel lined with rock-slope protection. At the downstream end of the north ephemeral drainage the entrance to the culvert (north culvert) would be reinforced with additional rock. This culvert also drains under SR-49. Erosion control measures such as fiber rolls and hydroseeding would be put in place. Within the Consolidation Area, a stabilized topsoil cover is proposed to help reduce the potential for erosive forces that could expose waste.

Within the Secondary Area, after the waste is removed from the ephemeral drainage, the drainage would be reestablished to its connection with the culvert draining to and under SR-49 (south culvert). The drainage would be covered with a temporary erosion control mat and hydroseeded with a native seed mix, unless otherwise directed by regulatory agencies during permitting. The existing drop inlet and culvert would be cleaned which also receives stormwater from the new roadside ditch extended from the Consolidation Area.

Potential Impacts

Based on the environmental evaluation performed for this Initial Study, the proposed Project would have:

- ***No Impact*** on Agricultural and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.
- ***Less Than Significant Impact*** on Aesthetics, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.
- ***Less Than Significant Impact with Mitigation Incorporated*** on Biological Resources.

Mitigation Measures

CalRecycle has agreed to implement the following mitigation measures to reduce Project impacts to a "Less than Significant" level:

- ***Mitigation Measure BIO-1*** would reduce general remediation impacts to protect wildlife species and their habitats to less than significant.
- ***Mitigation Measure BIO-2*** would reduce potentially significant impacts on special-status plants to less than significant by requiring CalRecycle to retain a qualified biologist to conduct protocol-level field surveys to identify populations of special-status plant species within the site prior to the initiation of any remediation activities.
- ***Mitigation Measure BIO-3*** would prevent impacts to, or mortality of individual special-status amphibians [California red-legged frog (CRLF) and foothill yellow-legged frog (FYLF)] or reptiles by requiring that CalRecycle retain a qualified biologist approved by California Department of

Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) to implement standard USFWS mitigation and avoidance measures.

- ***Mitigation Measure BIO-4*** would reduce impacts on migratory birds to less than significant by requiring CalRecycle to utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. If nesting birds are detected, consultation with CDFW and USFWS is recommended to establish acceptable avoidance or minimization measures, which could include the establishment of a suitable activity-free buffer around active nests/roosting sites.
- ***Mitigation Measure BIO-5*** would reduce impacts on special-status bats to less than significant by requiring that a qualified biologist survey the Project Area and vicinity for bats and any foraging or roosting habitat. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features. If suitable habitat trees are found, appropriate measures shall be taken to minimize impacts to roosting bats prior to tree removal.
- ***Mitigation Measure BIO-6*** would reduce impacts on aquatic resources to less than significant by requiring that CalRecycle obtain a U.S. Army Corps of Engineers (USACE) Section 404 CWA permit (Nationwide Permit 38 Cleanup of Hazardous and Toxic Waste), Central Valley Regional Water Quality Control Board (CVRWQCB) Section 401 Water Quality Certification, and CDFW Section 1602 Lake and Streambed Alteration Agreement for impacts to waters of the U.S. and State, and that they comply with all mitigation measures and requirements established in these permits.

List of Abbreviations

Abbreviation	Definition
AB	Assembly Bill
ADI	Area of Direct Impact
AII	Area of Indirect Impact
APCD	Air Pollution Control District
AOC	Area of Concern
APE	Area of Potential Effect
APN	Assessor's Parcel Number
ARD	Aquatic Resources Delineation Report
BLM	Bureau of Land Management
BMP	best management practice
BRA	Biological Resources Assessment
CAL FIRE	California Department of Forestry and Fire Protection
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of Sonora
CNDDB	California Natural Diversity Data Base
CO	Carbon monoxide
CO_2e	carbon dioxide equivalent
County	Tuolumne County

CRHR	California Register of Historical Resources
CRLF	California red-legged frog
CVRWQCB	Central Valley Regional Water Quality Control Board
dbh	diameter at breast height
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FYLF	foothill yellow-legged frog
H:V	ratio of horizontal to vertical
GWP	global warming potential
GHG	greenhouse gas
IPaC	Information for Planning and Consulting
IS	Initial Study
lbs	pounds
LEA	Local Enforcement Agency
LSA	Lake and Streambed Alteration
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MMRP	Mitigation Monitoring and Reporting Plan
MND	Mitigated Negative Declaration
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCE	Nichols Consulting Engineers
NHPA	National Historic Preservation Act
NPPA	Native Plant Protection Act

NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
Pb	lead
PM	particulate matter
PRC	Public Resources Code
Project	CalRecycle Rotelli Burn Dump Remediation Project
ROG	reactive organic gases
CVRWQCB	Central Valley Regional Water Quality Control Board
SB	Senate Bill
SMGB	State Mining and Geology Board
SO3	sulfur dioxide
SSS	special-status species
SWPPP	Storm Water Pollution Prevention Plan
TCAPCD	Tuolumne County Air Pollution Control District
TMDL	total maximum daily load
UBC	Uniform Building Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zones
VMT	vehicle miles traveled
WOUS	Waters of the United States

1 Project Information

Type of Information	*Project Details*
1. Project title:	CalRecycle Rotelli Burn Dump Remediation Project
2. Lead agency name and address:	Department of Resources Recycling and Recovery (CalRecycle) 1001 I Street Sacramento, CA 95812
3. Contact person and phone number:	Phillip Kovacs CalRecycle Waste Management Engineer (916) 708-6353 phillip.kovacs@calrecycle.ca.gov
4. Project location:	The Rotelli Burn Dump (Dump) is located North of Silver Pine Drive and west of State Route 49 (SR-49) in Tuolumne County on portions of Assessor's Parcel Numbers (APNs) 056-020-004, 056-020-027, and 059-010-034.
5. Project sponsor's name and address:	CalRecycle 1001 I Street Sacramento, CA 95812
6. General Plan designations:	Light Industrial
7. Zoning:	M-1 Light Industrial
8. Description of project:	The Project would remove surficial waste and excavate waste materials (waste, ash, and contaminated soil) from both a Primary and Secondary burn dump area, consolidate the waste in a Consolidation Area, and cap it with clean fill from a soil Borrow Area. Two ephemeral streams in the waste zones would be remediated and restored.
9. Surrounding land uses and setting:	Mixed land uses, including commercial and undeveloped properties. Bordered by undeveloped properties to the north, west, and south, and by SR- 49 to the east.
10. Other public agencies whose approval is required:	• U.S Army Corps of Engineers (USACE) • Central Valley Regional Water Quality Control Board (CVRWQCB) • California Department of Fish and Wildlife (CDFW) • U.S Fish and Wildlife Service (USFWS) • Tuolumne County

11. Have California Native American tribes traditionally and culturally affiliated with the Project Area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	The tribes were initially contacted regarding the Project on November 18, 2024, and follow-up emails were sent on December 2, 2024. The Chicken Ranch Rancheria of Me-Wuk Indians responded requesting consultation, however no response was received during attempts to schedule a consultation meeting on January 13, February 12, February 13, and February 14, 2025. Response details are provided in Section 4.18. The USACE conducted a separate outreach and consultation process pursuant to requirements of the National Historic Preservation Act Section 106.

2 Introduction

2.1 Focus of the Environmental Review

2.1.1 California Environmental Quality Act

The Department of Resources Recycling and Recovery (CalRecycle), as the Rotelli Burn Dump Remediation Project (Project) sponsor and California Environmental Quality Act (CEQA) Lead Agency, has prepared this Draft Initial Study (IS) pursuant to CEQA for the proposed Project. The Department of Toxic Substances Control (DTSC) and Central Valley Regional Water Quality Control Board (CVRWQCB) are providing regulatory oversight in accordance with the Burn Dump Protocol[1]. This Public Review Draft IS is an informational document provided to help the public and decision-makers understand the impact the Project may have on the environment, and how any potential adverse effects may be mitigated. This document describes potentially significant impacts that can be reduced to less than significant with the adoption of mitigation measures that are presented as a Mitigated Negative Declaration (MND) within this document.

The Notice of Intent to Adopt a Mitigated Negative Declaration provides notice to interested agencies and the public that it is CalRecycle's intent to adopt an MND and, pending public review, expects to determine from this IS that the proposed Project would not have a significant effect on the environment as mitigated. This Public Review Draft IS/MND is subject to modification based on comments received by interested agencies and the public.

2.2 Summary of Findings

Based on the environmental evaluation performed for this Initial Study, the proposed Project would have:

- ***No Impact*** on Agricultural and Forestry Resources, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.
- ***Less Than Significant Impact*** on Aesthetics, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.
- ***Less Than Significant Impact with Mitigation Incorporated*** on Biological Resources. The Project will implement Mitigation Measures BIO-1 through BIO-6 as described herein to reduce potential impacts to a Less than Significant level.

[1] A protocol developed by DTSC and State Water Control Board for site investigation and characterization of hazardous substances at burn dump sites. As part of the protocol, a site consultation meeting is held to determine the lead agency for remediation oversight.

2.3 Required Permits and Additional Approvals

2.3.1 Permits

The Project would obtain or comply with the following permits:

- Clean Water Act Section 404 Permit
- Clean Water Act Section 401 Water Quality Certification
- California Department of Fish and Game Code Section 1602 (Streambed Alteration Notification)
- California State Water Resources Control Board Construction General Permit Order 2009-0009-DWQ (2022-0057-DWQ on September 1, 2025)
- Potential Tuolumne County permits, as applicable

2.3.2 Responsible Agencies

- Department of Toxic Substances Control (DTSC)
- Central Valley Regional Water Quality Control Board (CVRWQCB)
- Tuolumne County

2.3.3 Trustee Agencies

- California Department of Fish and Wildlife (CDFW)

2.4 Lead Agency Determination

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.

X 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 (EIR) 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 EIR 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.

Mark deBie Digitally signed by Mark deBie
Date: 2025.08.26 12:51:24 -07'00'

Signature Date

Mark de Bie Deputy Director, Waste Permitting, Compliance and Mitigation Division

Name Title

3 Project Description

CalRecycle proposes implementing the Project as Lead Agency under CEQA and the Burn Dump Protocol, while DTSC and the CVRWQCB provide regulatory oversight in accordance with that same Burn Dump Protocol. The Project is intended to reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed burn waste at the closed Dump. This will be accomplished by excavating and consolidating waste followed by soil cover and revegetation of the area, as detailed in this section.

3.1 Project Location

The proposed Project is located near Mill Villa Court adjacent to SR-49, southwest of the City of Sonora (City) in unincorporated Tuolumne County (**Figure 1**). The Project Area is defined as the areas that will be disturbed by remediation activities or used for remediation access (**Figure 2**). The Project Area is predominately within 2 parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), and 056-020-027 (Smith), with a small part of the drainage crossing through the lower corner of APN 059-010-034 (Bureau of Land Management [BLM]). Remediation access would further cross portions of APN 056-020-029 (Hattler) and Caltrans right-of-way on the west side of SR-49 (**Figure 3**).

3.2 Background

The Rotelli Burn Dump (Dump; also called the Rotelli Private Dump, the Sonora Refuse Burn Dump, and the Sonora Refuse Dump) was historically used as a municipal dump site for Sonora area residents where waste was brought to be burned. The start of operation is unclear, though multiple local news sources report that the Rotelli family had established the site in the 1920s, and the dump closed its operation in 1965. Since the dump's closure and with permission from the Rotelli family, the area was then used as an encampment (named "Camp Hope") for transients.

The presence of transients along with illegal dumping at the Dump was first documented as an Area of Concern (AOC) by the Local Enforcement Agency (LEA) during routine inspections in 2004. Subsequent LEA inspections identified numerous violations, including litter control [Title 27, California Code of Regulations (27 CCR) § 20830], drainage and erosion issues (27 CCR § 20820), leachate control (27 CCR § 20790), grading of fill surfaces (27 CCR § 20650), final cover (27 CCR §§ 21140 and 21142), slope stability (27 CCR § 21145), security (27 CCR §§ 20530 and 21135), post-closure land use and maintenance (27 CCR §§ 20750 and 21190), and unpermitted structures (27 CCR § 21137).

The LEA requested assistance from CalRecycle to address the issues at the Dump in a letter dated August 6, 2020. CalRecycle and Tuolumne County (County) recognized that relocation of the transient population was a priority due to the exposed burn ash and other hazardous material from its historic use, as well as many other health and safety violations, and so the camp was removed in 2021. However, many transients continue to utilize or trespass through the area.



Figure 1. Project Vicinity Map

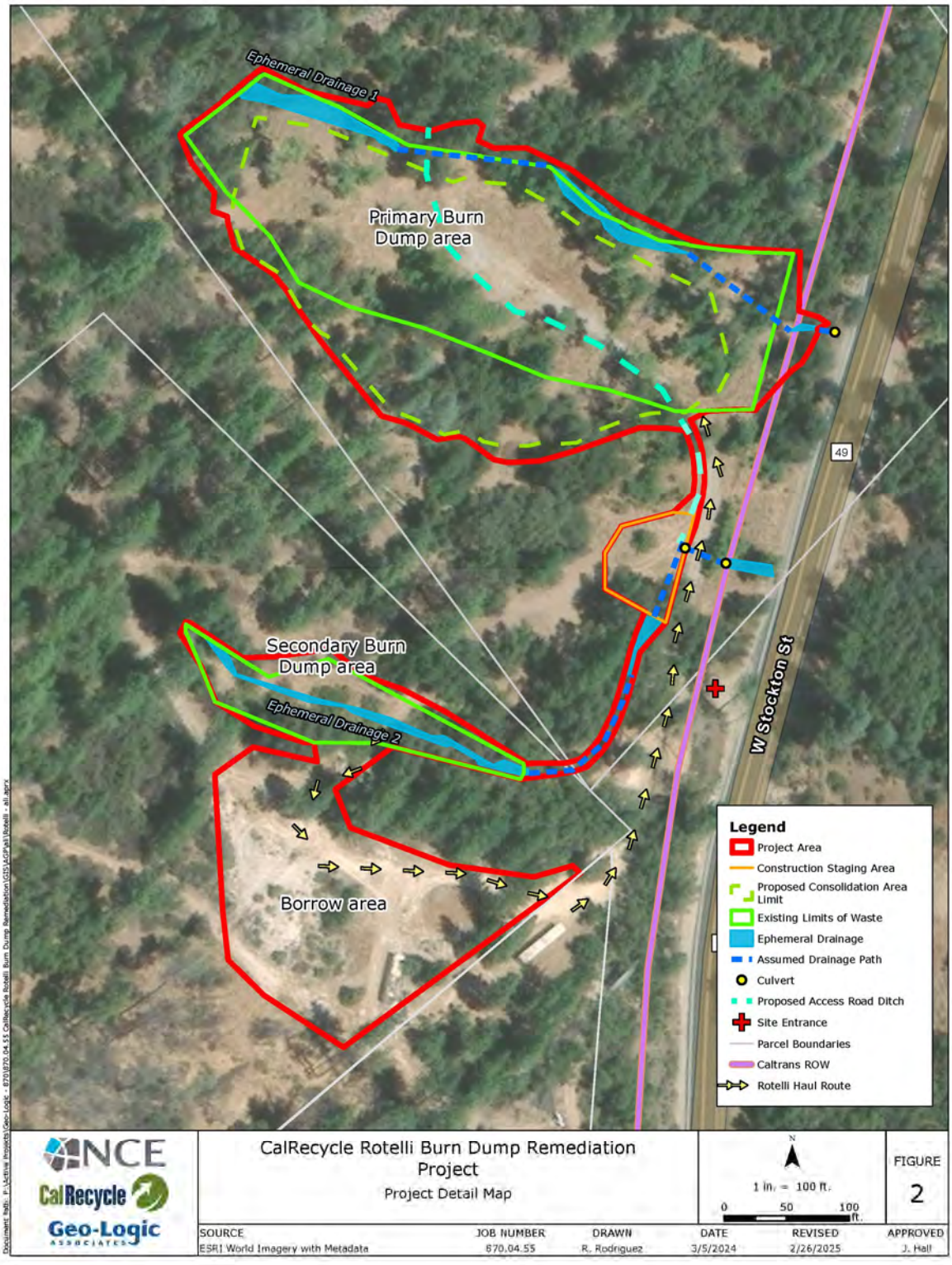


Figure 2. Project Detail Map



Figure 3. Parcel Map

To prevent illegal dumping and transient activity at the Dump, in 2022 CalRecycle installed chain-link fencing topped with barbed wire on the north, south, and west sides of the Project Area (aligning the property boundaries with the fencing where possible or practical) to restrict both pedestrian and vehicular access to the Project Area. As part of the fencing installation, CalRecycle removed surficial solid waste from the Project Area that had been generated by the previous transient encampments. At the start of the remediation activities, any solid waste found to be present from illegal dumping activities will be managed accordingly.

Two options for site remediation were evaluated to minimize the potential for future exposure to waste at the site (Geo-Logic Associates 2023). The first option was to "clean close" the site, which would require the owners to remove all waste from the site and decontaminate or remove all equipment, structures, and surrounding soils. The second option was to excavate a limited amount of burn waste from the north side of the Dump to create a stable and less steep slope and remove burn waste from the nearby private property. This burn waste would then be transported, consolidated, and compacted within the existing Dump footprint, followed by soil cover and revegetation. Due to the excessive cost of clean closure, CalRecycle chose to pursue the option of burn waste excavation, consolidation, and soil covering of waste as the remediation for the site.

3.3 Project Objectives

The objective of the proposed Project is to reduce the potential for environmental and public health and safety risks associated with steep, and potentially unstable slopes and exposed burn waste at the site, by bringing the site into compliance with CCR Title 27, Environmental Protection–Division 2, Solid Waste, and CalRecycle's Solid Waste Regulations and Codisposal Site Cleanup Program.

3.3.1 Existing Conditions

The approximately 3.35-acre Project Area contains burn waste, remnants of former quartz mining activities, and solid waste from the occasional occurrence of illegal dumping. Various forms of illegal grading, excavating, leveling, and historic mine alteration were also noted for the area in an "Opportunity to Correct" order issued by the Tuolumne County Environmental Health Division in 2021 prior to the discontinuation of the transient encampment.

The Project Area is accessed from the west side of SR-49 by way of a graded dirt road that is barred by a swing sentinel gate (primary entrance) and a gate in the perimeter chain-link fence (secondary entrance). A series of graded dirt roads cross the within and adjacent to the Project Area. The Project Area is currently characterized by 3 distinct existing areas within 2 parcels (056-020-004 and 056-020-027) - the Rotelli Primary Burn Dump Area, the Secondary Burn Dump Area, and a former mining area to be used as the Borrow Area - that are the primary focus of the Project (**Figure 2**). Other areas within these parcels, as well as adjacent parcel APN 059-010-34, would be used for construction equipment staging, waste consolidation, and drainage improvements as a part of the Project. The access road between the Rotelli Primary Burn Dump Area and the Secondary Burn Dump Area/Borrow Area traverses through a privately-owned parcel (APN 056-020-029) and Caltrans right-of-way (**Figure 3**).

The existing Rotelli Primary Burn Dump (Primary Area) and the proposed Consolidation Area are situated on steep slopes within parcel 056-020-004. The existing waste area is approximately 470 feet long, 135 feet wide, and up to 18 feet in depth (Geo-Logic 2023). It has an estimated footprint of 1.45 acres and

an estimated volume of approximately 8,400 cubic yards (± 75 cubic yards). The Primary Area includes a portion towards the west that drapes over an existing hillside and the remaining portion towards the east that partially occupies a drainage course. Wastes in the Primary Area, including the drainage, contain metal concentrations that exceed residential human health risk screening levels and State of California hazardous waste levels. While the site is partially fenced to restrict access, trespassing still occurs, and current site conditions may pose a health risk to anyone visiting the property. Observed waste in the drainage is also susceptible to mobilization and transport downstream, which feeds into the surface waters of Woods Creek.

The Secondary Burn Dump (Secondary Area) is located within parcel 056-020-027 and has a footprint of approximately 0.25 acres and an estimated volume of approximately 1,270 cubic yards (**Figure 2**). The waste area in this location straddles an ephemeral drainage and is located downhill and south of the Primary Area's southern boundary. The Secondary Area is connected by an access road to the Borrow Area. Illegal dumping is still occurring nearby on an intermittent basis, and it is possible that a portion of the waste observed is derived from both recent activities and mining operations.

The Project Area is characterized by 2 ephemeral drainages. One runs through the northern boundary of the Primary Area and flows to a culvert under SR-49. The other runs through the middle of the Secondary Area and flows through the Construction Staging Area to pipes under the access road and east to a culvert under SR-49 (**Figure 2**). Low quality non-native annual grassland, chaparral, coniferous forest, and ephemeral drainages within the survey area provide potential habitat for 18 special-status plant species, 2 special-status amphibian species, and 3 special-status mammal species.

Within the vicinity of the Project there is a mixture of land uses that include commercial and undeveloped properties. The Project Area is bordered by undeveloped properties to the north, west, and south and by SR-49 to the east and its Caltrans right-of-way. The closest developed use is a commercial business located approximately 300 feet southeast of the Project Area.

3.4 Project Features

The Project would remove surficial waste (if found to be present at the time of remediation) and excavate waste materials (buried waste, ash, and contaminated soil) from both the Primary and Secondary Areas, consolidating the waste in the Consolidation Area, and capping it with clean fill from the Borrow Area. At the start of remediation, the Primary Area, Secondary Area, Consolidation Area, and Borrow Area would be cleared and grubbed, and all 175 trees on site would be removed, including 95 oak trees. Illegally dumped solid waste would be sorted into separate recyclables, waste that is not readily compactible (i.e., tires, large bulky waste, etc.), and waste to be reconsolidated within the limits of the designated Consolidation Area. Recyclables and waste that are not readily compactible would be hauled to appropriate permitted facilities for final disposition. No hazardous waste is expected to be removed from the Project Area unless a significant radioactive source is discovered.

Burn waste materials would be excavated from both the Primary and Secondary Areas, consisting of approximately 1,300 cubic yards from the Secondary Area and 8,400 cubic yards from the Primary Area. The excavated material would then be transported to and disposed of within the designated 1.4-acre waste Consolidation Area located mostly within the Primary Area, but south of the northernmost drainage (**Figure 2**).

Transport of waste and clean soil within the Project Area would occur along the existing access roads (**Figure 2**). Clean soil would be removed from the Borrow Area and transported to the Consolidation Area. The existing slopes of the Borrow Area vary from approximately 3% to near vertical. The overall slopes of the hillside are 40%-60% while the "floor" of the borrow area has 3-16% grades. Post-construction the borrow area would have 2:1 slopes and a 3-15% "floor."

The grading of the final soil cover over the Consolidation Area would consist of an approximately 60-foot-wide by 200-foot-long flat area that slopes to the east at approximately 4 percent. The side slopes of the final cover would be between 3:1 to 3.5:1 horizontal to vertical (H:V). After placement and compaction of excavated burn waste and cover soil is completed, the final cover soil would be graded to achieve slope gradients of 3:1 H:V or less to promote positive drainage patterns and reduce erosion potential. Following the placement of the final cover, the existing road near the southeastern corner of the Consolidation Area would be extended through the Consolidation Area at a width of 16 feet resurfaced with an aggregate base. A ditch would be installed along the newly constructed access road that would direct stormwater runoff to the existing culvert (southern culvert) directly east of the Construction Staging Area that passes under the access road towards SR-49. Remediation plans are provided in **Appendix A.**

Stormwater improvements would include improvements to the existing ephemeral drainages that run through the existing waste limits. This surface stormwater drainage control system is designed to accommodate the anticipated precipitation from the 100-year, 24-hour storm event (design storm). Within the Primary Area, after the waste is removed from the existing northernmost drainage, it would be reconstructed as a trapezoidal stream channel lined with rock-slope protection. At the downstream end of the north drainage the entrance to the culvert (north culvert) would be reinforced with additional rock. This culvert also drains under SR-49. Erosion control measures such as fiber rolls and hydroseeding would be put in place. Within the Consolidation Area, a stabilized topsoil cover is proposed to help reduce the potential for erosive forces that could expose waste. Revegetating the final cover is planned to help prevent or minimize soil loss caused by wind and stormwater runoff erosion. Additionally, any areas disturbed by waste excavation or soil borrowing activities would be revegetated.

Within the Secondary Area, after the waste is removed from the ephemeral drainage, the drainage would be reestablished to its connection with the culvert to and under SR-49 (south culvert). The drainage would be covered with a temporary erosion control mat and hydroseeded with a native seed mix, unless otherwise directed by regulatory agencies during permitting. The existing drop inlet and culvert would be cleaned which also receives stormwater from the new roadside ditch extended from the Consolidation Area.

Vehicular parking, heavy equipment refueling, and the storage of equipment and remediation materials would be primarily within the designated Construction Staging Area, with some equipment storage in the Borrow Area as needed (**Figure 2**). No site lighting is anticipated. Dust control water would be obtained from an off-site source.

3.5 Project Approvals

- Project funding approval by CalRecycle
- Encroachment permit from Caltrans

- Access Agreement between CalRecycle and Hattler, parcel 056-020-029
- Access Agreement between CalRecycle and Smith, parcel 056-020-027
- Section 404 permit from the United States Army Corps of Engineers
- Section 401 permit from the Central Valley Regional Water Quality Control Board
- Section 1600 Stream Alteration permit from the California Department of Fish and Wildlife
- Potential Tuolumne County permits, as applicable

3.6 Remediation Schedule

Remediation is scheduled to take approximately 6 weeks, would occur outside the rainy season, and would involve the following:

- Week 1 - Mobilization/Clear Grub/Tree Felling/Stump Removal
- Week 2/3 - Waste Excavation and Relocation
- Week 3/4 - Final Cover Grading
- Week 5 - Permanent/Temporary Erosion Control Installation
- Week 6 - Hydroseed/Demobilization

3.6.1 Equipment and Labor Force

Various types of equipment would be needed to remediate the site. Equipment would include excavators, backhoes or front-end loaders, graders, dump trucks, and compactors (i.e., sheepsfoot roller, vibratory rolling compactor, etc.). Water trucks with a 2,000 to 4,000 gallon capacity would be used for dust control during remediation.

A skilled labor force would be required to complete this Project, such as civil/earthwork heavy equipment operators and laborers. The number of workers at the remediation site would vary based on the phase and complexity of remediation activities but are expected to range from 5 to 7.

Work would generally be completed during daylight hours, typically 7:00 a.m. to 6:00 p.m., or as specified by the County's Codes. During the 6-week remediation period, activities would generally be performed 5 days per week. Weekend work may occur occasionally depending on schedule. There would be no on-site temporary workforce housing, and parking of employee recreational vehicles or trailers would be prohibited.

3.7 Construction Controls

The Project would be required to comply with local, State, and federal regulations pertaining to the protection of human health, safety, and the environment. The following required construction controls from local, State, and federal agencies are incorporated into the Project design and are considered a part of the proposed Project. These standard controls have been adopted to reduce potential adverse effects from remediation activities as a part of the Project.

3.7.1 Geology and Soils

CalRecycle, as Lead Agency, is required to prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the CVRWQCB to comply with the National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Permit (Order No. 2009-0009-DWQ).

The purpose of the SWPPP is to protect soil and water resources from impacts during remediation, including groundwater. As part of the SWPPP, the contractor would be required to adhere to a Temporary Best Management Practices (BMP) Plan, a Spill Contingency Plan, and a Dewatering Plan approved by the CVRWQCB. The plan would designate BMPs to minimize impact from erosion and sedimentation. At a minimum, the following controls must be implemented:

- Place temporary erosion control devices downgradient of dirt piles, excavated areas, or stockpiles.
- Place coverings on all dirt piles during non-working hours.
- Install temporary fencing to protect existing vegetation where feasible.
- Revegetate disturbed areas to stabilize soil.
- Stabilize disturbed areas with mulch until vegetation is reestablished.
- Use controls for soil trackout to ensure compliance.

3.7.2 Greenhouse Gas Emissions and Green Energy

California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel-powered equipment regulations. The following practices must be incorporated to control exhaust emissions from diesel-powered equipment working at the remediation site:

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by 33 CCR 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- Use a CARB-approved low-carbon fuel for construction equipment (nitrogen oxide emissions from the use of low-carbon fuel must be reviewed and increases mitigated).

3.7.3 Hydrology and Water Quality

As discussed above, the Project must develop and implement a Project specific SWPPP, including a Temporary BMP Plan and a Spill Contingency Plan. The Temporary Drainage Diversion plan is conceptual and may differ from contractor's temporary diversion program. A Temporary Drainage Diversion plan has been prepared that requires the following conditions:

1. Contractor to provide sufficient conveyance for the ephemeral drainage
2. Additional conveyance capacity as necessary during storm events

3. Gravel bags to be filled with clean, washed gravel
4. Adequate energy dissipation be provided at bypass discharge point to prevent downstream erosion
5. Contractor to remove temporary diversion and restore site to final design conditions

These plans must outline measures that would protect hydrology and water quality resources, including groundwater, from negative impacts during remediation activities. The SWPPP would be prepared and submitted by a Qualified SWPPP Developer/Practitioner and reviewed and approved by the CVRWQCB.

4 Environmental Evaluation

The following sections evaluate the potential adverse impacts of the Project in compliance with CEQA. Appendix G of the CEQA Guidelines (California Natural Resources Agency 2025) provides a sample checklist with a series of questions designed to enable the lead agency to identify Project impacts with respect to 20 environmental topics; this IS generally follows this checklist.

Except where a specific threshold has been adopted by a public agency and is specified in the sections below (such as an air quality threshold), the values in Appendix G of the CEQA Guidelines are used as thresholds of significance for the CEQA checklist questions.

Potential environmental impacts are described as follows:

- **Potentially Significant Impact**: An environmental impact that could be significant and for which no feasible mitigation is known. If any potentially significant impacts are identified in this Checklist, an EIR must be prepared.
- **Less than Significant Impact with Mitigation Incorporated**: An environmental impact that requires the implementation of mitigation measures to reduce that impact to a less than significant level.
- **Less than Significant Impact**: An environmental impact may occur; however, the impact would not exceed significance thresholds.
- **No Impact**: No environmental impacts would result from implementation of the Project.

4.1 Aesthetics

4.1.1 Environmental Setting

The Project Area lies just outside the City of Sonora. Views in the area are dominated by hilly terrain, trees, and roadways. The site is approximately 60 feet west of SR-49, which is eligible to be included in the State Scenic Highway System. Views from SR-49 to the west are obscured by hilly terrain and trees.

The Project's vicinity includes mostly undeveloped properties, with 1 commercial site approximately 450 feet to the southeast on the other side of SR-49. The site is bordered by undeveloped properties to the north, west, and south and by Caltrans SR-49 right-of-way to the east. The site itself is hilly, scarred by former dump and historic mining activities, and trash.






4.1.2 CEQA Checklist Summary

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

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

4.1.3 Answers to CEQA Checklist Questions

Except as provided in Public Resources Code Section 21099:

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

No Impact

The proposed Project would not interfere with scenic vistas or damage any scenic resources. While SR-49 is eligible as a scenic highway, the highway adjacent to the site is bordered by steep slopes and the site is obscured by terrain and mature trees between the highway and the Project Area. Although the Project would reduce the number of trees within the Project Area, the Project would not remove trees on the slopes facing the highway and therefore would not alter scenic views or vistas from the vantage point of SR-49.

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

Less than Significant Impact

SR-49 adjacent to the Project Area is considered eligible as a scenic highway. The proposed Project does not propose any improvements to SR-49 or within 25 feet of SR-49, and the Project Area is not visible from the highway due to terrain and trees. Almost all remediation activities would occur at least 60 feet from the highway.

The proposed Project Area has no rock outcroppings, historic structures (see Section 4.5, below), or other scenic resources. However, 175 trees would be removed as a part of the Project, including 95 oak trees. However, the loss of trees would not be visible from SR-49 or affect the views of residents, businesses, or drivers. After remediation, the Project would hydroseed the site with native plant seeds

to promote the growth of new vegetation. CDFW will also require the mitigation of 27 trees identified within the riparian zone of the ephemeral drainages at a ratio up to 1:3.

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

Less Than Significant Impact

Remediation of the burn dump would remove surficial waste and debris, as well as all existing trees and vegetation from the Project Area where ground disturbance is planned. The loss of vegetation would be a temporary impact as the site would be hydroseeded and the ephemeral drainages would ultimately recover from the removal of waste materials. Tree coverage between the Project Area and SR-49 would not be changed. As discussed in (a) above, the Project would not interfere with scenic vistas or damage scenic resources. Due to tree coverage and grade changes between the Project Area and SR-49, the Project would not degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the Project would have a less than significant impact on the character or quality of public views of the site and its surroundings. Once remediation is completed, and the site restored with native vegetation over time, there will be a long-term visual improvement on the site itself as native vegetation matures on the site.

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

No Impact

No new lighting such as streetlights, or sources of glare such as road signs, are proposed as part of the Project; therefore, there would be no impact on day or nighttime views in the area.

4.2 Agricultural and Forestry Resources

4.2.1 Environmental Setting

The Project Area is zoned as M-1 in the Tuolumne County Zoning Code (Tuolumne County 2024) and Light Industrial in the Tuolumne County General Plan (Tuolumne County Community Resources Agency 2018) and is currently vacant. There is agricultural zoning to the west of the Project Area on land owned by the BLM.

4.2.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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

4.2.3 Answers to CEQA Checklist Questions

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

No Impact

The Project is not located in an area of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) and is mapped as grazing land, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency (California Department of Conservation 2022). The site is currently undeveloped and was previously used for mining and then as a burn dump; therefore, the Project would not convert farmland to non-agricultural use and would have no impact.

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

No Impact

There are no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance in the vicinity, and there are no Williamson Act contracts in the vicinity or on the site. Adjacent properties are zoned rural and homestead residential, public, and neighborhood commercial. The Project Area is not zoned for agriculture and is not under a Williamson Act contract, thus there would be no conflict.

c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code (PRC) § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

No Impact

There are no forestland or timberland land uses or zoning designations in the Project vicinity. Therefore, the Project does not have the potential to conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

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

No Impact

Refer to response 4.2.3(c). The Project would not result in the loss of forest land or the conversion of forest land to non-forest use.

e) Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact

Refer to responses 4.2.3(a-d). The Project would reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed waste and would not include work within agriculture zoned parcels. The site is currently undeveloped and zoned for light industrial use, although there are adjacent rural residential properties that may include small agricultural uses. Remediation of the site would protect adjacent properties from airborne waste migrating outside the Project Area and eliminate any future need for conversion, should that land be farmed, due to contamination from the Project Area. The Project would not result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

4.3 Air Quality

4.3.1 Environmental Setting

The Project is located approximately 1 mile south of the City of Sonora on SR-49. The Project would remediate a former burn dump to protect water quality and stabilize the site. About 9,700 cubic yards of material would be excavated and placed in a new waste disposal area. For the assessment of potential impact from the Project on air quality, the work on this Project is assumed to occur during the dry part of the year and take approximately 6 weeks to complete.

The Project is located in the Mountain Counties Air Basin as designated by the CARB. The Project is in a rural area with scattered homes and businesses within ½-mile of the site. The City of Sonora, home to approximately 5,000 people, lies approximately 1 mile northeast of the site.

The climate of the area is Mediterranean, with cool wet winters and warm dry summers. Winds in the area are generally light, but storms can sweep in with winds gusting up to 40 miles per hour. Winds in Sonora tend to be from the west and northwest.

4.3.2 Regulatory Setting

Air Quality Standards

Air quality in the Project Area is regulated by several agencies. Primary responsibility for air quality is held by the Tuolumne County Air Pollution Control District (TCAPCD) with support from the United States Environmental Protection Agency (EPA) and CARB. These agencies develop rules, regulations, policies, and/or plans to achieve the goals and directives imposed through legislation.

The EPA is responsible for implementing the federal Clean Air Act (1970), including establishing health-based National Ambient Air Quality Standards. These standards include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, PM2.5, and lead. The pollutant standards are periodically reviewed and revised as applicable. The CARB also regulates air emissions of asbestos, which naturally occurs in rock in approximately 80% of California counties.

CARB is responsible for implementing the California Clean Air Act (1988) and has established California Ambient Air Quality Standards, which may be more protective than the national standards. In general, the CARB works with local agencies to develop policies, guidance, and regulations related to state and federal ambient air quality standards. CARB also conducts research and assists local air districts as needed.

Tuolumne County is designated non-attainment for the federal and state ozone standards. The air quality within the County meets standards for all other pollutants. TCAPCD has rules that limit emissions and mandate control standards that manage emissions. These rules are enforced through permits and inspections. TCAPCD also enforces nuisance complaints, usually from odors or dust.

Thresholds of Significance

According to TCAPCD, “A project would have a significant impact on air quality if, pursuant to Tuolumne County Air Pollution Control District regulations, it would result in project-generated emissions in excess of the following criteria adopted by the Tuolumne County Air Pollution Control District:

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

4.3.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact
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?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

4.3.4 Answers to CEQA Checklist Questions

a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact

Projected Emissions

CalEEMod Version 2022.1.1.29 was developed by the California Air Pollution Control Officers Association to help estimate air pollution emissions from a wide range of projects. For this Project, a 5-day work week was assumed to span 1 calendar month, or 22 working days out of the 6-week remediation activities period that have the potential to create air emissions (i.e., grading and hauling). The assumed graded area is 3.35 acres. A variety of equipment was assumed to be in use, including graders, loaders, dozers, water trucks, etc. Complete CalEEMod outputs are provided in **Appendix B** that show all assumptions and expected emissions. The application of mitigation measures in the model had no effect on the reported emission levels, which unmitigated are well below significance thresholds. **Table 1** summarizes average daily emissions and their relationship to the TCAPCD Significance Thresholds.

Table 1. Anticipated Projected Emissions – Pounds Per Day Without Mitigation

Compound	Average Daily	Threshold	Exceeds Threshold?
ROG	0.1	1,000	No
NOx	1.6	1,000	No
PM10	73.9	1,000	No
PM2.5	7.4	1,000	No

The Project emissions would be well below TCAPCD daily emissions Significance Thresholds. The SWPPP would include specific dust control measures, such as regular watering, to reduce transport of sediments that would also reduce the potential for particulates to migrate beyond the Project Area.

Tuolumne County is designated non-attainment for ozone, as noted previously. ROG and NOx are precursor compounds that react in the presence of sunlight to create ozone. Hence controlling ROG and NOx are the strategies used to minimize ozone formation. Properly tuned equipment, limiting vehicle idling, and using clean fuel as required by CARB would further minimize ROG and NOx emissions. The Project therefore would not conflict with or obstruct any applicable local or state air quality plan.

b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact

As discussed above, Project remediation activities would result in emissions well below the significance thresholds. With or without mitigation, ROG and NOx emissions would stay below the TCAPD Significance Thresholds of 1,000 pounds per day or 100 tons per year. Therefore, the Project would not create a cumulatively considerable net increase of ozone precursors and respirable particulate matter.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact

Using properly tuned diesel engines, minimizing excess idling, and regular watering for dust control would avoid exposing sensitive receptors to substantial pollutant concentrations.

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact

Diesel exhaust and/or dust can adversely affect nearby residents and businesses during remediation; the closest receptor is a commercial business approximately 400 feet to the southeast. Emissions would be minor, and using properly tuned engines, minimizing idling time, and watering regularly for dust control will avoid adversely affecting a substantial number of people.

4.4 Biological Resources

4.4.1 Environmental Setting

This discussion is based on the Biological Resources Assessment Report (BRA; NCE 2025b, **Appendix C**) and the Aquatic Resources Delineation Report (ARD; NCE 2025a, **Appendix D**) prepared for the Project. The BRA (NCE 2025b) was prepared to determine the extent to which the Project may affect any federally threatened or endangered species, referred to as special-status species (SSS), and/or designated critical habitat. The surveys included database searches of United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), California Natural Diversity Data Base (CNDDB), and the California Native Plant Society Rare Plant Inventory, as well as field surveys of the Project Area plus a 200-foot buffer (together: survey area). The field surveys took place on March 14, 2024, December 19, 2024, and February 27, 2025, to assess the presence of both biological and aquatic resources. The ARD (NCE 2025a) was prepared to determine the extent to which the Project may affect Waters of the State and/or Waters of the United States.

Habitat Types

These habitat classifications are based on the CDFW Wildlife Habitat Relationships System (CDFW 2024b), which places an emphasis on dominant vegetation, vegetation diversity, and physiographic character of the habitat. For a list of plant species observed in these vegetation communities during the biological survey, refer to **Appendix C**. The Project Area encompasses 5 distinct vegetation communities: non-native annual grassland, *Baccharis pilulairis* shrubland alliance, *Rubus armeniacus – Sesbania punicea – Ficus carica* shrubland semi-natural alliance, *Pinus ponderosa* forest and woodland alliance, and *Arctostaphylos viscida* shrubland alliance. General descriptions of these natural communities are provided below.

Annual Grassland

Non-native annual grassland habitat was observed throughout the northern and central portions of the Primary Area, the northern and central portions of the Secondary Area, and throughout the Borrow Area. This community is characterized by a high prevalence of non-native vegetation which quickly recolonizes disturbed areas. Common species observed were invasive grasses and weedy herbaceous species, including ripgut brome (*Bromus diandrus*), wall barley (*Hordeum murinum*), longbeak stork's bill (*Erodium botrys)*, redstem stork's bill (*E. cicutarium)*, cutleaf geranium (*Geranium dissectum)*, common chickweeds (*Stellaria media)*, greater chickweed (*S. neglecta)*, and rye (*Secale cereale)*.

Baccharis pilularis Shrubland Alliance

The alliance[2] occurs on moderately wide stream benches and floodplains in the Sierra Nevada and may also occur on hillside seeps in the foothills and supports wetland vegetation. *Baccharis pilularis* shrubland alliance was observed throughout the survey area. Coyote brush (*Baccharis pilularis*) is

[2]The term alliance refers to a category of vegetation classification which describes repeating patterns of plants across a landscape. Each alliance is defined by plant species composition, and reflects the effects of local climate, soil, water, disturbance, and other environmental factors.

dominant in the shrub canopy with emergent trees present at low cover including interior live oak (*Quercus wislizeni*) and Ponderosa pine (*Pinus ponderosa*). In the Sierra Nevada Foothills, small stands tend to occupy recently disturbed areas.

Rubus armeniacus – Sesbania punicea – Ficus carica Semi-Natural Alliance

This habitat community was observed in the stream channel corridors along the northern perimeter of the Primary Area and through the center of the Secondary Area. Invasive Himalayan blackberry *(Rubus armeniacus*) is dominant in the shrub canopy with emergent interior live oak trees present at low cover. This community grows along riparian sites, mesic clearings, disturbed areas, and stock ponds throughout cismontane[3] California.

Pinus ponderosa Forest and Woodland Alliance

This habitat community was observed throughout the southern and eastern portion of the Primary Area, throughout the Secondary Area, and throughout the buffers between the subareas of the Project Area. Ponderosa pine is co-dominant in the tree canopy with Jeffrey pine *(P. jeffreyi*) and interior live oak. The shrub layer varies from open[4] to continuous, and the herbaceous layer is grassy. In the Sierra Nevada Foothills, isolated trees and groves occur along streams and lower slopes.

Arctostaphylos viscida Shrubland Alliance

This alliance was observed throughout the Borrow Area. This chapparal community is dominated by whiteleaf manzanita (*Arctostaphylos viscida*) in the shrub canopy with emergent Ponderosa pine trees present at low cover and a sparse herbaceous layer.

Wildlife

A query of federally listed wildlife species for the United States Geological Survey (USGS) 7.5-minute quadrangle encompassing the survey area was obtained from the USFWS Information for Planning and Consultation (IPaC) (USFWS n.d.). Additional information about the distribution of SSS with the potential to occur within the Project Area was compiled from the CDFW California Natural Diversity Database for occurrences for SSS within a 1-mile radius of 1) the proposed Project Area; 2) from aerial photographs of the survey area; and 3) from USGS 7.5-minute quadrangle maps of the survey area. Information on the distribution of SSS with potential to occur in the Project region also was compiled from published literature.

The database searches identified 5 federally listed wildlife species with potential to occur within the survey area. The official list is provided **Appendix C**. In addition, reconnaissance-level field surveys of the survey area were conducted on March 14, 2024, December 19, 2024, and February 27, 2025. These surveys focused on identifying the presence of SSS or their habitat within the survey area.

[3]Cismontane woodland refers to woodland vegetation found on the coastal side of mountain ranges in California.

[4]An “open shrub layer” refers to a layer with a forest ecosystem that is characterized by relatively sparse or low-density shrub growth, often with more sunlight reaching the forest floor than in a dense or continuous shrub layer.

Based on the literature review, the reconnaissance-level field survey, and habitat assessment of the survey area, the BRA concluded that the Secondary Area may contain potential habitat for the California red-legged frog (*R. draytonii*, CRLF) and foothill yellow-legged frog (*Rana boylii,* FYLF). The Project Area overall contains potential foraging and dispersal habitat for the spotted bat (*Euderma maculatum)*, western mastiff bat *(Eumops perotis californicus*), and western red bat (*Lasiurus frantzii*) (**Appendix C**).

4.4.2 Regulatory Setting

Federal

Endangered Species Act

The federal Endangered Species Act (ESA) protects plants and wildlife that are listed as endangered or threatened by the USFWS. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations 17.3). This statute also governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law.

Under Section 7 of the ESA, federal agencies are required to consult with the USFWS and/or National Oceanic and Atmospheric Administration–National Marine Fisheries Service if their actions, including permit approvals or funding, could adversely affect a federally listed species (including plants) or its critical habitat.

Clean Water Act

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into Waters of the United States (WOUS), which includes wetlands under Sections 401 and 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act.

Section 401 requires that an applicant proposing to conduct any activity that may result in a discharge to a WOUS must apply for and secure a Water Quality Certification prior to remediation activities. The CVRWQCB will administer the Section 401 Water Quality Certification for this Project.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season. California Department of Fish and Game (CDFG) Code (Section 3500) also prohibits the destruction of any nest, egg, or nestling.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the CDFG Code, an Incidental Take Permit from the CDFW is required for projects that could result in the "take" of a State listed threatened or endangered species. Under the CESA, "take" is defined as an activity that would

directly or indirectly kill an individual of a species proposed for listing (called "candidates" by the state). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act provides the State with very broad authority to regulate "Waters of the State" (which are defined as any surface water or groundwater, including saline waters). The State Regional Water Quality Control Board is granted ultimate authority over water quality policy in the State of California. Before allowing discharges that may affect the quality of Waters of the State, a Report of Waste Discharge must be filed with the CVRWQCB.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900 – 1913) was created in order to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. CESA provided further protection for rare and endangered plant species, but the NPPA remains part of the CDFG Code.

California Fish and Wildlife

The CDFW is responsible for protecting and conserving fish and wildlife resources, and the habitats upon which they depend. Section 1602 of the California Fish and Game Code requires that the CDFW review any project that may do 1 or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake.
- Change the bed, channel, or bank of any river, stream, or lake.
- Use material from any river, stream, or lake.
- Deposit or dispose of material into any river, stream, or lake.

Under the Lake and Streambed Alteration (LSA) Program, entities are required to notify the CDFW of proposed impacts through an LSA Notification. If it is determined by the CDFW that the activity, as described in an LSA Notification, would substantially alter a river, stream, or lake, and may substantially adversely affect existing fish or wildlife resources, then an LSA Agreement must be prepared. The LSA Agreement includes necessary mitigation measures to protect fish and wildlife resources from significant impacts.

Local Requirements

2018 Tuolumne County General Plan

Chapter 15, the Natural Resources Element of the 2018 Tuolumne County General Plan (Tuolumne County Community Resources Agency. 2018), discusses goals and policies for the management of natural resources in Tuolumne County. The goals and policies of Tuolumne County relevant to biological resources are provided below.

Natural Resources Element

- Goal 16B: Support the diversity and quality of biological resources while balancing the needs of public and private property rights.
    - Policy 16.B.5 – Evaluate and mitigate impacts to biological resources in accordance with the requirements of State and Federal law.
        - 16.B.j Established thresholds of significant for the conversion of Oak Woodland in Tuolumne County. The County defines an oak woodland is defined as a woodland stand with greater than 10% native oak canopy cover.
- Goal 16C: Support efforts to conserve biological resources.
    - Policy 16.C.5 – Encourage the conservation of oak woodlands and the preservation of heritage trees.

Tuolumne County Code Section 9.24

Section 9.24 of the County Code discourages the premature removal of oak resources by establishing procedures and penalties for such removal. Section 9.24.040 identifies activities exempt from this chapter, and the following exemption applies to this Project:

- B. Removal of native oak trees as part of a construction project for which a permit has been issued by a state agency, such as Caltrans or the Department of Fish and Game.

4.4.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
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 & Wildlife (CDFW) or U.S. Fish & Wildlife Service (USFWS)?	Less Than Significant Impact with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?	Less Than Significant Impact with Mitigation Incorporated
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact with Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less Than Significant Impact

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

4.4.4 Answers to CEQA Checklist Questions

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

Less Than Significant Impact with Mitigation Incorporated

The survey area contains documented potential habitat for 18 special-status plant species and 5 special-status wildlife species (**Appendix C**). No SSS were observed during the field surveys, but suitable habitat exists for several protected species.

Plant Species

The timing of the surveys was outside the blooming period for 18 plant species; therefore, the Project may impact 18 plant SSS if they are located within the Project Area during Project activities. Direct impacts to these plant species could result from ground disturbance within areas of potential habitat, including remediation equipment crushing individuals[5] or removal of individuals during grubbing. These impacts could result in direct mortality of individuals or small populations of special-status plant species.

Amphibian and Reptile Species

The Project Area contains potential habitat for CRLF (Federally Threatened, CDFW Species of Special Concern) in a pond northwest of the Secondary Area, as well as upland aestivation[6] habitat. The ephemeral stream drainage provides potential habitat for FYLF (Federally Proposed Threatened, CDFW Species of Special Concern). Ground disturbance within the aquatic habitat and adjacent upland refuge habitat during the Project implementation may result in direct impacts should any of these individuals be present within the Project Area. Impacts could also occur in refuge habitat if individuals are present during the summer or dry season in a dormant condition in underground refugia[7] or under debris. These species could be directly impacted from being crushed by remediation equipment or vehicles. These impacts could result in direct mortality of individuals or small populations of special-status amphibians.

Bird Species

Trees throughout and adjacent to the Project Area also provide potential nesting habitat for migratory birds protected under the MBTA and California Fish and Game Code. If a migratory bird, regardless of its federal or state status, were to nest in trees on or near the site prior to or during Project remediation

[5]The reference to "individuals" throughout this document pertains to any member of any of the biological species discussed in this document (plants, amphibian and reptiles, birds, and mammals).
[6]Aestivation is a state of dormancy into which an animal enters during hot and dry periods. During this time, the animal has reduced activity and a reduced metabolic rate.
[7]Refugia refers to areas in which a species can survive through a period of unfavorable conditions.

activities, such activities could result in the abandonment of active nests or direct mortality to these birds.

Mammal Species

Additionally, the plant communities within the Project Area provide potential habitat for 3 special-status bat species: spotted bat, western mastiff bat, and western red bat (all CDFW Species of Special Concern). Large mature trees and rock crevices offer potential roosting habitat. Removal of trees and disturbance from remediation activities in the vicinity of maternity roosts could result in roost abandonment and mortality of young.

Mitigation Measure BIO-1: General Construction Mitigation Measures

The following general conservation measures shall be implemented by CalRecycle during remediation activities to protect wildlife species and their habitats:

- Areas for fuel storage, refueling and servicing of equipment shall be located in an upland location outside of delineated aquatic resources.
- Equipment washing areas shall be located in upland locations to ensure wash water does not flow into stream channels or wetlands.
- All construction equipment shall be in good working condition, showing no signs of fuel or oil leaks. All motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals that are questionable shall be replaced. The mechanical equipment shall be inspected daily to ensure no leaks. Any leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of remediation activity.
- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a release or spill occurs from the mechanical equipment, no additional work shall occur using that equipment until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) if spill materials reach the waterway, CDFW, CVRWQCB, and CalRecycle have been notified.
- To avoid debris contamination into drainages and other aquatic resources, silt fencing or other sediment control devices shall be placed around remediation activities in these areas to contain spoils from excavation activities.
- Due to the potential for SSS to occur or move through or into the Project Area, an on-site biological monitor shall be present during initial ground disturbance and tree removal, and at least weekly thereafter. Equipment operators and crew shall be trained to, at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities and during earth disturbing activities to prevent take of SSS. All pipes or tubing with diameter 4 inches or larger shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering at night. All trenches and other excavations shall be backfilled the same day they are opened or shall have an exit ramp built into the excavation to allow animals to escape. SSS identified on the site we be allowed to leave the area on their own accord, or an

appropriate no-activity buffers surrounding the SSS determined by the qualified biologist will be implemented.

- Environmental Awareness Training shall be presented to all personnel working in the field in the proposed Project Area. Training shall consist of a brief presentation in which biologists who have knowledge of endangered species biology and legislative protection shall explain SSS concerns. Topics to be discussed include the biology of the SSS that may be encountered in the Project Area, their habitat needs, their identification, their status under the CESA and ESA, and any relevant protection measures. As part of the training, an environmental awareness handout will be provided to all personnel that describes the SSS at the site, including photographs, and lists applicable permit conditions identified by local, state, and federal agencies to protect these resources. If any Project personnel are added to the proposed Project, they shall receive the mandatory training before starting work.
- Project Area boundaries shall be clearly delineated by stakes and/or flagging to minimize inadvertent degradation or loss of adjacent habitat areas during Project operations. Staff and/or contractors shall post signs and/or place fencing around portions of the Project Area as necessary to restrict access of vehicles and equipment unrelated to Project operations. Access to the Project Area by unauthorized vehicles and equipment shall remain restricted by the gate at the main entrance off SR-49 (primary gate) and an additional gate (secondary gate) along with fencing for the Rotelli Primary Burn Dump Area.
- To avoid entanglement of wildlife, CalRecycle shall not use plastic mono-filament netting, jute netting, or any material with cross joints that are bound/stitched (such as that found in straw wattles/fiber rolls and some erosion control blankets) on the Project Area for any purpose. CalRecycle shall ensure that all fiber rolls and erosion control blankets or netting are made of loose-weave mesh that is not fused at the intersections of the weave, such as coconut (coir) fiber, or other products without welded weave. CalRecycle shall cover the edges of erosion control blankets or netting with soil, sandbags, or similar materials to prevent wildlife from crawling underneath the material and becoming entrapped.

Mitigation Measures for Special-Status Species

Implementation of the following mitigation measures would reduce impacts to less than significant:

Mitigation Measure BIO-2: A qualified botanist shall conduct protocol-level field surveys to identify potential populations of special-status plant species within the site prior to the initiation of any remediation activities.

These surveys shall coincide with the appropriate flowering periods of the special-status plant species that have potential to occur in the Project Area. If any population(s) of special-status plant species is identified directly adjacent to the Project Area, a qualified biologist retained by CalRecycle shall clearly delineate the location of the plant population and install protective fencing between the disturbance zone and the population to ensure that the population is adequately protected. CalRecycle shall consult with CDFW and USFWS to determine the appropriate measures to avoid or mitigate for impacts to the species or population. CalRecycle shall adjust the boundaries of the disturbance zone where feasible to avoid impacts to the plant species/population.

The special-status plant species that shall be surveyed for are listed below with their flowering season. These species have been identified as having potential to occur within the Project Area.

- beaked clarkia (*Clarkia rostrata*), flowering period: April - May
- Mariposa cryptantha (*Cryptantha mariposae*), flowering period: April - June
- red hills cryptantha (*C. spithamaea*), flowering period: April - May
- yellow-lip pansy monkeyflower (*Diplacus pulchellus*), flowering period: April - July
- tansy-flowered woolly sunflower (*Eriophyllum confertiflorum* var*. tanacetiflorum*), flowering period: May - July
- Tuolumne button-celery (*Eryngium pinnatisectum*), flowering period: May - August
- spiny-sepaled button-celery (*E. spinosepalum*), flowering period: April - June
- Kings River monkeyflower (*Erythranthe acutidens*), flowering period: April - July
- Gray's monkeyflower (*E. grayi*), flowering period: May - July
- small-flowered monkeyflower (*E. inconspicua*), flowering period: May - June
- serpentine bluecup (*Githopsis pulchella* ssp*. serpentinicola*), flowering period: May - June
- delicate bluecup (*G. tenella*), flowering period: April - June
- Parry's horkelia (*Horkelia parryi*), flowering period: April - June
- Tuolumne iris (*Iris hartwegii* ssp*. columbiana*), flowering period: May - June
- foothill jepsonia (*Jepsonia heterandra*), flowering period: August - December
- Layne's ragwort (*Packera layneae*), flowering period: April - August
- Michael's rein orchid (*Piperia michaelii*), flowering period: April - August
- Hernandez bluecurls (*Trichostema rubisepalum*), flowering period: June - August

Where avoidance of such impacts is not feasible, CalRecycle shall implement 1 or more of the following measures:

- Transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, 2 additional plants shall be planted for a total of 3. Plantings shall be managed and monitored and shall survive to 5 years after planting.
- Seed or purchase plants and place them in an area adjacent to the disturbance zone.
- Purchase credits at an approved mitigation bank at a ratio approved by CDFW, USFWS, and CalRecycle.

Mitigation Measure BIO-3: In order to prevent impacts to, or mortality of individual special-status amphibians or reptiles, CalRecycle shall retain the services of a qualified biologist approved by CDFW and USFWS. The qualified biologist shall implement the following standard USFWS mitigation and avoidance measures:

- Preconstruction surveys before remediation activities for CRLF and FYLF shall be completed within 48 hours prior to commencement of any earth-moving activity, remediation, or vegetation removal within the Project Area, whichever comes first. The preconstruction survey shall include 2 nights of nocturnal surveys in areas of suitable habitat before any remediation activities should occur.
- If any CRLF and FYLF are encountered during the preconstruction surveys, the findings shall be reported to CDFW and USFWS to determine what, if any, further actions must be followed to prevent possible take of this species before remediation begins and if required by CDFW, CalRecycle shall obtain an Incidental Take Permit prior to Project remediation activities resuming. Any actions taken in regard to this species will follow the measures outlined in the Incidental Take Permit.
- Prior to the commencement of Project activities, remediation work areas in or near special-status amphibian habitat shall be fenced in a manner that prevents equipment and vehicles from entering adjacent habitat areas. Vegetation removal or excavation needed to install the exclusionary fencing may occur first. A qualified biologist, in consultation with CalRecycle, USFWS, and CDFW, shall assist in determining the boundaries of the area to be fenced and the type of exclusionary fencing, and direct the installation of the fence. Exclusionary fencing shall be at least 24 inches in height, buried at least 6 inches below the ground surface, reinforced with compacted soil against the bottom edge on both sides, and shall be permanent enough to ensure that it remains in good condition throughout the duration of Project activities. The exclusionary fencing shall be inspected daily, and any necessary maintenance or repairs of the fence shall be implemented immediately. All workers shall be advised that equipment and vehicles must remain within the fenced work areas.
- Clearance surveys for special-status amphibians shall occur daily in the work area, especially along the interface between open space and remediation areas. If CRLF are found within the fenced work area, activities shall cease until the CRLF moves outside of the work area on its own volition.
- A qualified biologist shall be present during all vegetation removal and ground disturbing activities immediately adjacent to or within habitat that supports CRLF or FYLF.
- Prior to placement of any fill, the qualified biologist shall visually survey the area for CRLF and FYLF.
- If any CRLF or FYLF are found in a remediation area where fencing was deemed unnecessary, work shall cease until the CRLF or FYLF moves of its own volition. The qualified biologist, in consultation with CDFW and USFWS, shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the qualified biologist.
- Any CRLF or FYLF found during clearance surveys will be allowed to move outside of the work area on its own volition.
- The qualified biologist shall have the authority to stop all activities until appropriate corrective measures have been completed.

- Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when special-status amphibians may be present. Because special-status amphibians are often most actively foraging and dispersing during dusk and dawn, all activities shall cease 30 minutes before sunset and shall not begin prior to one half hour before sunrise.
- Traffic speed shall be maintained at 5 miles per hour or less in the work area.

Mitigation Measure BIO-4: If Project work must occur during the nesting season (February 1 – September 1), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of remediation activities.

If nesting birds are detected within the survey area during the survey, a protective, activity-free buffer shall be established around the nest. The buffer shall remain in place until the young have fledged the nest and a qualified biologist has determined the nest is no longer actively being used. The buffer shall be a minimum of 200 feet unless otherwise approved by a qualified biologist. A reduction in the size of the buffer may be deemed suitable based on-site conditions, species behaviors or other specific criteria determined by the qualified biologist. This measure would ensure that no nesting birds are impacted by remediation activities. If the nesting bird species is subject to special state or federal protections CDFW and USFWS consultations are recommended to ensure the nesting species is adequately protected.

Mitigation Measure BIO-5: A qualified biologist shall conduct a habitat assessment and survey of the Project Area and vicinity for both special-status bats and common bats. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species[8], and suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if (a) presence of bats is presumed, or documented during the surveys in trees with suitable bat habitat, and removal using the 2-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 – April 15 or September 1 – October 15, or (b) after a qualified bat biologist, after first receiving written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats.

- The 2-step tree removal shall be conducted over 2 consecutive days, as follows:
    - The first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting the 2-step tree removal process, the limbs and branches shall be removed from the tree by a qualified tree removal contractor using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided.
    - The second day, the entire tree shall be removed.

[8]Colonial species refers to genetically identical individuals that form a larger, connected unit or colony.

Finding: With implementation of Mitigation Measures BIO-1 through BIO-5, potential impacts to SSS would be reduced to less than significant levels.

b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

Less Than Significant Impact with Mitigation Incorporated

The Project involves remediation activities that would affect 2 ephemeral drainages covering 0.10 acres within the Project Area. Both ephemeral drainages are hydrologically connected to traditionally navigable waters and are considered waters of the state and U.S. One drainage runs through the northern boundary of the Primary Area and flows to a culvert under SR-49, while the other runs through the middle of the Secondary Area and flows through the Construction Staging Area to culverts under the access road and east to another culvert under SR-49. The Project would result in 0.06 acres of permanent impacts and 0.04 acres of temporary impacts within the 2 drainages.

The Project would reconstruct the existing drainage in the Primary Area as a trapezoidal channel with rock-slope protection creating a stable and continuous drainage free of burn ash and solid waste. The ephemeral drainage in the Secondary Area would be cleaned, then lined with temporary erosion control mat and revegetated. These drainages are regulated waters of the U.S. and waters of the State of California, who consider any temporary or permanent loss of regulated waters to be cumulatively significant, due to the extreme loss of aquatic resources throughout the state. Modification of these drainages would impact riparian vegetation and aquatic resources and be a potentially significant impact requiring permitting under Sections 404 and 401 of the Clean Water Act and California Fish and Game Code Section 1602.

The Section 404 and 401 permits provide a mechanism for regulatory agencies to review the Project and establish mitigation requirements for the 0.06 acres of permanent impacts and 0.04 acres of temporary impacts. Whereas CalRecycle must obtain the necessary permits from USACE (Section 404)[9], CVRWQCB (Section 401)[10], and CDFW (Lake and Streambed Alteration Agreement) to comply with state and federal regulations in order to proceed with site remediation, the appropriate CEQA mitigation is to apply for, receive and implement the permits. CalRecycle would provide mitigation for impacts to aquatic resources in the form of mitigation bank credits or on-site mitigation/restoration at a ratio[11] agreed to between CalRecycle, USACE, CVRWQCB, and CDFW.

Mitigation Measure BIO-6: Prior to remediation, CalRecycle shall obtain a USACE Section 404 CWA permit, CVRWQCB Section 401 Water Quality Certification, and CDFW Section 1602 Lake and Streambed Alteration Agreement for temporary and permanent impacts to waters of the U.S. and State. CalRecycle shall comply with all mitigation measures and requirements established in these permits.

[9]The USACE Section 404 permits refer to the group of permits that can be issued under CWA Section 404. For the Project, the applicable permit is the USACE Nationwide Permit 38 Cleanup of Hazardous and Toxic Waste.
[10]401 Water Quality Certification permit.
[11]In this context, "ratio" refers to the proportion of restoration or mitigation effort required to offset the environmental impact to aquatic resources.

Finding: Through compliance with local policies, regulatory permit requirements and implementation of required mitigation measures, impacts to riparian habitat and sensitive natural communities would be reduced to less than significant levels.

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

No Impact

There are no state or federally protected wetlands in the Project Area (NCE 2025b). As discussed in item b) above, the Project proposes to impact 2 ephemeral drainages: one covering 0.06 acres that runs through the Primary Area and 1 covering 0.04 acres that runs through the Secondary Area. These features are state and federally regulated waters of the State and waters of the U.S., but do not meet the definition of wetlands.

d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact with Mitigation Incorporated

There are no established migratory corridors associated with the Project Area. Remediation activities could temporarily interrupt movement of native resident or migratory wildlife species through the Project Area. As discussed above, the Project Area contains potential habitat for CRLF in a pond northwest of the Secondary Area and potential habitat for FYLF in the ephemeral drainage. The site also contains potential habitat for 3 special-status bat species (spotted bat, western mastiff bat, and western red bat) and nesting migratory birds.

The 2 ephemeral drainages on site flow to Woods Creek and ultimately to the Don Pedro Reservoir and Tuolumne River. However, these drainages are unlikely to serve as significant wildlife movement corridors due to their ephemeral nature and the disturbed condition of the site from historic mining and dumping activities.

Finding: With implementation of Mitigation Measures BIO-1 – BIO-6, species utilizing the Project Area during remediation activities would be protected against significant impacts.

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

Less Than Significant Impact

The General Plan (Tuolumne County Community Resources Agency 2018) contains policies pertaining to the protection of biological resources. Native oak trees are specifically protected through Goal 16C, Policy 16.C.5 of the General Plan which encourages oak woodland conservation and preservation of heritage trees. The Project will seek approval from CDFW for impacts to aquatic resources. As part of CDFW's approval process they will require mitigation for the 27 trees within the riparian corridor that will be removed as part of the Project. Mitigation will be required in the form of replacement plantings

at a ratio ranging from 1:1 to 1:3 based on the size of the tree removed. Under Section 9.24.040 of the County Code, the Project is exempt from the County ordinance regarding oak tree preservation because it involves construction for which a permit has been issued by a state agency (CalRecycle and CDFW).

The Project Area contains several vegetation communities including *Pinus ponderosa* forest and woodland alliance and other native tree species. The remediation activities at the Rotelli Burn Dump site would require removal of 175 trees during clearing and grubbing of the Primary Area, Secondary Area, Consolidation Area, and Borrow Area. Of these, 95 are valley, black, and interior live oak trees ranging in size from 5 inches diameter at breast height (dbh) to 31 inches dbh. Their removal is necessary to facilitate waste consolidation, capping, and construction of drainage improvements. As part of the CDFW permit process for impacts to aquatic resources, mitigation for the removal of 27 riparian trees will be required. Mitigation will be completed via replacement tree plantings. In addition to the plantings, the site will be hydroseeded with a native plant mix, and deed restricted so no development can occur. Once the site is remediated and hydroseeded, the Project Area is anticipated to recover naturally over time resulting in a tree canopy with a diversity of tree species and ages consistent with the surrounding properties. The EPA confirms that native plants are ideal for landfill revegetation due to their adaptability, low maintenance needs, and ecological benefits (U.S. Environmental Protection Agency 2006).

Mitigation Measure BIO-6 requires the Project comply with permits from USACE (Section 404), CVRWQCB (Section 401), and CDFW (Lake and Streambed Alteration Agreement) for impacts to aquatic resources, thus the Project is exempt from County Code Section 9.24.040 requirements. Permits from these resource agencies are required because the Project will result in 0.06 acres of permanent impacts and 0.04 acres of temporary impacts within aquatic resources. CDFW will require mitigation for tree loss within the riparian corridor and stream channel at a ratio up to 1:3, and the Project Area will be reseeded with native plants as part of the Project. Therefore, compliance with **Mitigation Measure BIO-6** would ensure the Project does not conflict with the County's tree preservation ordinance.

Finding: With implementation of Mitigation Measure BIO-6, the Project will mitigate tree impacts in compliance with County Code Section 9.24.040 and therefore would not conflict with the local tree protection ordinance.

f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact

There are no known Habitat Conservation Plans or Natural Community Conservation plans associated with the Project Area. No impacts are anticipated, and no mitigation measures are required.

4.5 Cultural Resources

4.5.1 Environmental Setting

The 3.35-acre Area of Potential Effect (APE) is identical to the Project boundary shown on **Figure 2** in the Project Description. The APE consists of an Area of Direct Impact (ADI), where the physical impacts of the Project will occur, and an Area of Indirect Impact (AII), where indirect effects of the Project such as visual and/or auditory impacts may be experienced. The ADI consists of the 3.35-acre area where ground disturbance will occur. The ADI also includes areas potentially impacted by machinery and material stockpiles located within the Construction Staging Area. Because the APE is located on private property surrounded by trees and remediation activities noise is temporary on surrounding parcels, the AII shares the same boundary as the ADI.

Site Investigation

An investigation was conducted to locate, describe, and evaluate cultural resources present within the APE. A records search was conducted at the Northwest Information Center. The search results indicate that there has been 1 previously recorded site within the APE (NCE 2025c). The resource is not considered eligible for either the National Register of Historic Places or the California Register of Historical Resources (CRHR). No architectural resources were recorded in the APE.

Pedestrian surveys of the APE were conducted on March 27, 2024, in accordance with federal and State standards. Much of the area has experienced some level of previous disturbance in the form of access road construction, mining activities, illegal dumping, and transient encampment. The Cultural Resources Inventory Report (NCE 2025c) is attached as **Appendix E**.

4.5.2 Regulatory Setting

Federal

The National Historic Preservation Act (NHPA; 1966) defined the role and responsibilities of the federal government in historic preservation and established the National Register of Historic Places. The NHPA directs agencies to identify and manage historic properties under their control, to undertake actions that would advance the Act's provisions and avoid actions contrary to its purposes, to consult with others while carrying out historic preservation activities, and to consider the effects of their actions on historic properties. This Project requires a Clean Water Act Section 404 Permit, and therefore Section 106 of the NHPA applies to the U.S. Army Corps of Engineers permit action.

State

California Register of Historical Resources

The CRHR is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR helps government agencies identify and evaluate California's historical resources and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change (PRC § 5024.1(a)). Any resource listed in, or eligible for listing in, the CRHR must be considered during the CEQA process.

4.5.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

4.5.4 Answers to CEQA Checklist Questions

a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?

No Impact

There has been 1 previously recorded site within the APE: the Rotelli Burn Dump, which was determined to be not eligible for the CRHR or National Register. However, no historical properties meeting the criteria outlined in Section 5024.1 of the California Public Resources Code or Title 36 of the Code of Federal Regulations Part 60.4 are present within the Project Area. As described in Appendix E, the Project will not impact historical resources. The Project will not result in a significant, substantial change to character-defining elements associated with historical resources listed in or eligible for listing in the CRHR (Public Resources Code Section 21083, 50201). Further, it is recommended the Project will not impact historical properties and a finding of "no historic properties present" is applicable, as that phrase is viewed within the context of compliance with the Advisory Council on Historic Preservation regulations (36 Code of Federal Regulations Part 800.4(d)(1)).

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?

Less Than Significant Impact

Archaeological resources consisting of accumulations of historical artifacts are present within the APE, but they are located within heavily disturbed contexts and are not associated with historically significant activities. Three artifact concentrations were identified as part of the cultural resources investigation. Concentration 1 is the original extent of this site recorded by Barnes (2008), located in and around a small, unnamed drainage. Concentrations 2 and 3 are located along a second drainage to the north. The Project Area contains thousands of mostly residential debris artifacts, with some commercial/industrial material, including but not limited to: ceramic dishware, ceramic insulators, glass containers (clear, aqua, green, olive, amber, cobalt, and milk), metal containers (sanitary cans, bimetal cans, rectangular oil cans, paint cans, food tins, barrels), metal cables, metal scrap, and vehicle parts. Modern trash from the transient population and illegal dumping post-facility closure is also pervasive throughout the site.

The present condition of the site is poor. The archaeological resources that are present lack significance, and therefore the Project will not cause a substantial change to significant archaeological resources.

c) Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact

There is no indication that human remains from either the prehistoric or historic periods are present within the Project Area. The California Native American Historical, Cultural and Sacred Sites law requires that if there is an inadvertent discovery of human remains during remediation activities on state and private lands, the activity ceases, and the county coroner is notified. If the remains are of a Native American, the coroner notifies the Native American Heritage Commission (NAHC) that then notifies those persons mostly likely to be descended from the Native American remains.

4.6 Energy

4.6.1 Environmental Setting

The Project Area is an undeveloped former burn dump and there is no energy being used or connected to the site.

4.6.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

4.6.3 Answers to CEQA Checklist Questions

a) Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact

Energy for the Project would only be required during remediation and the Project would not require additional capacity on a local or regional scale. Standard air quality requirements would reduce use of fossil fuels and increase energy efficiency of construction equipment. Because energy use would be temporary during remediation and meet California standards for efficiency, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact

The site is undeveloped and there is no energy being used, nor planned for the site. Remediation would be temporary and would comply with CARB fuel standards, consistent with State energy goals. The Project would not conflict with or obstruct state or local plans.

4.7 Geology and Soils

4.7.1 Environmental Setting

Regional Geologic Setting

Tuolumne County lies mostly in the Sierra Nevada geomorphic province[12], with a small part in the Great Valley province. The Sierra Nevada province is a 400-mile-long tilted fault block with a rugged eastern face and a gentle western slope. Deep river canyons and glacial activity have shaped the landscape, including Yosemite Valley. The highest point is Mt. Whitney at 14,495 feet. The region's metamorphic bedrock contains gold-bearing veins in the Mother Lode[13]. The northern boundary is marked by the volcanic cover of the Cascade Range (Tuolumne County Community Resources Agency 2018).

Seismicity and Faulting

Tuolumne County is located to the east of the Foothills fault system. The Foothills fault system is a complex, braided system of individual fault segments that extends for approximately 200 miles from Mariposa in the south to Lake Almanor in the North. There are 2 primary fault zones within the Foothills fault system: the Melones fault zone along the east side of the system and the Bear Mountain fault zone on the west. The Melones fault zone is classified as “active” (has demonstrated displacement within the last 100,000 years). The Bear Mountain fault zone is classified as “indeterminable active” (definitive evidence has not been established locally concerning its activity within the last 100,000 years) (Tuolumne County 2018b).

Liquefaction

Liquefaction can occur when wet or saturated cohesionless soil temporarily loses strength due to the buildup of excess water pressure during events such as earthquakes. The soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded sand. Since liquefaction most likely would occur during or following an earthquake and severe earthquake risk is deemed to be low in the County, the risk and danger of liquefaction and subsidence occurring within the County is also considered to be minimal.

Groundwater

The Project Area is located within the Upper Tuolumne Hydrologic Unit Code 8 (HUC-8) region boundary, as defined by the Department of Water Resources. A subsurface investigation conducted by backhoe excavation encountered no groundwater in any test pit, which reached depths of 32 feet below ground surface (Geo-Logic Associates 2023).

[12]A geological province is a spatial entity characterized by distinct geological features, such as rocks, minerals, landforms, and geological history.

[13]The “Mother Lode” refers to a significant belt of gold-bearing quartz veins located in the Sierra Nevada Mountains of California.

Soils

The Web Soil Survey shows 2 mapped soils in the Project Area (Natural Resources Conservation Service n.d.): Wardsferry-Millvilla complex, 30 to 60 percent slopes and Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes. The Wardsferry-Millvilla complex consists of well-drained soils on 30 to 60 percent slopes, formed from phyllite, schist, and other metasedimentary rocks[14]. These soils support vegetation like interior live oak and blue oak and are used for watershed, wildlife habitat, recreation, and home site development. The Nedsgulch-Wallyhill-Arpatutu complex consists of well-drained soils found on 15 to 30 percent slopes, formed from schist, phyllite, and other metasedimentary rocks. These soils support vegetation like sugar pine and ponderosa pine and are used for recreation, wildlife habitat, and watershed purposes.

4.7.2 Regulatory Setting

State

Public Resources Code § 5097.5

This code prohibits excavation or removal of any "vertebrate paleontological site … situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include land owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. PRC § 5097.5 states that any unauthorized disturbance or removal of paleontological materials or sites located on public lands is a misdemeanor.

Local

The 2018 Tuolumne County General Plan (Tuolumne County Community Resources Agency 2018), Chapter 17 contains the Natural Hazards Element that outlines the protection of the community from known geologic hazards, such as seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche[15] and dam failure, and slope instability. Specifically, the law mandates that the General Plan address emergency response and prevention measures associated with these risks through County policies and measures.

[14]Metasedimentary rocks are metamorphic rocks that originated from sedimentary rocks. They are formed when sedimentary rocks are subjected to high temperatures and pressures, causing them to recrystallize and change their mineral composition and texture.

[15]A temporary disturbance or oscillation in the water level of a lake or partially enclosed body of water, especially one caused by changes in atmospheric pressure.

4.7.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Could the Project directly or indirectly cause potential substantial adverse effects, including 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.	No Impact
ii. Strong seismic ground shaking?	No Impact
iii. Seismic-related ground failure, including liquefaction?	No Impact
iv. Landslides?	Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on/or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

4.7.4 Answers to CEQA Checklist Questions

a) Would the Project directly or indirectly cause potential substantial adverse effects, including 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.

No Impact

The Project Area is not within an Alquist-Priolo Earthquake Fault Zone that designates a known active fault (a fault is active if it has ruptured or shows evidence of displacement in the Holocene or the last

11,000 years) that is susceptible to fault rupture as defined by the California Geologic Survey (formerly the California Division of Mines and Geology). Therefore, the potential for fault rupture in the Project Area is considered to be low.

The Project Area is located within approximately 1 mile of the Melones fault zone. According to the Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan 2024, the fault runs north-south along the western county boundary and is part of the Foothill fault system. While this fault has an estimated maximum seismic capability of Magnitude 6.5 measured on the Richter scale, the County has experienced only 5 historical earthquake events with recorded magnitudes of 3.5 or greater within 50 miles over the past century.

The Project includes vegetation management and enhancement, slope stability, and road repair improvements in the Project Area, which are intended to protect human and environmental exposure to hazardous waste. There are no features of the Project that would pose risk, loss, or injury due to rupture of an earthquake fault, and stability features are intended to minimize exposure during a seismic event; therefore, potential impacts would be less than significant.

ii. Strong seismic ground shaking?

No Impact

The primary geologic hazard in the Project Area is the potential for moderate to strong ground shaking associated with nearby faults discussed in the prior section on seismicity and faulting. Factors determining the characteristics of earthquake ground motion at the Project Area would depend upon the magnitude of the earthquake, distance from the zone of energy release, travel path, topographic effects, subsurface materials, and rupture/source mechanism.

No buildings are proposed with the Project, therefore there is no potential to expose people or structures from substantial adverse effects due to seismic ground shaking; therefore, the Project would have no impact.

iii. Seismic-related ground failure, including liquefaction?

No Impact

According to the Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan 2024, Tuolumne County's geological characteristics make it relatively resistant to liquefaction hazards (County of Tuolumne 2024). The County is in a seismically inactive region, with earthquake activity significantly below the California state average.

Based on test pit observations from the site investigation, native soils at the site consist of well-cemented, thinly bedded sediments with distinct grain size distributions, typically underlain by a weathered clay layer interpreted as the original top soil. The cover soil typically consists of fine-to medium-grained, moist, loose sand with no bedding or lithological structure, mixed with glass fragments and metal debris (Geo-Logic Associates 2023). While these unconsolidated cover soils could be susceptible to ground failure, the proposed remediation, including improving cover soil thickness and waste removal, would not result in an increased risk of exposing people or structures to liquefaction hazards. The proposed Project would stabilize the existing landscape and slopes; thus, the Project would have no impact.

iv. Landslides?

Less Than Significant Impact

The Project is located in areas with steep slopes that could be subject to ground failure during seismic events. The Project is specifically designed to reduce existing landslide risks by addressing unstable slopes at the site. The current site contains waste situated on steep slopes that are susceptible to mobilization and transport downstream. The Project would improve slope stability through waste consolidation and proper engineering controls, including regrading slopes to achieve gradients of 3:1 H:V or less, installing rock-slope protection, and implementing erosion control measures. The Project would implement construction BMPs as part of required SWPPP compliance. These improvements would enhance rather than compromise slope stability; therefore, potential impacts would be less than significant.

b) Would the Project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact

The Project will include the temporary movement and stockpile of soil materials on site. During grading activities, there is a potential for soil erosion. Once final remediation is complete, no stockpiles will remain on site and the area will be revegetated with a mixture of native seeds to reduce erosion potential. The Project would implement erosion and sediment BMPs as outlined in Section 3.8 that would prevent significant soil loss or erosion during remediation activities. Implementation of the Project SWPPP would further reduce potential for erosion and topsoil loss during remediation activities. The risk of soil erosion and loss of topsoil would be 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?

Less Than Significant Impact

As discussed in the Environmental Setting, the Project Area contains unstable soils on steep slopes. The site consists soils characterized as the Wardsferry-Millvilla complex (30 to 60 percent slopes) and Nedsgulch-Wallyhill-Arpatutu complex (15 to 30 percent slopes), which are well-drained soils formed from phyllite, schist, and other metasedimentary rocks. The site is located within the Calaveras Complex bedrock, with waste materials currently situated on steep slopes susceptible to mobilization and downstream transport.

The Project will remediate unstable slopes and exposed burn waste and proposes improvements that would result in increased stability once implemented. As noted above, the Project would address slope stability through waste consolidation, engineered slopes (3:1 H:V or less), improved drainage controls, and erosion control measures, ultimately reducing the likelihood of future slope failure, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant.

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

No Impact

Soils in the Project Area are deep, well-drained, and formed in colluvium[16] over residuum weathered from phyllite, schist, and other metasedimentary rocks and are typically found on foothills with slopes. The soil texture is fine-loamy (Wardsferry Series), or loamy-skeletal (Nedsgulch-Wallyhill-Arpatutu Complex) which generally do not indicate high expansiveness. No permanent habitable structures are proposed to be constructed on the Project Area. Therefore, the Project would not create substantial direct or indirect risks to life or property.

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 does not propose use of septic tanks and would not require use of alternative wastewater disposal services; therefore, there would be no impact from these systems.

f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact

A search of the Central California Information Center records identified no previously recorded or existing paleontological resources or sites within the Project Area. No unique geological resources were identified during review of geologic resources within the Project Area. Remediation is not anticipated to encounter fossil-containing geologic formations. Therefore, the Project would have no impact.

[16]Colluvium is typically loosely consolidated angular material located at the base of a steep hill slope or cliff.

4.8 Greenhouse Gas Emissions

The term Greenhouse Gas (GHG) is used to describe atmospheric gases that absorb solar radiation and subsequently emit radiation in the thermal infrared region of the energy spectrum, trapping heat in the Earth's atmosphere. These gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and water vapor, among others. A growing body of research attributes long-term changes in temperature, precipitation, and other elements of Earth's climate to large increases in GHG emissions since the mid-nineteenth century, particularly from human activity related to fossil fuel combustion. GHG emissions resulting from human activities of particular interest include CO2, CH4, N2O, and fluorinated gases.

GHGs differ by the amount of heat that each traps in the atmosphere (global warming potential, or GWP). CO2 is the most significant GHG, so amounts of other gases are expressed relative to CO2, using a metric called "carbon dioxide equivalent" (CO2e). Generally, estimates of all GHGs are summed to obtain total emissions for a project or given time period, usually expressed in metric tons or million metric tons CO2e.

Naturally occurring GHGs include water vapor, CO2, CH4, NOx, and O3. Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but are for the most part solely a product of industrial activities.

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs have a broader, global impact. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/ manufacturing, utility, residential, commercial, and agricultural sectors.

4.8.1 Environmental Setting

The primary source of GHGs within Tuolumne County is fossil fuel consumption from the transportation sector, representing approximately 69% of countywide GHG emissions (Tuolumne County 2000). As identified in the Appendix A of the Tuolumne County Climate Action Plan (2020), other sources of GHG emissions include:

- Residential (approximately 12%)
- Agriculture (approximately 12%)
- Nonresidential Building Energy (approximately 4%)
- Waste/wastewater (approximately 3%)

4.8.2 Regulatory Setting

Federal

The EPA has no regulations or legislation enacted specifically addressing GHG emissions reductions and climate change at the project level. In 2025, federal agencies have been directed to discontinue analysis of GHG and climate change impacts.

State

CARB is the lead agency in the development of GHG reduction for the State of California. The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) lays out a path to achieve targets for carbon neutrality and reduce anthropogenic greenhouse gas emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279 (CARB 2022).

As identified in Section 3.8.2, California regulations limit idling from both on-road and off-road diesel-powered equipment. CARB enforces idling limitations and compliance with diesel-powered equipment regulations.

Regional Construction Emissions

While the TCAPCD does not currently have active thresholds or guidance for construction-related GHG emissions, the Project is required to implement standard construction BMPs consistent with state requirements and CARB guidance to minimize GHG emissions (CARB 2022).

Local

For construction activities specifically, the County does not currently have adopted thresholds or specific construction-related GHG requirements, so projects typically follow state regulations and CARB requirements for construction equipment and vehicles. The County's General Plan Climate Change Element focuses on reducing GHG emissions and preparing for climate impacts. It includes policies to develop a Climate Action Plan aimed at achieving GHG reduction targets consistent with Senate Bill (SB) 32, which mandates a 40% reduction in statewide GHG emissions below 1990 levels by 2030. The element emphasizes sustainable practices, energy efficiency, and resilience to climate-related hazards. It requires the Climate Action Plan to require Tier 4 equipment[17] for all construction activities and forestry/mining operations by 2030.

4.8.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

[17]Tier 4 equipment refers to off-highway diesel engines and the heavy machinery they power that comply with the U.S. Environmental Protection Agency (EPA) regulations for reducing emissions of particulate matter (PM) and oxides of nitrogen (NOx).

4.8.4 Answers to CEQA Checklist Questions

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

Less Than Significant Impact

The primary source of CO2e for this Project is fossil diesel and gasoline combustion emitted by construction equipment. Emissions were calculated as discussed in Section 4.3 Air Quality, and greenhouse gas emissions resulting from Project remediation are identified in **Table 2**. The State has a renewable fuel standard which has helped make Renewable Diesel readily available; the current version of CalEEMod does not account for CO2e reductions from Renewable Diesel, so NCE assumed an 80% reduction compared to fossil diesel and reports it here.

Table 2: Anticipated Projected GHG Emissions – Pounds Per Day Without Mitigation

Compound	Average Daily	Threshold	Exceeds Threshold?
CO2e	8,511	none	None given

The Project would result in short term, temporary increases in GHG emissions during remediation due to equipment and vehicle use. Heavy equipment such as excavators, backhoes, front-end loaders, graders, compactors, and water trucks, as well as commutes from a workforce of 5 – 7 people, would generate GHG emissions.

While Tuolumne County adopted a Climate Action Plan in November 2022, neither the County nor TCAPCD have adopted specific GHG thresholds for determining CEQA significance. According to CARB's 2022 Climate Change Scoping Plan, projects should aim to achieve no net additional increase in GHG emissions compared to existing conditions and incorporate design features and reduction measures to minimize emissions. As discussed under Section 3.2.8 Construction Controls, California regulations limit idling from both on-road and off-road diesel-powered equipment, and CARB enforces idling limitations and compliance with diesel-powered equipment regulations to reduce daily construction emissions.

The Project involves remediation of a closed burn dump site and does not propose any new long-term operational sources of GHG emissions that would conflict with the County's GHG reduction goals. As a burn dump, no organic materials are remaining that would be a significant source of methane, a potent GHG. Given the short remediation duration, small workforce size, and implementation of required GHG reduction measures for construction equipment and vehicles, Project effects would be less than significant.

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

Less Than Significant Impact

Given that emissions would be short term, increases in GHGs that could be attributed to the Project would not interfere with adopted goals and policies to reduce GHGs. The GHG emissions generated during remediation would not be considered significant and would not limit the State’s ability to attain

the reduction targets. Additionally, implementation of the Project would not conflict with any of the GHG emission policies within the Tuolumne County General Plan Climate Change Element (Tuolumne County Community Resources Agency 2018). Therefore, the proposed Project does not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

The land use surrounding the Project Area is a mixture of undeveloped land, residential and commercial properties, and open space. The nearest major road, SR-49, is approximately 60 feet east of the Project Area and becomes West Stockton Street approximately 1,200 feet north of the Project Area. The Project Area currently poses public health and safety risks associated with unstable slopes, historic quartz mining operations, and exposed burn waste at the closed Dump. As identified in the 2023 Site Investigation Report (Geo-Logic Associates 2023), in its current condition the Project Area likely poses an elevated health risk to site visitors due to elevated levels of arsenic and cadmium that exceed the respective Regional Screening Level established by the United States Environmental Protection Agency Region IX.

4.9.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project Area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

4.9.3 Answers to CEQA Checklist Questions

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

Less Than Significant Impact

The Project's routine use of hazardous materials during remediation is anticipated to be limited to fuels and other maintenance-related chemicals to run equipment and vehicles. The use, storage, and spill management of construction materials would be specified according to the on-site SWPPP. For example, equipment fueling and maintenance, if performed at the job site, would be performed in a designated area utilizing secondary containment with a spill kit nearby. Rinsing of concrete tools and chutes would also be performed according to the SWPPP, including utilizing concrete washouts and/or requiring that wastewater be kept within the concrete truck and hauled off-site for recycling. No off-site disposal of hazardous materials is anticipated as part of this Project. Therefore, construction workers or environmental exposure to the routine transport, use, or disposal of hazardous materials would be less than significant.

b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact

The purpose of the Project is to remove existing hazardous material exposure that is currently impacting both the environment and visitors to the site; there is no public access, although occasional trespassing by transients occurs. Short term remediation activities and the occurrence of a truck or equipment accident present the highest potential for hazardous waste contamination through direct contact or airborne transportation of contaminated soils during excavation, transport, and consolidation activities. Temporary BMPs and the SWPPP would require that dust is minimized and ensure that soil and/or hazardous waste are not transported from the site. Required construction controls would be in place to ensure the appropriate response and protection for construction workers and the environment during reasonably foreseeable upsets and conditions that could trigger accidents. Therefore, the Project would not create a significant hazard to construction workers or the environment and would have a long-term beneficial effect.

c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact

The nearest school is Tuolumne County Special Education Preschool, located 0.6 miles north of the Project Area on SR-49. Since there is no school within one-quarter mile of the Project, there would be no impact.

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

Less Than Significant Impact

NCE conducted a search of the Project Area on the State Water Resources Control Board GeoTracker website and the Department of Toxic Substances Control EnviroStor website. The search did not identify any previous uses or hazardous materials sites associated with the Project Area on GeoTracker.

However, the site is listed as "under evaluation" on the Department of Toxic Substances Control's (DTSC) EnviroStor database. As of July 18, 2024, the site was under review due to the presence of burn ash, evidence of illicit dumping, and intrusion by transient encampments. The site is currently being managed by CalRecycle, and the proposed Project includes remediation of the area in accordance with the Burn Dump Protocol. Whereas the Project involves remediating existing hazards on the site, the Project would reduce hazards to the public and the environment.

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

No Impact

The nearest airport, Columbia Airport, is over 5 miles from the Project Area. The Project Area is not located within a comprehensive land use planning area, and the Project would not involve habitable improvements that would be sensitive to airport operations.

f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact

The Project would not impair implementation of an emergency response or evacuation plan. The internal road would be regraded and resurfaced with an aggregate base. Security fencing along portions of the property containing the former burn dump and the gate at the entrance off SR-49 would restrict access to the site. During remediation, all evacuation routes will be maintained and there would be minimal short term ingress and egress for up to 7 construction workers off SR-49, the primary evacuation route. No impact would occur on evacuation routes or plans.

g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact

There are no proposed human uses of the site or buildings that would be exposed to a risk of wildfire. Surficial waste removal and site vegetation clearance for remediation with later revegetation with a native plant seed mix, would reduce fuels currently in the Project Area. The Project would therefore not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

Water quality within the Project Area is within the jurisdictional limits of the CVRWQCB. Two ephemeral drainages were delineated in the Project Area: one in the northern perimeter of the Primary Area, and 1 through the center of the Secondary Area (see **Figure 2**).

The main source of water for the Project Area is direct precipitation. The Secondary Area also receives water from a groundwater spring northwest of the site. The 2 ephemeral drainages continue east of the site into culverts below SR-49 and connect to Woods Creek (NCE 2025a), Woods Creek flows into the Don Pedro Reservoir, which flows into the Tuolumne River. The Tuolumne River is a traditional navigable waterway.

These hydrological features are considered WOUS and waters of the State of California. Regulations associated with these features are discussed in the Regulatory Setting section below.

The Project Area is identified as Zone D by the Federal Emergency Management Agency's (FEMA) flood insurance program. This means it is in an area with possible but undetermined flood hazards, and no flood hazard analysis has been conducted.

4.10.2 Regulatory Setting

State

Statewide Construction General Permit

Because the proposed Project would disturb more than 1 acre, it is subject to the statewide Construction General Permit Order 2009-0009-DWQ, which regulates stormwater leaving construction sites. Under this order, site owners must notify the State and implement a SWPPP prepared by a Qualified SWPPP Developer. The SWPPP must outline measures that would protect hydrology and water quality resources, including groundwater, from negative impacts during remediation activities through implementation of BMPs and monitoring the effectiveness of BMPs. This permit is administered by the State Water Resources Control Board and overseen by the CVRWQCB.

4.10.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	Less Than Significant Impact

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i. result in substantial erosion or siltation on or off-site;	Less Than Significant Impact
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;	Less Than Significant Impact
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less Than Significant Impact
iv. impede or redirect flood flows?	Less Than Significant Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less Than Significant Impact

4.10.4 Answers to CEQA Checklist Questions

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact

Overall, the Project proposes features which would have a beneficial effect on water quality. As discussed in the Project Description, current water quality concerns are associated with exposed burn waste and contaminated soils in 2 drainage areas, particularly in the Primary Area where waste materials contain metal concentrations exceeding residential health risk screening levels and State hazardous waste levels. The waste in drainage channels is susceptible to mobilization and transport downstream into Woods Creek and ultimately Don Pedro Reservoir and the Tuolumne River, creating ongoing water quality impacts.

The Project addresses these water quality concerns by implementing several protective features, including excavation and consolidation of waste materials away from drainage areas, remediation in the Primary Area of a trapezoidal channel lined with rock-slope protection, installation of erosion control measures including fiber rolls and hydroseeding, creation of stable 3:1 H:V drainage slopes to reduce erosion potential, improvements to existing drainage ditches to properly manage stormwater flows, and revegetation of the final cover and disturbed areas to prevent soil loss.

There is potential for remediation activities to temporarily impact water quality at the site. Activities such as waste excavation, grading, and use of machinery near and within the drainage courses are sources of potential pollution that could impact water quality.

As discussed in the Project Description and Regulatory Setting section, the CVRWQCB requires preparation and implementation of a SWPPP for construction projects over 1 acre. It is required that this document include an extensive list of measures to minimize impacts to stormwater quality during construction per Order WQ 2022-0057-DWQ, NPDES No. CAS000002.

Because the Project incorporates proper waste consolidation away from drainages, engineered drainage improvements, site revegetation, comprehensive erosion control measures, a SWPPP, and water quality protection BMPs, no significant impacts to surface or groundwater quality are anticipated to occur during remediation.

Long-term, the Project would have a beneficial impact on water quality because the contaminated materials would be removed from drainage areas and properly contained, preventing future releases of contaminated materials into Woods Creek.

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

Less Than Significant Impact

If unanticipated groundwater is encountered during remediation activities at the site, particularly during waste excavation or drainage improvements, dewatering would be required and would be conducted according to a Dewatering Plan that must be approved prior to remediation. Any groundwater encountered, including flow from the existing groundwater spring northwest of the Secondary Area, would be managed in accordance with the Project's SWPPP requirements and the site-specific Dewatering Plan. The Project Area is not within a priority groundwater basin (California Department of Water Resources n.d.) and therefore there are no applicable sustainable groundwater management plans associated with the Project. Since the Project involves consolidating waste materials away from drainage areas and improving surface water drainage patterns, it would not adversely affect groundwater recharge or prevent sustainable management of groundwater in the basin. There would be no increase in impervious surfaces that could reduce groundwater recharge. Additionally, because stormwater improvements are designed to maintain natural drainage patterns through the reconstructed channels and culverts, the Project would not result in a decrease in groundwater supply or recharge. Therefore, impacts to groundwater resources would be less than significant.

c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

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

Less Than Significant Impact

The Project would remediate and reconstruct 2 ephemeral drainages in the Project Area. Remediation plans incorporate slope stability and stormwater design with pervious materials such that the Project, once constructed, would reduce the amount of erosion or siltation currently occurring in the Project Area. Construction controls would ensure no significant erosion or siltation would occur during remediation. No impervious surfaces are proposed. While some modification of the existing drainage pattern on the site would occur, the proposed slope stabilization and culvert replacement would have a long-term beneficial effect on erosion and siltation.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on/or off-site?

Less Than Significant Impact

The Project does not propose features which would increase runoff at the site, although culvert improvements that reduce flooding on the site could result in a small increase in flows downstream during storm events. Drainage improvements have been appropriately sized to handle the 100-year, 24-hour storm event to capture and properly direct surface runoff that discharges into Woods Creek. The Project proposes to construct a final cover that includes vegetation and maintain permeable drainage channels and access roads with aggregate base surfacing, which would allow for continued infiltration of surface runoff at the site and minimize surface flows. Project impacts on flooding either on or off-site would be less than significant.

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?

Less Than Significant Impact

See discussion above. The Project does not propose an increase in impervious coverage, and stormwater design would result in a less than significant increase in drainage flows downstream from the Project Area. Construction controls such as the SWPPP would protect water quality during remediation. Long-term, the Project would reduce polluted runoff because the contaminated materials would be removed from drainage areas and properly contained, preventing future releases of contaminated materials into downstream water bodies. The Project would have a less than significant impact on the natural drainage system and a long-term beneficial effect by reducing polluted runoff.

iv) Impede or redirect flood flows?

Less Than Significant Impact

The Project would alter existing drainage patterns at the site through the reconstruction of 2 ephemeral drainages, but these alterations are designed to improve drainage function and flood control. In the Primary Area, the existing stream would be reconstructed as a trapezoidal stream channel lined with rock-slope protection, while the drainage channel in the Secondary Area would be lined with temporary erosion control mat and revegetated. The surface drainage control system has been specifically designed to accommodate the anticipated precipitation from the 100-year, 24-hour storm event. The Project would improve the existing general drainage pattern where both ephemeral drainages flow east to culverts under SR-49 before connecting to Woods Creek. Additionally, the Project would not substantially increase impervious surfaces, as the access road would be surfaced with aggregate base, allowing for continued infiltration. All graded areas would achieve slope gradients of 3:1 H:V or less to promote positive drainage patterns. Therefore, while the Project would modify existing drainages, these modifications are engineered improvements that would better manage rather than impede or redirect flood flows, resulting in a less than significant impact.

d) In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

No Impact

The Project is located in the Sierra Nevada foothills of Tuolumne County, in Federal Emergency Management Agency (FEMA) Zone D (FEMA n.d.). Due to its inland location, the site would not be subject to tsunami risk. The Project is approximately 5 miles west of New Melones Lake, and the site's distance and higher elevation from the lake prevent any impact from potential seiches. The Project would provide for greater slope stability within the Project Area, thereby reducing the potential for mudflows to impact the drainage system. Therefore, no impacts related to risk of inundation by seiche, tsunami, or mudflow would occur.

e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact

The CVRWQCB uses the Water Quality Control Plan (Basin Plan) as one of its regulating documents (CVRWQCB 2019). The Basin Plan sets forth water quality standards for the surface and ground waters of the region. As discussed above, the Project is intended to remove waste from jurisdictional waters and therefore be in furtherance towards implementation of a water quality control plan.

The State Sustainable Groundwater Management Act requires local agencies of groundwater basins in high or medium priority areas[18] to implement sustainable groundwater management plans. The Project Area is not within a priority groundwater basin (California Department of Water Resources n.d.) and therefore there are no applicable sustainable groundwater management plans associated with the Project. The Project does not anticipate exposing groundwater during excavation activities.

Additionally, as discussed above, the Project proposes to manage runoff through improvements to the 2 ephemeral drainages consisting of the installation of a trapezoidal channel with rock-lined slope protection in the Primary Area and an erosion control mat lined channel in the Secondary Area, both of which would discharge runoff ultimately to Woods Creek. Because runoff would maintain its natural drainage pattern to Woods Creek with only modifications to improve channel stability and erosion control, and because the site will continue to receive direct precipitation and spring water run-on, the Project would not result in a decrease in groundwater supply or obstruct the sustainable management of groundwater.

[18]California's high- and medium-priority groundwater basins are those identified by the California Department of Water Resources as being at risk of unsustainable groundwater use.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The Project Area consists of parcels zoned as M-1 light industrial in the Tuolumne County Ordinance Code and designated light industrial in the Tuolumne County General plan. The Project vicinity contains mixed land uses, including commercial, residential and open space. The site is bounded to the west by vacant property owned by the BLM.

4.11.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Physically divide an established community?	No Impact
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

4.11.3 Answers to CEQA Checklist Questions

a) Would the Project physically divide an established community?

No Impact

The Project is in an underdeveloped area in Tuolumne County, just outside the limits of the City of Sonora. There is no established community in the Project Area and no adjacent development. Therefore, the proposed Project would not physically divide an established community and no impacts would occur.

b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

The Project Area is subject to the Tuolumne County General Plan and Zoning Ordinance. The Project Area is designated as light industrial. There is a mix of land uses in the vicinity, including commercial and undeveloped properties. The Project does not include or propose any land use changes and does not lie within the boundaries of any specific resource mitigation plan. The County General Plan requires projects to minimize adverse effects if impacts on oak woodland cannot be avoided. As a remediation project designed to improve health and safety, and subject to regulatory permitting for aquatic resources, the Project is exempt from the tree preservation ordinance and thus would not conflict with any plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Although short term effects on oak trees would occur, the site will be revegetated and deed restricted, allowing natural regeneration of the site in addition to CDFW mitigation requirements.

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are naturally occurring chemical elements or compounds, or groups of elements and compounds, formed from inorganic processes and organic substances including, but not limited to, coal, peat, and oil-bearing rock, but excluding geothermal resources, natural gas, and petroleum.

Tuolumne County has extensive mining history and resources. Currently operating mines in Tuolumne County gather limestone and dolomite and various forms of crushed rock, gravel, and sand products. A number of properties have been classified as mining zones, including the Southern Half of the Bald Mountain/Browns Flat Gold Mining District, the Jamestown Mine, and portions of the Rough and Ready Creek site. These sites are located approximately 2.5 miles southwest and 10 miles southeast of the site (Tuolumne County Community Resources Agency 2018). The Project Area has been previously mined.

According to the State Mining and Geology Board (State Mining and Geology Board n.d.) there are currently no state or regionally valuable mineral resources within the Project Area.

4.12.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact

4.12.3 Answers to CEQA Checklist Questions

a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact

According to the State Mining and Geology Board and General Plan Policy 7.C.1: (Tuolumne County Community Resources Agency 2018), there are no lands classified as significant Mineral Resource Zone-2 (MRZ-2) within the Project Area. The proposed Project would therefore not result in the loss of a known mineral resource.

b) Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact

According to the State Mining and Geology Board and General Plan (Tuolumne County Community Resources Agency 2018, State Mining and Geology Board n.d.), there are no resource recovery sites associated with the Project; therefore, there would be no impact.

4.13 Noise

Noise is defined as a sound or series of sounds that are intrusive, objectional, or disruptive to daily life. Noise levels are measured in order to regulate ambient noise and protect residents from exposure to excessive noise. Different land uses have different acceptability levels in terms of noise disturbance. For example, industrial uses have a higher noise threshold than residential uses. Noise standards provide a means of assessing exposure and compatibility based on specific uses.

4.13.1 Environmental Setting

Significant noise generators in the vicinity include motor vehicles from SR-49. The closest receptor to the Project Area is a commercial business approximately 600 feet southeast, and the closest residence is approximately 2,400 feet southwest of the site.

4.13.2 Regulatory Setting

Local

The County's Noise Ordinance establishes noise limits and allowable hours for construction activities, typically 7:00 a.m. to 7:00 p.m.

4.13.3 CEQA Checklist Summary

Would the Project result in:

CEQA Question	Impact Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project Area to excessive noise levels?	No Impact

4.13.4 Answers to CEQA Checklist Questions

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

Less Than Significant Impact

There are no sensitive receptors in the vicinity of the Project Area. During remediation, workers would be temporarily exposed to noise generated by construction equipment, such as compaction equipment, excavators, backhoes, and loaders. Pile driving, which is the major source of ground borne vibrations

and noise during construction, would not be used for the Project. Noise generated during the Project from equipment operation and backup alarms would be temporary and would comply with the County construction noise guidelines, and there are no nearby sensitive receptors. Therefore, the Project would have a temporary and less than significant impact on ambient noise levels.

b) Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact

Vibration is described in terms of frequency and amplitude. Unlike sound, there is no standard way of measuring and reporting vibration. Construction vibration is generally associated with pile driving and rock blasting. Occasionally, large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity. Remediation activities would result in intermittent exposure of ground borne vibration to the Project Area. However, this impact would be temporary and there are no sensitive receptors or buildings in the immediate vicinity of the Project Site. Because impacts would be temporary and isolated from buildings and residents, the impact would be less than significant.

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

No Impact

There are no airports within the vicinity of the Project Area. The area is served by the Columbia Airport approximately 5 miles northwest of the Project Area. Therefore, the Project would not expose construction workers to excessive aircraft noise.

4.14 Population and Housing

4.14.1 Environmental Setting

As of 2023, Sonora had an estimated population of 5,003 residents and an estimated housing stock of 2,515 dwelling units (California Department of Finance 2024).

4.14.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
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
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

4.14.3 Answers to CEQA Checklist Questions

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

No Impact

The Project would remediate waste from a closed burn dump and does not propose building, utility, or infrastructure development. The proposed Project would not induce population growth directly by adding new housing or commercials uses, or indirectly by adding new infrastructure.

b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact

The Project Area was historically used as a burn dump. The proposed Project does not propose any removal of existing housing or new development or infrastructure that would result in displacement of people or housing and would therefore not require construction or replacement of housing elsewhere. Therefore, the Project would have no impact.

4.15 Public Services

4.15.1 Environmental Setting

Fire Protection

The Sonora Fire Department provides 24-hour emergency response for medical emergencies, fire suppression, water rescue, and disaster response. The nearest station is located approximately 1 mile northwest of the Project Area.

Police Protection

The Sonora Police Department provides protective services for the Project Area. In case of emergencies and non-emergency calls, the community can reach an on-call first responder. The Tuolumne County Sheriff's office provides additional services to the City. The nearest police station is located approximately 1.3 miles northwest of the Project Area.

Medical Facilities

Adventist Health Care Center is located 0.7 miles north of the Project Area. In addition, Sierra Emergency Medical Group is located 1.4 miles north and works with Adventist Health Sonora to bring emergency medical care to Tuolumne County and the surrounding areas.

Parks

The nearest public trail is the Dragoon Gulch Trail Head approximately 1 mile northeast of the Project Area and the nearest public park is approximately 1.4 miles northeast of the Project Area.

4.15.2 CEQA Checklist Summary

Would the Project result in:

CEQA Question	Impact Determination
a) Would the Project result in substantial adverse physical impacts associated with the need and/or provision of new or physically altered governmental services and/or facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services? i) Fire protection? ii) Police protection? iii) Schools? iv) Parks? v) Other public facilities?	No Impact

4.15.3 Answers to CEQA Checklist Questions

a) Would the Project result in substantial adverse physical impacts associated with the need and/or provision of new or physically altered governmental services and/or facilities in order

to maintain acceptable service ratios, response times, or other performance objectives for any of the public services?

i) Fire protection?

ii) Police protection?

iii) Schools?

iv) Parks?

v) Other public facilities?

No Impact

The Project would not increase dwelling units or road capacity; thus involves no increase in demand for public services such as schools or parks.

During remediation, the Project may have a negligible increase in emergency services demand to protect construction equipment or personnel; this potential demand increase over a 6-week period can be adequately served by existing services. There are adequate fire and police services to protect the remediation area and construction workers without affecting emergency services ratios, response times or other performance objectives. Therefore, the proposed Project would not require new or physically altered governmental services and/or facilities in order to maintain acceptable service ratios, response times, or other performance objectives.

4.16 Recreation

4.16.1 Environmental Setting

The closest parks and other recreation facilities are located in Sonora under the jurisdiction of the City of Sonora, Don Pedro Recreation Agency, community-based recreation and park districts, community services districts, and Tuolumne County. The nearest public trail is the Dragoon Gulch Trail Head approximately 1 mile northeast of the site and the nearest public park is approximately 1.4 miles northeast of the site.

4.16.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
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?	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

4.16.3 Answers to CEQA Checklist Questions

a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact

Population growth is the main driver for new or expansion of recreational facilities. The Project would not include recreational features or facilities or require construction or expansion of recreational facilities because the Project would not influence population growth. Therefore, there would be no effect on recreation and no subsequent environmental impact from construction or expansion activities.

b) Would 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 Project would not include recreational facilities or improvement, such as trail biking or connectivity, or induce population growth that would lead to an increased demand for recreational services. The Project Area involves private property that is fenced and gated from public access.

4.17 Transportation

4.17.1 Environmental Setting

The Project Area is accessed from SR-49. SR-49 is a north-south state highway that passes through many historic mining communities and is known as the Golden Chain Highway. SR-49 adjacent to the Project Area is a 2-lane roadway. It starts at an intersection with SR-41 in Oakhurst and passes through the counties of Tuolumne, Calaveras, Amador, El Dorado, Placer, Nevada, Yuba, Sierra, and Plumas, before ending in Vinton.

4.17.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	Less Than Significant Impact
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
d) Result in inadequate emergency access?	No Impact

4.17.3 Answers to CEQA Checklist Questions

a) Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact

The Project is in an undeveloped area and surrounded by undeveloped, unincorporated land. Access to the Project Area is via SR-49. There are no bike lanes, sidewalks, bus stops, or other public transportation facilities located in the vicinity of the site and no alternative transportation plans applicable to the Project Area. No new public roadways, transit, bicycle, or pedestrian facilities are proposed; therefore, the Project would not conflict with any program, plan, ordinance, or policy addressing transportation.

b) Would the Project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Less than Significant Impact

The Project Area is in a rural area with limited public access and does not propose residential, commercial, or industrial development that would generate an increase in vehicle miles traveled (VMT). A small temporary increase in remediation-related traffic would occur as workers, equipment, and materials are moved to and from the Project Area. Equipment is expected to remain within the Project

Area for the duration of remediation. Only 5 – 7 construction personnel are anticipated to commute to the site during the 6-week remediation period. Therefore, the Project would result in a temporary and less than significant impact on VMT.

c) Would the Project 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 does not have a roadway design component and therefore would not increase any hazards related to roadway design. Aggregate internal roadway improvements would be for internal access only to minimize disturbance of the cap during site inspections.

d) Would the Project result in inadequate emergency access?

No Impact

The Project would not alter SR-49, an existing emergency access route, nor change existing patterns of emergency access. As discussed in Section 4.9, SR-49 access will be maintained and there would be minimal short term ingress and egress for up to 7 construction workers. No impact on emergency access would occur.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

The Central Sierra Me-Wuk people lived in the western foothills of central California, from Jenny Lind on the Calaveras River to Knights Ferry on the Stanislaus River to La Grange on the Tuolumne River (Barrett 1908). The Utian family, which is made up of the Costanoan and Miwokian sub-families, includes the Central Sierra Me-Wuk language. The Western and Eastern Miwokian are the 2 groups; the latter is the language of the Me-Wuk, a people from Sierra (Levy 1978).

Native tribes were severely disturbed by the entrance of Spanish missionaries in the late 1700s and early 1800s, and they frequently fled, encroaching on Central Sierra Me-Wuk Territory. Tribe boundaries were impacted by the decline in tribe populations in the valley by the Gold Rush, as fugitives joined other groups (Levy 1978). Indians were used as wage workers in the mines in the 1850s. The Indians frequently starved as a result of the settlers' severe environmental changes, which cut them off from their customary food sources. The Me-Wuk were almost exterminated by starvation, sickness, and anti-native sentiments; prior to the advent of Europeans, the Sierra Me-Wuk population was around 10,000, but by 1910, it had dropped to 679 (Tuolumne Me-Wuk Tribal Council 2024).

The government acquired the Chicken Ranch and the Tuolumne Me-Wuk rancherias as reservations at the beginning of the 20th century. The Me-Wuk still reside in the general area of their former region in current century. Cultural customs are still followed today, and occasions like the yearly Acorn Festival, which was started in 1966, honor these regional customs (Tuolumne Me-Wuk Tribal Council 2024).

4.18.2 Regulatory Setting

Native American Consultation

In accordance with AB 52, as identified in the PRC Section 21080.3.1(b)(2) of CEQA and Section 106 of the NHPA, Native American tribes (tribes) identified by the NAHC must be invited to consult on projects.

4.18.3 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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 CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k), or	No Impact
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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact

4.18.4 Answers to CEQA Checklist Questions

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC § 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 CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?

No Impact

Following AB 52 as identified in PRC Section 21080.3.1(b)(2) of CEQA, Native American tribes identified by the Native American Heritage Commission (NAHC) were invited to consult on the Project. Native American correspondence was initiated with a letter to the NAHC. The letter requested a search of their Sacred Lands File and a contact list for regional tribes that may have knowledge of tribal cultural resources within or immediately adjacent to the APE.

AB 52 Native American consultation as required under CEQA was conducted by CalRecycle, which has a tribal liaison on staff responsible for contacting tribe representatives. Chicken Ranch Rancheria of Me-Wuk Indians indicated an interest in consulting; however, no further contact was able to be established. No other tribes responded. AB 52 consultation was closed on February 19, 2025, by CalRecycle. USACE is responsible for tribal consultation under Section 106 of the NHPA as a separate process.

The search of the NAHC Sacred Lands File indicated no known tribal cultural resources are located within or immediately adjacent to the Project Area, and no resources with cultural value to a California Native American tribe that are listed or eligible for listing in California Historic Register or in a local register of historical resources are known to be present within the Project Area. Therefore, no impact on an eligible tribal resource is anticipated to occur.

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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant Impact

The cultural resources inventory of the Project Area did not identify any previously unrecorded resources that would have cultural value to a California Native American tribe. Based on available information, the Project would not impact prehistoric resources meeting the criteria outlined in Section 5024.1 of the California Public Resources Code or Title 36 of the Code of Federal Regulations Part 60.4. State laws are in place to protect unanticipated discovery of human remains during remediation.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

The Project Area was used as a remote burn dump site. There are no utilities located on or adjacent to the Project Area.

4.19.2 CEQA Checklist Summary

Would the Project:

CEQA Question	Impact Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less Than Significant Impact
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
d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less Than Significant Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

4.19.3 Answers to CEQA Checklist Questions

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

No Impact

The Project does not propose construction or expansion of facilities which would have an impact on the need for new or expanded utility facilities. The Project would involve site remediation that includes surface drainage improvements to improve flows and water quality. Improvements include modifications of the existing channel to a trapezoidal shaped channel with rock-slope protection lining and lining the road crossing through a swale with rock-slope protection. This surface drainage control is designed to accommodate the anticipated precipitation from the 100-year, 24-hour storm event. Stormwater would flow naturally to Woods Creek, and no stormwater facilities would be involved. Although stormwater eventually flows to Don Pablo Reservoir, no new impervious surfaces are

proposed that change the volume of stormwater from the site. Therefore, there would be no impact on stormwater facilities, and no utility connections are proposed for the site.

b) Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact

Project remediation would require water trucks that would access water off-site to reduce dust on the 3.35 acre Project Area during approximately 4 weeks of remediation activities. The Project does not propose features that would require long-term water services; therefore, the short term impact on local water supplies to fill the trucks would be less than significant.

c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

No Impact

The Project does not involve direct or indirect discharge of wastewater to a sanitary sewer or on-site septic systems. No demand for wastewater treatment or facilities would occur as a result of the Project. The Project would not create wastewater and would not impact a wastewater treatment operator.

d) Would the Project generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact

Waste generated during Project remediation activities would be temporary and generally limited to vegetation debris and remaining surficial waste. Surficial waste was previously removed during site fencing, thus new waste on the site since that time would be transported to the landfill and would not be a significant amount. If hazardous materials are encountered during remediation, these materials would be sent to an appropriate waste facility. The Project would not create solid waste after remediation and therefore would have a less than significant impact on local landfill capacity or solid waste reduction goals.

e) Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact

The Project has been designed to remediate a former burn dump pursuant to the Burn Dump Protocol, which was used to investigate and characterize the burn dump site. The Burn Dump Protocol aims to identify potential hazards, such as heavy metals and organic constituents, and ensure compliance with regulatory authorities such as DTSC and the CVRWQCB. The Project is being implemented following the guidance of LEA Advisory #56 – Process for Evaluating and Remediating Burn Dump Sites and is consistent with all applicable federal, state, and regional solid waste regulations.

4.20 Wildfire

4.20.1 Environmental Setting

The California Department of Forestry and Fire Protection (CAL FIRE) designates fire hazard severity zones for areas under state jurisdiction. For areas under local jurisdiction, CAL FIRE identifies areas that the department considers to be Very High Fire Hazard Severity Zones (VHFHSZs); the local jurisdiction must choose whether to adopt the CAL FIRE recommendations. The Project Area is located in a State Responsibility Area for High Fire Hazard Severity.

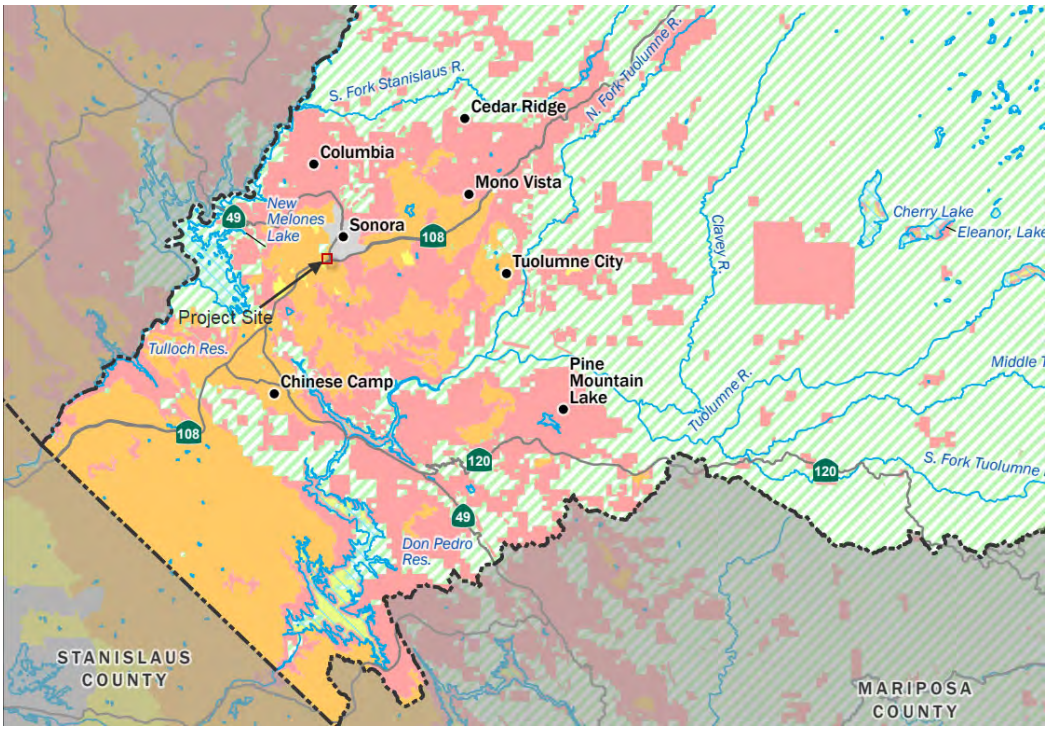


Figure 4. Very High Fire Hazard Severity Zones

Source: California Department of Forestry and Fire Protection (CAL FIRE). 2023.
NOTE: Red area designates the State VHFHSZ. Orange area designates the State HFHSZ.

Tuolumne County is predominantly designated a VHFHSZ, and several areas in the County are at risk for wildland fires. Fire protection services within the County and the surrounding areas are provided by the Tuolumne County Fire Department, CAL FIRE, and the Fire Department for each city within the County.

4.20.2 Regulatory Context

Local

The Tuolumne County Hazardous Vegetation Management Ordinance (Chapter 8.14 of the County Code) provides for the removal of hazardous vegetation situated in the unincorporated areas of the County to reduce the potential for fire and to promote the safety and welfare of the community, including protection of lives, structures, private property, natural resources and the environment.

4.20.3 CEQA Checklist Summary

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

CEQA Question	Impact Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
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?	No Impact
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?	No Impact
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

4.20.4 Answers to CEQA Checklist Questions

a) Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact

The Project Area is within a state classified VHFHSZ. The Project would remove existing vegetation fuel from the Project Area and restore it with native over non-native plants. It would not change adjacent roadways nor introduce habitable dwellings into the VHFHSZ. There would be a minor temporary increase in construction traffic on SR-49, an evacuation route.

The County uses the Everbridge Citizen Alert System to allow residents and visitors to receive alerts issued by the Tuolumne County Sheriff's Office of imminent threats and emergency warnings. This system has the option to enter 1 or multiple addresses that any registrant requests to be aware of in the event of an emergency. If there is a wildfire, the notification system will inform remediation workers with directions on evacuation procedures, as necessary. The Project would utilize SR-49 for ingress and egress during the 6 week remediation period. However, the minimal number of remediation crew and required equipment along with truck traffic associated with material deliveries or waste removal would not significantly add trips to SR-49 and therefore would not impair the adopted emergency response or evacuation plans.

b) Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact

The Project would remove vegetation fuel sources and would not construct or modify habitable structures within the Project Area that could expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact

The Project would involve short term remediation and does not propose infrastructure or utilities that would exacerbate fire risk or result in impacts on the environment.

d) Would the project 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 would remove vegetation fuel sources and would not construct or modify habitable structures within the Project Area. The Project would improve slope stability and drainage, thereby reducing the potential for landslides on the site or downstream flooding in the event of a wildfire. Until such time as vegetation is reestablished, the Project Area would also serve as a fire break in the short term.

4.21 Mandatory Findings of Significance

4.21.1 CEQA Checklist Summary

CEQA Question	Impact Determination
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact with Mitigation Incorporated
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, or the effects of probable future projects.)	Less Than Significant Impact with Mitigation Incorporated
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant Impact

4.21.2 Answers to CEQA Mandatory Findings of Significance Questions

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

Less Than Significant Impact with Mitigation Incorporated

The results of the IS indicate that the Project does not have the potential to substantially degrade the quality of the environment with regards to aesthetics, air quality, agriculture and forestry, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and services, or wildfires.

As discussed in Section 4.4, Project remediation activities could impact Biological Resources, specifically CRLF and FYLF, migratory birds, riparian habitat, and special-status bats. **Mitigation Measures BIO-1 through BIO-6** are included in Section 4.4.4 that would reduce impacts to less than significant.

Implementation of **Mitigation Measure BIO-1** would reduce general remediation impacts to protect wildlife species and their habitats. Implementation of **Mitigation Measure BIO-2** would reduce potentially significant impacts on special-status plants by requiring CalRecycle to retain a qualified biologist to conduct protocol-level field surveys to identify populations of special-status plant species within the site prior to the initiation of any remediation activities.

Implementation of **Mitigation Measure BIO-3** would prevent impacts to, or mortality of individual special-status amphibians (CRLF and FYLF) or reptiles by requiring that CalRecycle retain a qualified biologist approved by CDFW and USFWS in standard USFWS mitigation and avoidance measures.

Implementation of **Mitigation Measure BIO-4** would reduce impacts on migratory birds by requiring CalRecycle to utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. If nesting birds are detected, consultation with CDFW and USFWS is recommended to establish acceptable avoidance or minimization measures, which could include the establishment of a suitable activity-free buffer around active nests/roosting sites.

Implementation of **Mitigation Measure BIO-5** would reduce impacts on special-status bats by requiring that a qualified biologist survey the Project Area and vicinity for bats and any foraging or roosting habitat. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features. If suitable habitat trees are found, appropriate measures shall be taken to minimize impacts to roosting bats prior to tree removal.

Remediation of the existing drainages would result in permanent impacts to regulated waters of the U.S. and waters of the State of California, including the removing of trees within the riparian corridor. Modification of these drainages would be a potentially significant impact requiring permitting under Sections 404 and 401 of the Clean Water Act and California Fish and Game Code Section 1602. The loss of oak tree canopy is temporary as the site cannot be developed, and with native plant hydroseeding will regenerate over time. Implementation of **Mitigation Measure BIO-6** requires that CalRecycle obtain a USACE Section 404 CWA permit (Nationwide Permit 38 Cleanup of Hazardous and Toxic Waste), CVRWQCB Section 401 Water Quality Certification, and CDFW Section 1602 Lake and Streambed Alteration Agreement for impacts to waters of the U.S. and State, and that they comply with all mitigation measures and requirements established in these permits.

These mitigation measures would reduce the potential of the Project to degrade the quality of the environment including the potential to substantially reduce the habitat of a fish or wildlife species or cause a fish or wildlife population or plant community to drop below self-sustaining levels to less than significant levels.

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, or the effects of probable future projects.)

Less Than Significant Impact with Mitigation Incorporated

The Project would not result in an increase in population or growth that would require new housing, facilities, or structures that would cause cumulative environmental degradation. The Project would not result in an exceedance of any criteria air pollutant or GHG for which the region is in non-attainment status for air quality; therefore, there would be no cumulatively considerable net increase in criteria pollutants or GHG. The Project would be consistent with local, state, and federal regulations pertaining to the protection and mitigation of impacts to sensitive resources, and compliance with Mitigation Measures BIO-1 through BIO-6. The terms of permitting conditions would ensure that biological

resources are protected during remediation and would not result in a significant cumulative loss of biological resources. There are no known cultural or tribal cultural resources within the Project Area that could contribute to a cumulative loss of cultural materials. Therefore, as mitigated, the Project would have a less than cumulatively considerable impact.

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

Less Than Significant Impact

All potential impacts associated with remediation activities identified in this Mitigated Negative Declaration are either less than significant after mitigation or less than significant and do not require mitigation. No adverse effects on human beings, such as air quality, noise, or hazards, were identified as a result of remediation activities. Additionally, implementation of BMPs and compliance with state and federal regulations protecting human and environmental health during remediation, such as preparation of a SWPPP and Spill Prevention, and Control Plan, would be implemented. Therefore, the Project would not result in environmental effects that cause substantial adverse effects on human beings either directly or indirectly.

5 Mitigation Monitoring and Reporting Plan

CEQA requires review of any project that could have significant adverse effects on the environment. In 1988, CEQA was amended to require reporting on and monitoring of mitigation measures adopted as part of the environmental review process. This Mitigation Monitoring and Reporting Plan is designed to aid CalRecycle in their implementation and monitoring of measures proposed in the IS for the proposed Project.

Table 3 provides details of the Mitigation Monitoring and Reporting Plan. The mitigation measures are taken from the IS and are assigned the same number as in the IS. The Mitigation Monitoring and Reporting Plan describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

Table 3. Mitigation and Monitoring Plan

Mitigation Measure	Mitigation Activities	Implemented By	Monitored By	Timing and Frequency	Verification of Compliance
BIO-1	The following general conservation measures shall be implemented by CalRecycle during remediation activities to protect wildlife species and their habitats: • Areas for fuel storage, refueling and servicing of equipment shall be located in an upland location outside of delineated aquatic resources. • Equipment washing areas shall be located in upland locations to ensure wash water does not flow into stream channels or wetlands. • All construction equipment shall be in good working condition, showing no signs of fuel or oil leaks. All motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals that are questionable shall be replaced. The mechanical equipment shall be inspected daily to ensure no leaks. Any leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of remediation activity. • Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a release or spill occurs from the mechanical equipment, no additional work using that equipment shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) if spill materials reach the waterway, CDFW, CVRWQCB, and CalRecycle have been notified. • To avoid debris contamination into drainages and other aquatic resources, silt fencing or other sediment control devices shall be placed around remediation activities in these areas to contain spoils from excavation activities. • Due to the potential for SSS to occur or move through or into the Project Area, an on-site biological monitor shall be present during initial ground disturbance and tree removal, and at least weekly thereafter. Equipment operators and crews shall be trained to, at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities and during earth disturbing activities to prevent take of SSS. All pipes or tubing with diameter 4 inches or larger shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering at night. All trenches and other excavations shall be backfilled the same day they are opened or shall have an exit ramp built into the excavation to allow animals to escape. SSS identified on the site we be allowed to leave the area on their own accord, or an appropriate no-activity buffers surrounding the SSS determined by the qualified biologist will be implemented. • Environmental Awareness Training shall be presented to all personnel working in the field in the proposed Project Area. Training shall consist of a brief presentation in which biologists who have knowledge of endangered species biology and legislative protection shall explain SSS concerns.	Contractors	CalRecycle	Throughout remediation	Verified by: Date:

	Topics to be discussed include the biology of the SSS that may be encountered in the Project Area, their habitat needs, their identification, their status under the CESA and ESA, and any relevant protection measures. As part of the training, an environmental awareness handout will be provided to all personnel that describes the SSS at the site, including photographs, and lists applicable permit conditions identified by local, state, and federal agencies to protect these resources. If any Project personnel are added to the proposed Project, they shall receive the mandatory training before starting work. • Project Area boundaries shall be clearly delineated by stakes and/or flagging to minimize inadvertent degradation or loss of adjacent habitat areas during Project operations. Staff and/or contractors shall post signs and/or place fencing around portions of the Project Area as necessary to restrict access of vehicles and equipment unrelated to Project operations. Access to the Project Area by unauthorized vehicles and equipment shall remain restricted by the gate at the main entrance off SR-49 (primary gate) and an additional gate (secondary gate) along with fencing for the Rotelli Primary Burn Dump Area. • To avoid entanglement of wildlife, CalRecycle shall not use plastic mono-filament netting, jute netting, or any material with cross joints that are bound/stitched (such as that found in straw wattles/fiber rolls and some erosion control blankets) on the Project Area for any purpose. CalRecycle shall ensure that all fiber rolls and erosion control blankets or netting are made of loose-weave mesh that is not fused at the intersections of the weave, such as coconut (coir) fiber, or other products without welded weave. CalRecycle shall cover the edges of erosion control blankets or netting with soil, sandbags, or similar materials to prevent wildlife from crawling underneath the material and becoming entrapped.				
BIO-2	A qualified botanist shall conduct protocol-level field surveys to identify populations of special-status plant species within the site prior to the initiation of any remediation activities. These surveys shall coincide with the appropriate flowering periods of the special-status plant species that have potential to occur in the Project Area. If any population(s) of special-status plant species is identified directly adjacent to the Project Area, a qualified biologist retained by CalRecycle shall clearly delineate the location of the plant population and install protective fencing between the disturbance zone and the population to ensure that the population is adequately protected. CalRecycle shall consult with CDFW and USFWS to determine the appropriate measures to avoid or mitigate for impacts to the species or population. CalRecycle shall adjust the boundaries of the disturbance zone where feasible to avoid impacts to the plant species/population. The special-status plant species that shall be surveyed for are listed below with their flowering season. These species have been identified as having potential to occur within the Project Area. • beaked clarkia (*Clarkia rostrata*), flowering period: April - May • Mariposa cryptantha (*Cryptantha mariposae*), flowering period: April - June	Qualified botanist Contractors and/or CalRecycle	CalRecycle	Prior to and during remediation during the flowering periods of the special-status plant species that have potential to occur in the Project Area	Verified by: Date:

	• red hills cryptantha (*C. spithamaea*), flowering period: April - May • yellow-lip pansy monkeyflower (*Diplacus pulchellus*), flowering period: April - July • tansy-flowered woolly sunflower (*Eriophyllum confertiflorum* var*. tanacetiflorum*) , flowering period: May - July • Tuolumne button-celery (*Eryngium pinnatisectum*), flowering period: May - August • spiny-sepaled button-celery (*E. spinosepalum*), flowering period: April - June • Kings River monkeyflower (*Erythranthe acutidens*), flowering period: April - July • Gray's monkeyflower (*E. grayi*), flowering period: May - July • small-flowered monkeyflower (*E. inconspicua*), flowering period: May - June • serpentine bluecup (*Githopsis pulchella* ssp*. serpentinicola*), flowering period: May - June • delicate bluecup (*G. tenella*), flowering period: April - June • Parry's horkelia (*Horkelia parryi*), flowering period: April - June • Tuolumne iris (*Iris hartwegii* ssp*. columbiana*), flowering period: May - June • foothill jepsonia (*Jepsonia heterandra*), flowering period: August - December • Layne's ragwort (*Packera layneae*), flowering period: April - August • Michael's rein orchid (*Piperia michaelii*), flowering period: April - August • Hernandez bluecurls (*Trichostema rubisepalum*), flowering period: June - August Where avoidance of such impacts is not feasible, CalRecycle shall implement 1 or more of the following measures: • Transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, 2 additional plants shall be planted for a total of 3. Plantings shall be managed and monitored and shall survive to 5 years after planting. • Seed or purchase plants and place them in an area adjacent to the disturbance zone. • Purchase credits at an approved mitigation bank at a ratio approved by CDFW, USFWS, and CalRecycle.				
BIO-3	In order to prevent impacts to, or mortality of individual special-status amphibians or reptiles, CalRecycle shall retain the services of a qualified biologist approved by CDFW and USFWS. The qualified biologist shall implement the following standard USFWS mitigation and avoidance measures: • Preconstruction surveys before remediation activities for CRLF and FYLF shall be completed within 48 hours prior to commencement of any earth-moving activity, remediation, or vegetation removal within the Project Area, whichever comes first. The preconstruction survey shall include 2 nights of nocturnal surveys in areas of suitable habitat before any remediation activities should occur. • If any CRLF and FYLF are encountered during the preconstruction surveys, the findings shall be reported to CDFW and USFWS to determine what, if any, further actions must be followed to prevent possible take of this species before remediation begins and if required by CDFW,	Qualified biologist Contractors and/or CalRecycle	CalRecycle	Prior to and during remediation	Verified by: Date:

	CalRecycle shall obtain an Incidental Take Permit prior to remediation activities resuming. Any actions taken in regard to this species will follow the measures outlined in the Incidental Take Permit. • Prior to the commencement of Project activities, remediation work areas in or near special-status amphibian habitat shall be fenced in a manner that prevents equipment and vehicles from entering adjacent habitat areas. Vegetation removal or excavation needed to install the exclusionary fencing may occur first. A qualified biologist, in consultation with CalRecycle, USFWS, and CDFW, shall assist in determining the boundaries of the area to be fenced and the type of exclusionary fencing, and direct the installation of the fence. Exclusionary fencing shall be at least 24 inches in height, buried at least 6 inches below the ground surface, reinforced with compacted soil against the bottom edge on both sides, and shall be permanent enough to ensure that it remains in good condition throughout the duration of Project activities. The exclusionary fencing shall be inspected daily, and any necessary maintenance or repairs of the fence shall be implemented immediately. All workers shall be advised that equipment and vehicles must remain within the fenced work areas. • Clearance surveys for special-status amphibians shall occur daily in the work area, especially along the interface between open space and remediation areas. If CRLF are found within the fenced work area, activities shall cease until the CRLF moves outside of the work area on its own volition. • A qualified biologist shall be present during all vegetation removal and ground disturbing activities immediately adjacent to or within habitat that supports CRLF or FYLF. • Prior to placement of any fill, the qualified biologist shall visually survey the area for CRLF and FYLF. • If any CRLF or FYLF are found in a remediation area where fencing was deemed unnecessary, work shall cease until the CRLF or FYLF moves of its own volition. The qualified biologist, in consultation with CDFW and USFWS, shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the qualified biologist. • Any CRLF or FYLF found during clearance surveys will be allowed to move outside of the work are on their own volition. • The qualified biologist shall have the authority to stop all activities until appropriate corrective measures have been completed. • Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when special-status amphibians may be present. Because special-status amphibians are often most actively foraging and dispersing during dusk and dawn, all activities shall cease 30 minutes before sunset and shall not begin prior to one half hour before sunrise. • Traffic speed shall be maintained at 5 miles per hour or less in the work area.				

BIO-4	If Project work must occur during the nesting season (February 1 – September 1), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project Area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of remediation activities. If nesting birds are detected within the survey area during the survey, a protective, activity-free buffer shall be established around the nest. The buffer shall remain in place until the young have fledged the nest and a qualified biologist has determined the nest is no longer actively being used. The buffer shall be a minimum of 200 feet unless otherwise approved by a qualified biologist. A reduction in the size of the buffer may be deemed suitable based on-site conditions, species behaviors or other specific criteria determined by the qualified biologist. This measure would ensure that no nesting birds are impacted by remediation activities. If the nesting bird species is subject to special state or federal protections CDFW and USFWS consultations are recommended to ensure the nesting species is adequately protected.	Qualified biologist	CalRecycle	Prior to remediation	Verified by: Date:
BIO-5	A qualified biologist shall conduct a habitat assessment and survey of the Project Area and vicinity for special-status bats and common bats. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if (a) presence of bats is presumed, or documented during the surveys in trees with suitable bat habitat, and removal using the 2-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 – April 15 or September 1 – October 15, or (b) after a qualified bat biologist, after first receiving written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats. • The 2-step tree removal shall be conducted over 2 consecutive days, as follows: o The first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting the 2-step tree removal process, the limbs and branches shall be removed from the tree using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided. o The second day, the entire tree shall be removed.	Qualified biologist	CalRecycle	Prior to and during tree removal	Verified by: Date:
BIO-6	Prior to remediation, CalRecycle shall obtain a USACE Section 404 CWA permit, CVRWQCB Section 401 Water Quality Certification, and CDFW Section 1602 Lake and Streambed Alteration	CalRecycle	CalRecycle	Permits prior to remediation, and implement	Verified by: Date:

	Agreement for temporary and permanent impacts to waters of the U.S. and State. CalRecycle shall comply with all mitigation measures and requirements established in these permits.			mitigation measures prior to, during and after remediation.	

6 References

Barnes, J. 2008. Cultural Resources Inventory Report for the Sonora encampment trespass cleanup project (Case # CA-018-S-TM-08/02), Tuolumne County, California. BLM, Folsom Field Office, California.

Barrett, S. A. 1908. The Geography and Dialects of the Miwok Indians. University of California Publications in American Archaeology and Ethnology 6 (2): 333-368.

California Air Resources Board (CARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. Sacramento, CA. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

California Department of Conservation (CDOC). 2015. "California Geological Survey Fault Activity Map of California." https://maps.conservation.ca.gov/cgs/fam/.

California Department of Conservation. 2022. "Farmland Mapping and Monitoring Program." https://www.conservation.ca.gov/dlrp/fmmp/.

California Department of Finance. 2024. *E-5 Population and Housing Estimates for Cities, Counties and the State.* Sacramento, California. https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/#:~:text=This%20report%20provides%20the%20revised%20population%20and%20housing,cities.%20These%20population%20estimates%20incorporate%202020%20Census%20counts.

California Department of Fish and Wildlife (CDFW). 2024a. "California Natural Diversity Database and Spotted Owl Viewer." https://wildlife.ca.gov/Data/CNDDB/Mapsand-Data#43018408-cnddb-in-bios.

California Department of Fish and Wildlife (CDFW). 2024b. "California Wildlife Habitat Relationship System." Version 10.1.29. https://wildlife.ca.gov/Data/CWHR.

California Department of Forestry and Fire Protection (Cal Fire). 2023. "State Responsibility Area Fire Hazard Severity Zones." https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_11x17_2022_tuolumne_2.pdf.

California Department of Transportation (Caltrans). 2019. "California State Scenic Highway System Map." https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

California Department of Water Resources. n.d. "SGMA Basin Prioritization Dashboard." Accessed January 30, 2025. https://gis.water.ca.gov/app/bp-dashboard/final/#.

California Environmental Protection Agency (CalEPA). n.d. "CalEnviroScreen 4.0 Indicator Maps." Accessed March 1, 2025. https://experience.arcgis.com/experience/ed5953d89038431dbf4f22ab9abfe40d/page/Indicators/?views=Groundwater-Threats#data_s=id%3AdataSource_32-17c3cf1189e-layer-1%3A4791%2Cid%3AdataSource_30-17c388cd970-layer-3%3A4148%2Cid%3AdataSource_29-17c39109ce9-layer-2%3A866.

California Natural Resources Agency. 2025. "Appendix G." *California Environmental Quality Act (CEQA) Guidelines.* Title 14, Division 6, Chapter 3 of the California Code of Regulations.

California State Mining and Geology Board (SMGB). n.d. "California State Mining and Geology Board." Accessed April 25, 2025. https://www.conservation.ca.gov/smgb.

Central Valley Regional Water Quality Control Board (CVRWQCB). 2019. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region.*

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201902.pdf.
County of Tuolumne. 2024. *Multi-Jurisdictional Hazard Mitigation Plan* (MJHMP) 2024. https://www.tuolumnecounty.ca.gov/DocumentCenter/View/28446/FINAL-Tuolumne-County-MJHMP-11052024?bidId=.
Department of Water Resources. n.d. "Sustainable Groundwater Management Act (SGMA) Portal." Accessed February 9, 2025. https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels.
Geo-Logic Associates. 2023. 2023 Site Investigation Report – Revised Rotelli Burn Dump Facility No. 55-CR-0037 City of Sonora, California.
Kroeber, A. E. 1925. "Handbook of the Indians of California." *Bureau of American Ethnology* Bulletin 78. Washington, DC: Smithsonian Institution.
Levy, R. 1978. "Eastern Miwok". *Handbook of North American Indians*, Volume 8: California, edited by R. F. Heizer, 398-413. Washington, DC: Smithsonian Institution.
Natural Resources Conservation Service, United States Department of Agriculture (NRCS). n.d. "Web Soil Survey." Accessed February 9, 2025. http://websoilsurvey.sc.egov.usda.gov/.
NCE. 2025a. Aquatic Resources Delineation Report, CalRecycle Rotelli Burn Dump Remediation Project. Prepared by NCE for CalRecycle. March.
NCE. 2025b. Biological Resources Evaluation Report, CalRecycle Rotelli Burn Dump Remediation Project. Prepared by NCE for CalRecycle. February.
NCE. 2025c. Cultural Resources Inventory Report, CalRecycle Rotelli Burn Dump Remediation Project. Prepared by NCE for CalRecycle. March.
Tuolumne County. 2024. "Title 17: Zoning". *Tuolumne County Ordinance Code.* https://www.tuolumnecounty.ca.gov/165/Ordinance-Code.
Tuolumne County Air Pollution Control District (TCAPCD). n.d. "Air Pollution Control District." *Tuolumne County.* Accessed April 25, 2025. https://www.tuolumnecounty.ca.gov/364/Air-Pollution-Control-District.
Tuolumne County Community Resources Agency. 2018. *2018 Tuolumne County General Plan Volume I: General Plan Policy Document*. https://www.tuolumnecounty.ca.gov/DocumentCenter/View/11266/Vol-I-Goals-Policies-Programs.
Tuolumne County Transportation Council (TCTC). 2012. *Tuolumne County Regional Blueprint Greenhouse Gas Study*. https://www.tuolumnecounty.ca.gov/DocumentCenter/View/21998/Appendix-D.
Tuolumne County. 2020. "Greenhouse Gas Emissions Inventory Update and Forecasts – Technical Memorandum." *Tuolumne County Climate Action Plan.* https://www.tuolumnecounty.ca.gov/DocumentCenter/View/21995/Appendix-A_compressed.
Tuolumne Me-Wuk Tribal Council (TMTC). 2024. "History – The Tuolumne Band of ME-Wuk Indians." https://mewuk.com/cultural/history/.
U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA). n.d. "Flood Maps." Accessed February 11, 2025. Ahttps://www.fema.gov/flood-maps.
U.S. Environmental Protection Agency. 2006. "Revegetating Landfills and Waste Containment Areas Fact Sheet." https://www.epa.gov/sites/default/files/2015-08/documents/revegetating_fact_sheet.pdf.
U.S. Fish and Wildlife Service (USFWS). n.d. "Information for Planning and Consultation (IPaC)." Accessed February 9, 2025. https://ecos.fws.gov/ipac/.
U.S. Fish and Wildlife Service (USFWS). 2024. "National Wetlands Inventory Mapper." https://www.fws.gov/wetlands/data/Mapper.html.

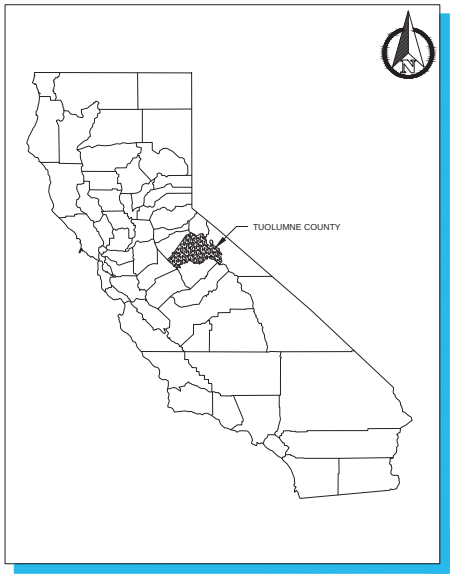
Appendix A

Remediation Plans

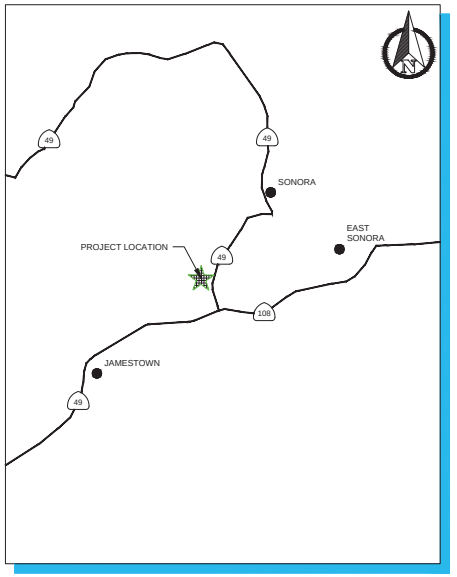
ROTELLI BURN DUMP
SITE REMEDIATION PROJECT

PREPARED FOR:

CalRecycle



CALIFORNIA COUNTIES

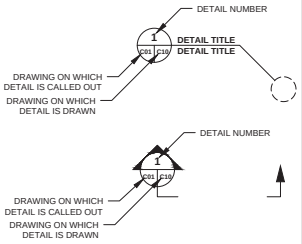


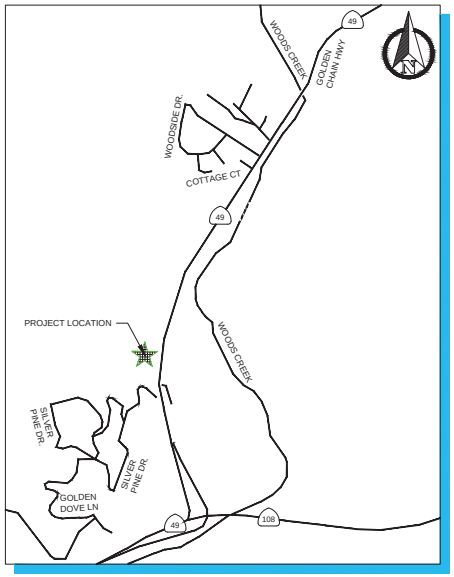
REGIONAL MAP

ABBREVIATIONS

℄	CENTERLINE	MIN	MINIMUM
Ø	DIAMETER	N	NORTHING
E	EASTING	NIS	NOT IN SECTION
EL	ELEVATION	NTS	NOT TO SCALE
FT	FEET	OC	ON CENTER
GCL	GEOSYNTHETIC CLAY LINER	oz	OUNCE
HDPE	HIGH DENSITY POLYETHYLENE	%	PERCENT
MAX	MAXIMUM	TYP	TYPICAL

SYMBOLS





VICINITY MAP

DRAWING INDEX

DRAWING NUMBER	TITLE AND DESCRIPTION	LATEST REVISION NUMBER	LATEST REVISION DATE
GENERAL			
G01	TITLE PAGE	D	6/18/2025
G02	SITE PLAN AND EXISTING CONDITIONS	D	6/18/2025
CIVIL			
C01	WASTE EXCAVATION PLAN	D	6/18/2025
C02	WASTE CONSOLIDATION PLAN	D	6/18/2025
C03	FINAL COVER AND SECONDARY BURN DUMP AREA GRADING PLAN	D	6/18/2025
C05	CROSS SECTIONS	D	6/18/2025
C06	CROSS SECTIONS	D	6/18/2025
C06-C09	RESERVED		
C10	DETAILS	D	6/18/2025
C11	DETAILS	D	6/18/2025

NOTES
1. PIPE BENDS AND GEOSYNTHETICS ARE SHOWN NTS.

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C	1/29/2025	90% DRAFT	
D	5/15/2025	90% DRAFT	
	6/18/2025	90% DRAFT	

DATE OF ISSUE: 6/18/2025
DESIGNED BY: RDD
DRAWN BY: SMD
CHECKED BY: RDD
APPROVED BY:

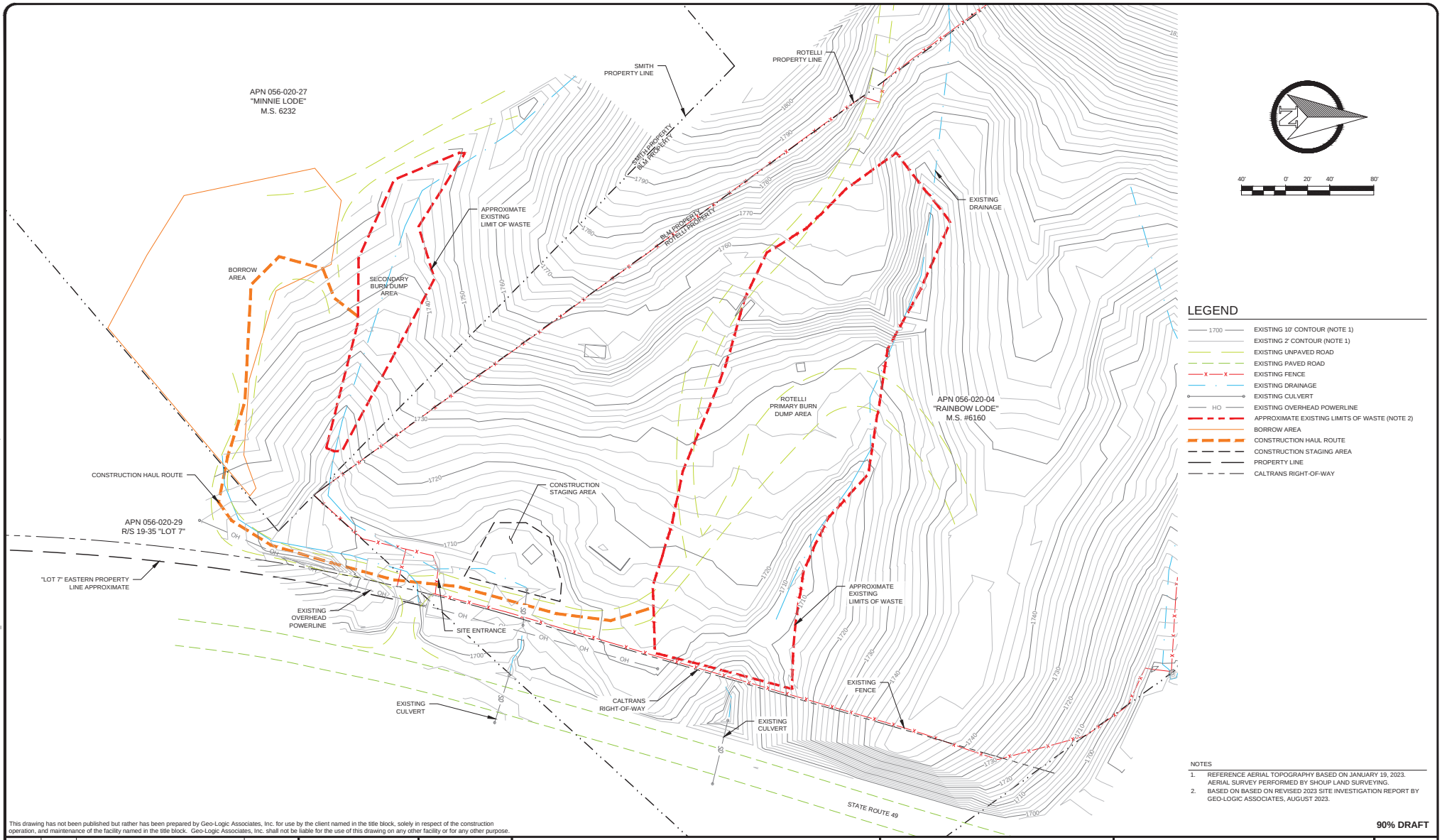
Geo-Logic ASSOCIATES
143E Spring Hill Dr, Grass Valley, California 95945
geo-logic.com | 530.272.2448

CalRecycle

ROTELLI BURN DUMP
SITE REMEDIATION PROJECT
TUOLUMNE COUNTY, CALIFORNIA
TITLE PAGE

DRAWING NO. G01
PROJECT NO. AU23.1081.00

N:\CAL-REC\1.EAU23.1081.00 CAL-RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELLI\5_CAD\G01 TITLE PAGE.DWG January 29, 2025 - 10:13 AM BY: GLA USER



LEGEND

- EXISTING 10' CONTOUR (NOTE 1)
- EXISTING 2' CONTOUR (NOTE 1)
- EXISTING UNPAVED ROAD
- EXISTING PAVED ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- EXISTING CULVERT
- EXISTING OVERHEAD POWERLINE
- APPROXIMATE EXISTING LIMITS OF WASTE (NOTE 2)
- BORROW AREA
- CONSTRUCTION HAUL ROUTE
- CONSTRUCTION STAGING AREA
- PROPERTY LINE
- CALTRANS RIGHT-OF-WAY

NOTES

1. REFERENCE AERIAL TOPOGRAPHY BASED ON JANUARY 19, 2023. AERIAL SURVEY PERFORMED BY SHOUP LAND SURVEYING.
2. BASED ON BASED ON REVISED 2023 SITE INVESTIGATION REPORT BY GEO-LOGIC ASSOCIATES, AUGUST 2023.

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	6/18/2025	90% DRAFT	

DATE OF ISSUE: 6/18/2025
DESIGNED BY: RDD
DRAWN BY: SMD
CHECKED BY: RDD
APPROVED BY:

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CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

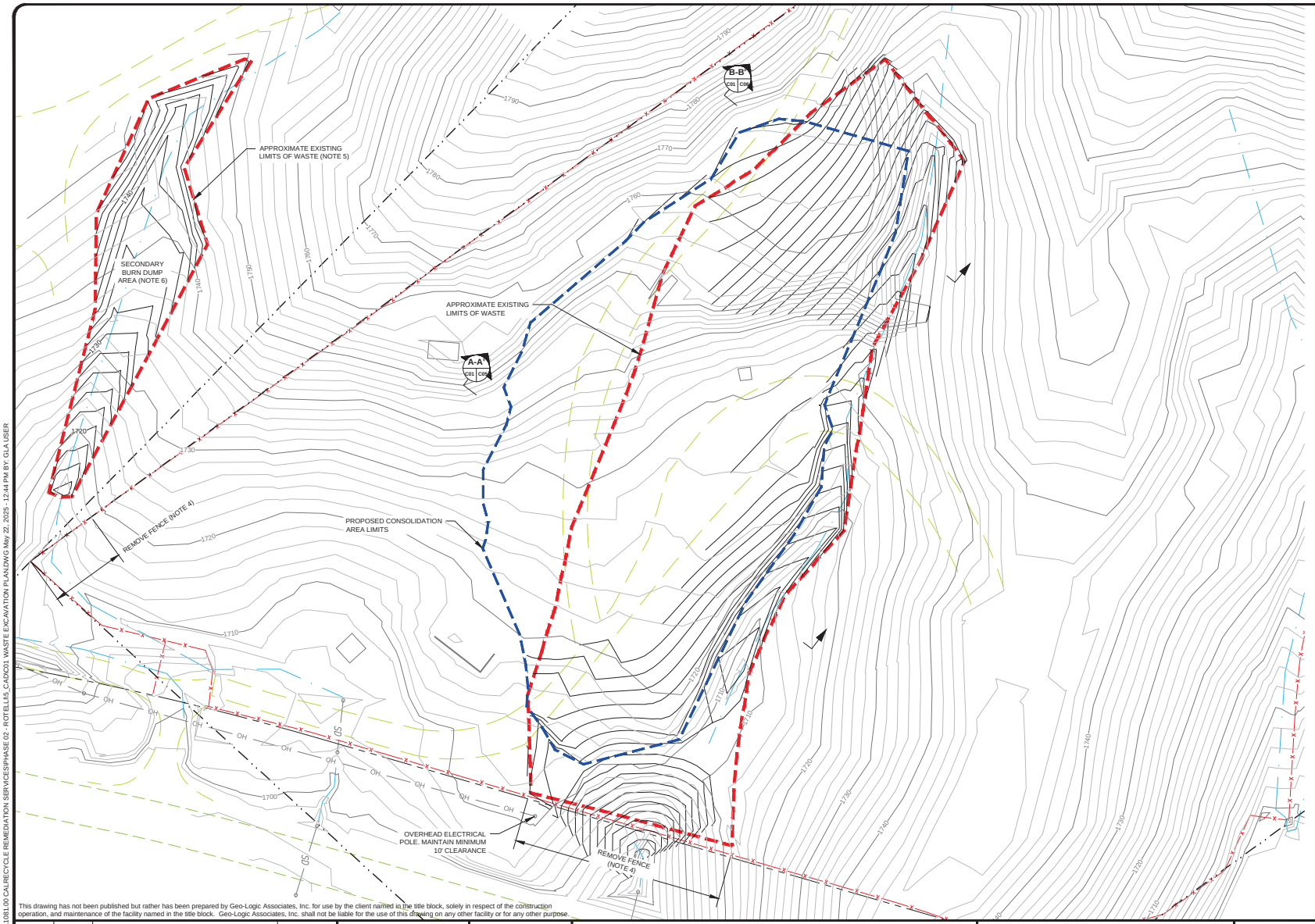
TUOLUMNE COUNTY, CALIFORNIA

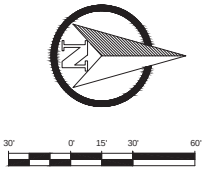
SITE PLAN AND EXISTING CONDITIONS

DRAWING NO. G02

PROJECT NO. AU23.1081.00

N:\CAL-REC\Y-LEAU23.1081.00 CAL-RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL#5_CAD\G02 SITE PLAN AND EXISTING CONDITIONS.DWG June 18, 2025 - 3:39 PM BY: GLA USER





LEGEND

- 1720 — EXISTING 10' CONTOUR (NOTE 1)
- EXISTING 2' CONTOUR (NOTE 1)
- EXISTING UNPAVED ROAD
- EXISTING PAVED ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- EXISTING CULVERT
- HO — EXISTING OVERHEAD POWERLINE
- APPROXIMATE EXISTING LIMITS OF WASTE (NOTE 2)
- 1720 — PROPOSED WASTE EXCAVATION 10' CONTOUR (NOTE 3,5)
- PROPOSED WASTE EXCAVATION 2' CONTOUR (NOTE 3,5)
- PROPOSED CONSOLIDATION AREA LIMITS
- PROPERTY LINE
- CALTRANS RIGHT-OF-WAY

NOTES

1. REFERENCE AERIAL TOPOGRAPHY BASED ON JANUARY 19, 2023. AERIAL SURVEY PERFORMED BY SHOUP LAND SURVEYING.
2. BASED ON 2023 SITE INVESTIGATION REPORT BY GEO-LOGIC ASSOCIATES, AUGUST 2023.
3. WASTE EXCAVATION GRADES OUTSIDE PROPOSED CONSOLIDATION AREA LIMITS ARE ESTIMATED AND MAY CHANGE IN FIELD AS DETERMINED BY THE ENGINEER.
4. REMOVE FENCE PRIOR TO WASTE EXCAVATION. STOCKPILE FENCE MATERIALS ON SITE FOR REINSTALLATION.
5. EXCAVATED WASTE AND CONTAMINATED SOIL TO BE MOVED TO CONSOLIDATION AREA.
6. WASTE IN SECONDARY BURN DUMP AREA WILL BE EXCAVATED AND MOVED TO THE CONSOLIDATION AREA. EXCAVATION GRADES MAY VARY BASED ON CONFIRMATION SAMPLING PER THE CQA PLAN.

90% DRAFT

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DRAWN BY: SMD
CHECKED BY: RDD
APPROVED BY:

Geo-Logic ASSOCIATES
143E Spring Hill Dr, Grass Valley, California 95945
geo-logic.com | 530.272.2448

CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

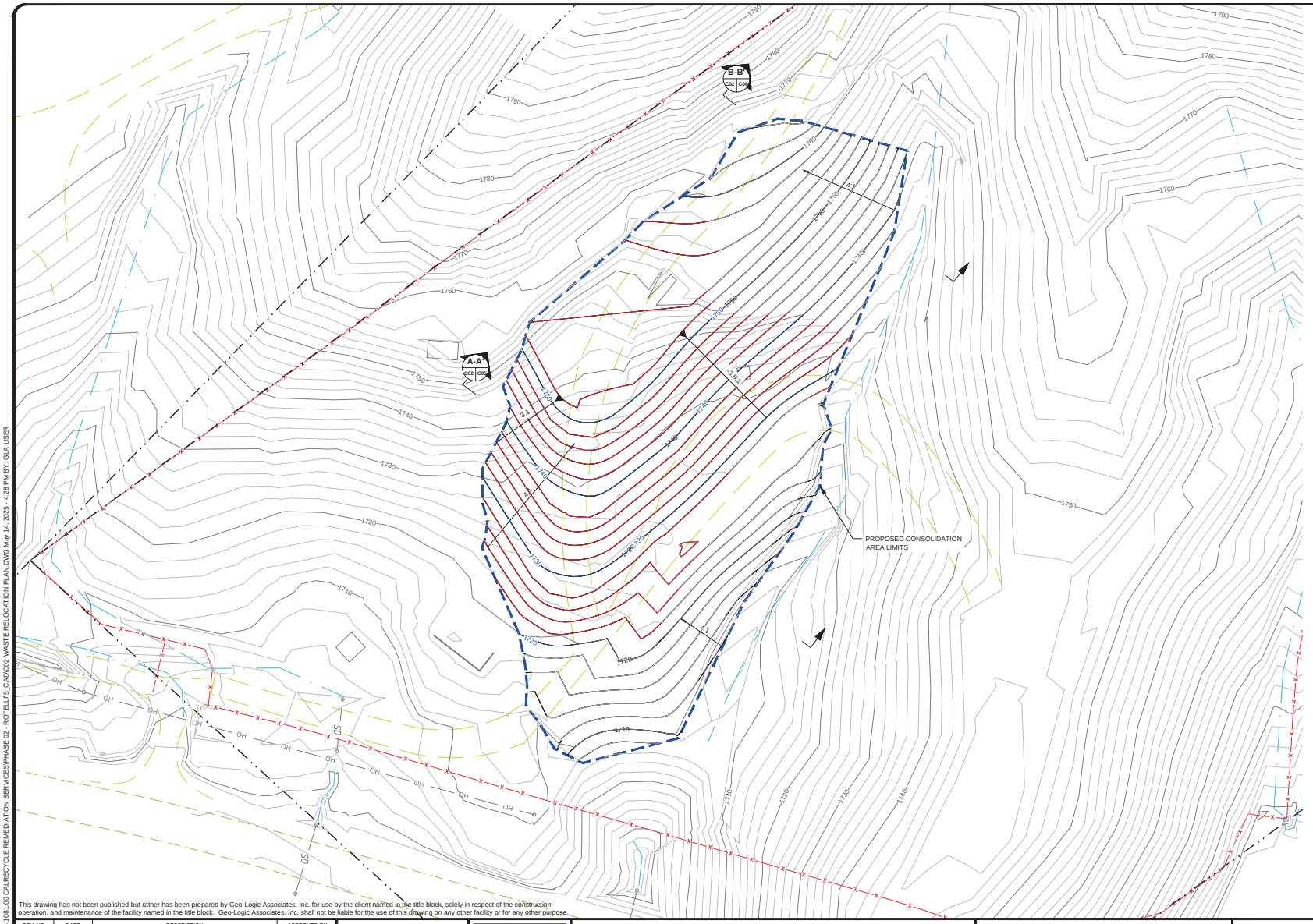
TUOLUMNE COUNTY, CALIFORNIA

WASTE EXCAVATION PLAN

DRAWING NO. C01

PROJECT NO. AU23.1081.00

N:\CAL\RECY\LEAU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL\05_CAD\01 WASTE EXCAVATION PLAN.DWG May 22, 2025 - 12:44 PM BY: GLA USER



LEGEND

- EXISTING 10' CONTOUR (NOTE 1)
- EXISTING 2' CONTOUR (NOTE 1)
- EXISTING UNPAVED ROAD
- EXISTING PAVED ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- EXISTING CULVERT
- EXISTING OVERHEAD POWERLINE
- PROPOSED WASTE CONSOLIDATION 10' CONTOUR (NOTE 2)
- PROPOSED WASTE CONSOLIDATION 2' CONTOUR (NOTE 2)
- PROPOSED CONSOLIDATION AREA LIMITS
- PROPERTY LINE

NOTES

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2. WASTE AREA GRADES ARE APPROXIMATE. GRADES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

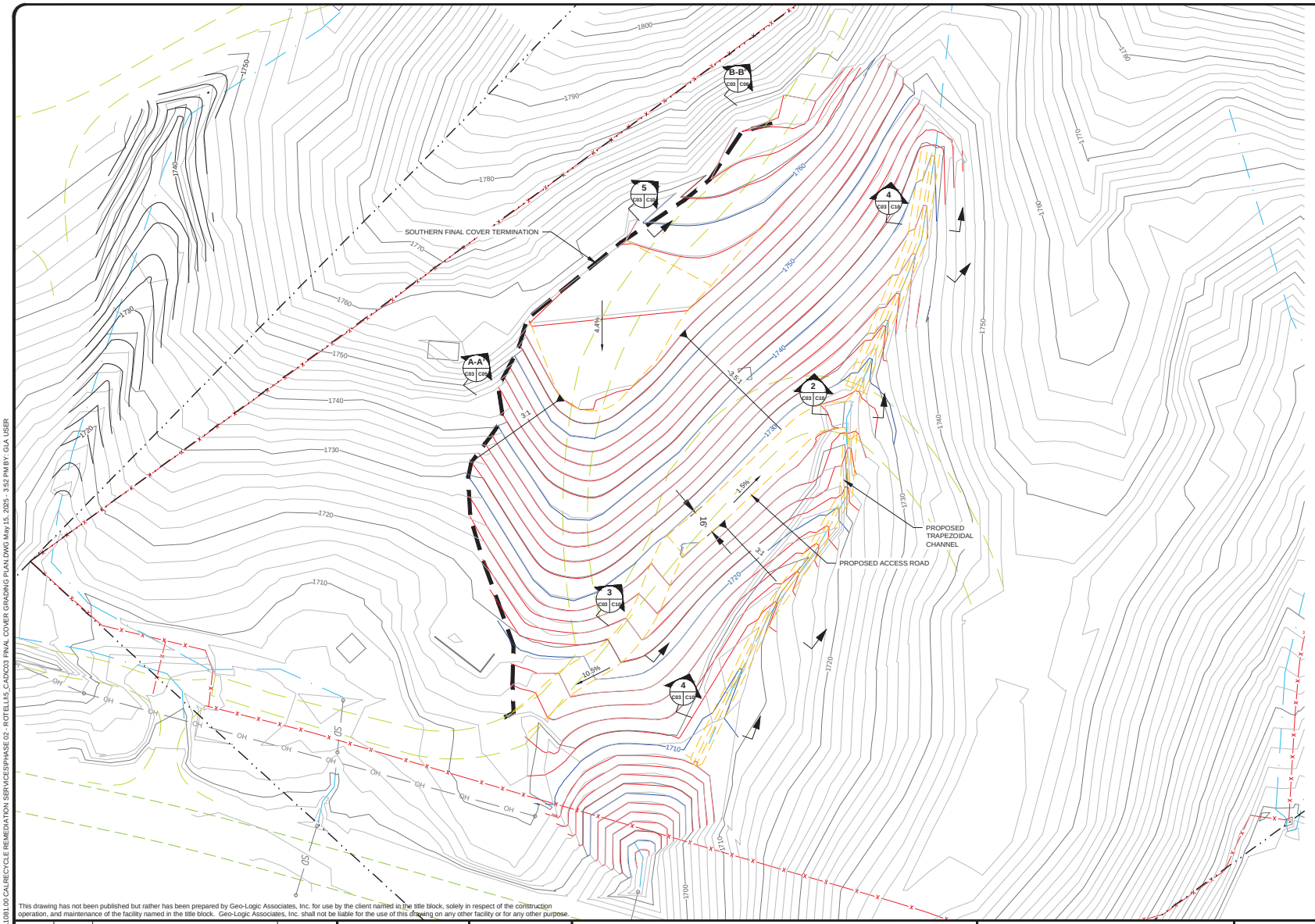
TUOLUMNE COUNTY, CALIFORNIA

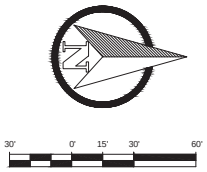
WASTE CONSOLIDATION PLAN

DRAWING NO. C02

PROJECT NO. AU23.1081.00

N:\CAL\RECYLE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL\05_CAD\02 WASTE RELOCATION PLAN.DWG May 14, 2025 - 4:28 PM BY: GLA USER





LEGEND

- 1710 — EXISTING 10' CONTOUR (NOTE 1)
- EXISTING 2' CONTOUR (NOTE 1)
- EXISTING UNPAVED ROAD
- EXISTING PAVED ROAD
- EXISTING FENCE
- EXISTING DRAINAGE
- EXISTING CULVERT
- HO — EXISTING OVERHEAD POWERLINE
- 1710 — PROPOSED 10' FINAL COVER CONTOUR
- PROPOSED 2' FINAL COVER CONTOUR
- 1710 — PROPOSED 10' SECONDARY BURN DUMP AREA FINAL GRADE CONTOUR (NOTE 2)
- PROPOSED 2' SECONDARY BURN DUMP AREA FINAL GRADE CONTOUR (NOTE 2)
- PROPOSED HINGELINE
- PROPOSED SOUTHERN FINAL COVER TERMINATION
- PROPERTY LINE

NOTES

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2. SECONDARY BURN DUMP AREA GRADES ARE APPROXIMATE. GRADES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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143E Spring Hill Dr, Grass Valley, California 95945
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CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

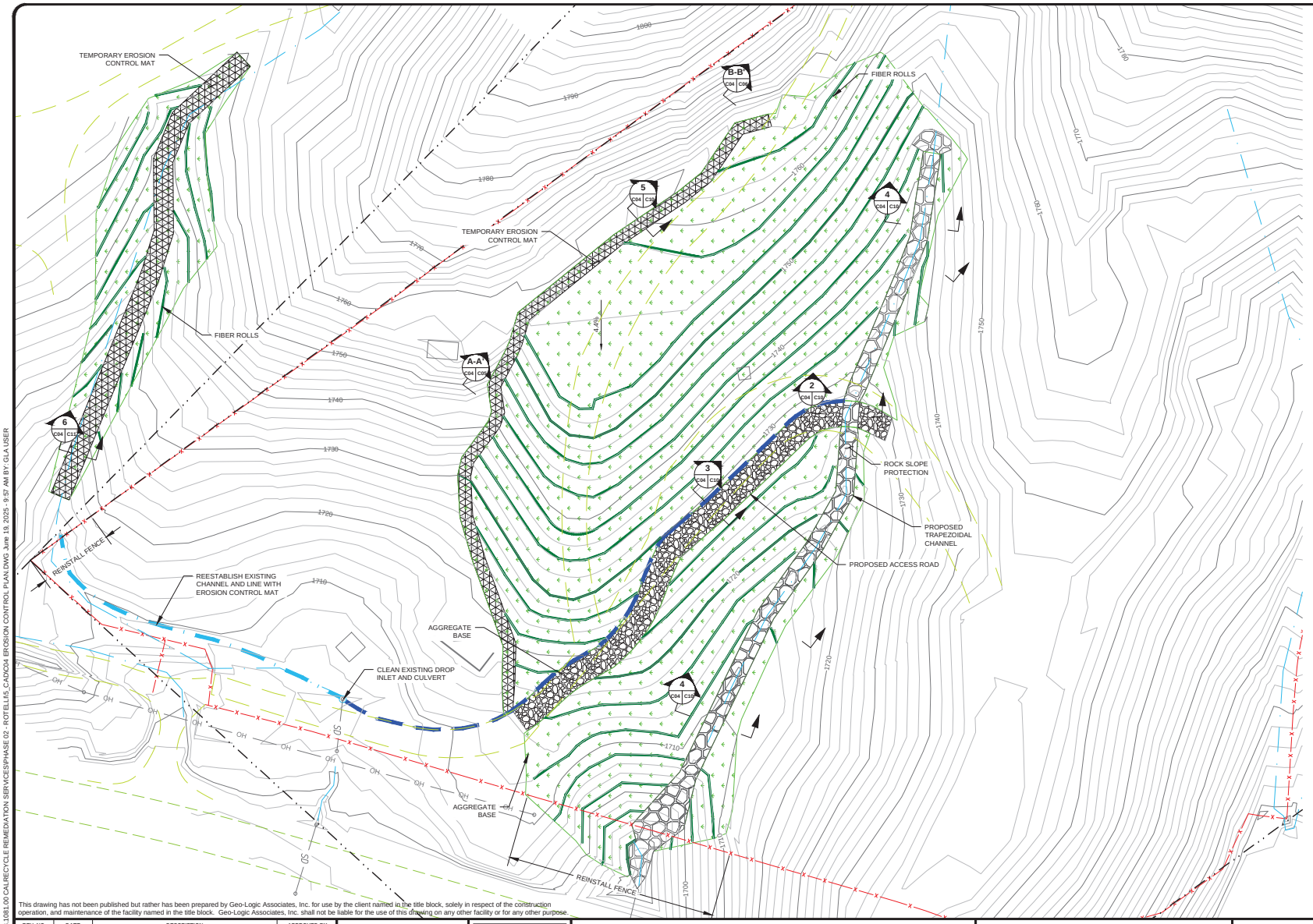
TUOLUMNE COUNTY, CALIFORNIA

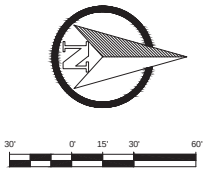
FINAL COVER AND SECONDARY BURN DUMP AREA GRADING PLAN

DRAWING NO. C03

PROJECT NO. AU23.1081.00

N:\CAL\RECYLE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL\05_CAD\03 FINAL COVER GRADING PLAN.DWG May 15, 2025 - 3:52 PM BY: GLA USER





LEGEND

- EXISTING 10' CONTOUR (NOTE 1)
- EXISTING 2' CONTOUR (NOTE 1)
- EXISTING UNPAVED ROAD
- EXISTING PAVED ROAD
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING OVERHEAD POWERLINE
- PROPOSED HYDROSEEDING
- PROPOSED ROCK SLOPE PROTECTION
- PROPOSED AGGREGATE BASE
- PROPOSED TEMPORARY EROSION CONTROL MAT
- PROPOSED FIBER ROLLS
- PROPOSED ACCESS ROAD DITCH
- EXISTING CHANNEL TO REESTABLISH
- PROPERTY LINE

NOTES

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ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

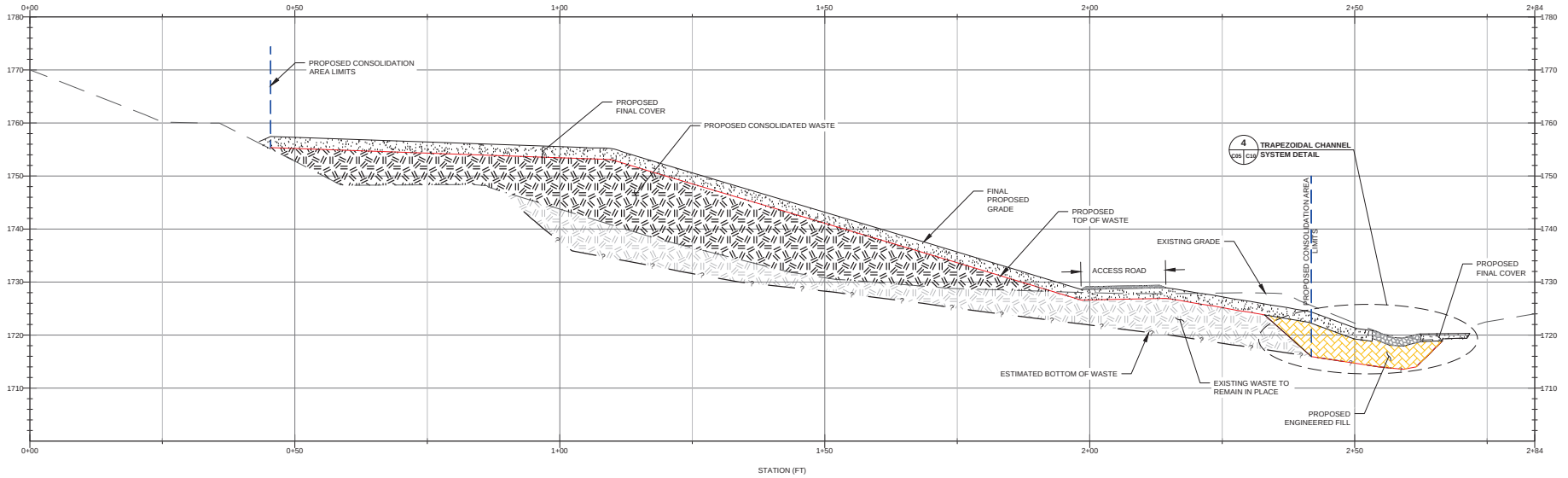
TUOLUMNE COUNTY, CALIFORNIA

EROSION CONTROL AND REVEGETATION PLAN

DRAWING NO. C04

PROJECT NO. AU23.1081.00

N:\CAL\RECY\LE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELLI\05_CAD\04 EROSION CONTROL PLAN.DWG June 19, 2025 - 9:57 AM BY GLA USER



SECTION AA'
HORIZ: 1" = 10'
VERT: 1" = 10'

LEGEND

- FINAL PROPOSED GRADE
- EXISTING GRADE
- PROPOSED TOP OF WASTE
- PROPOSED CONSOLIDATION AREA LIMITS
- ESTIMATED BOTTOM OF WASTE
- PROPOSED FINAL COVER
- PROPOSED RELOCATED WASTE
- PROPOSED ENGINEERED FILL
- PROPOSED ROCK SLOPE PROTECTION
- EXISTING WASTE TO REMAIN IN PLACE
- ACCESS ROAD

90% DRAFT

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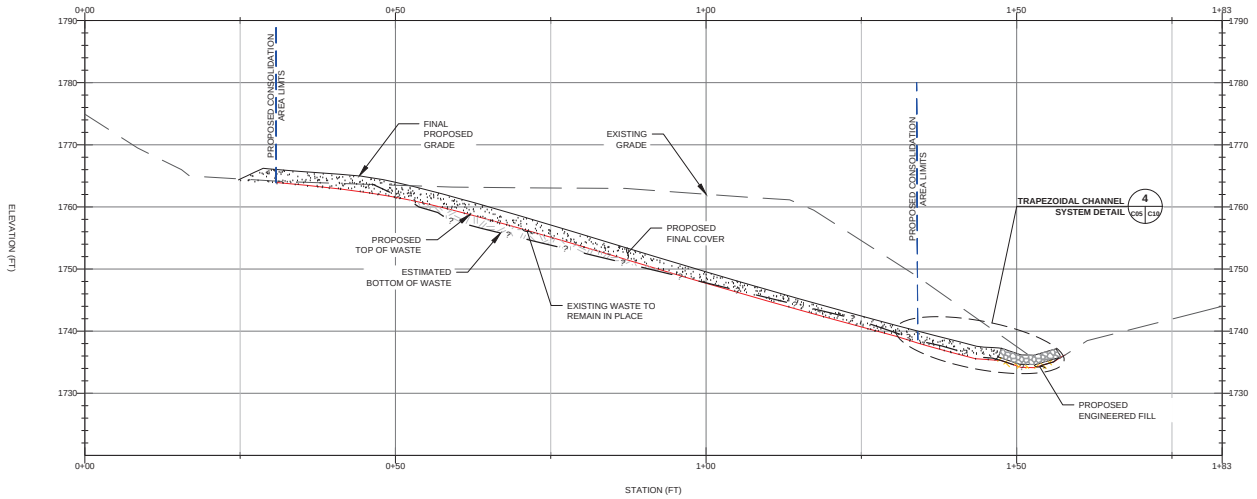
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ROTELLI BURN DUMP
SITE REMEDIATION PROJECT
TUOLUMNE COUNTY, CALIFORNIA
CROSS SECTIONS

DRAWING NO. **C05**
PROJECT NO. **AU23.1081.00**

N:\CAL\RECYLE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL\05_CAD\05 CROSS SECTIONS.DWG January 29, 2025 - 9:59 AM BY GLA USER



SECTION BB'
HORIZ: 1" = 10'
VERT: 1" = 10'

LEGEND

- FINAL PROPOSED GRADE
- EXISTING GRADE
- PROPOSED TOP OF WASTE
- PROPOSED CONSOLIDATION AREA LIMITS
- ESTIMATED BOTTOM OF WASTE
- PROPOSED FINAL COVER
- PROPOSED ROCK SLOPE PROTECTION
- PROPOSED ENGINEERED FILL
- EXISTING WASTE TO REMAIN IN PLACE

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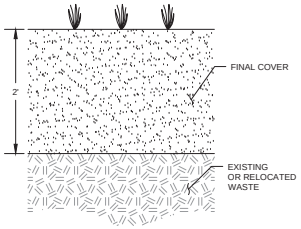
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CalRecycle

ROTELLI BURN DUMP
SITE REMEDIATION PROJECT
TUOLUMNE COUNTY, CALIFORNIA
CROSS SECTIONS

DRAWING NO. C06
PROJECT NO. AU23.1081.00

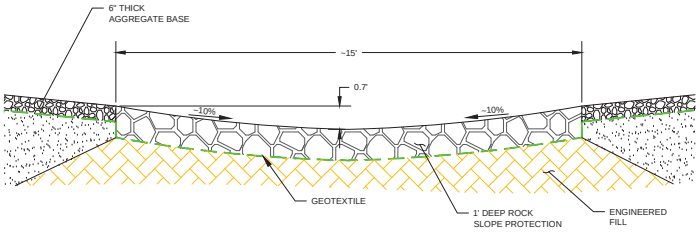
N:\CAL\RECYLE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELL\05_CAD\05 CROSS SECTIONS.DWG January 29, 2025 - 9:59 AM BY GLA USER



FINAL COVER SYSTEM

DETAIL 1 (C03 | C10)

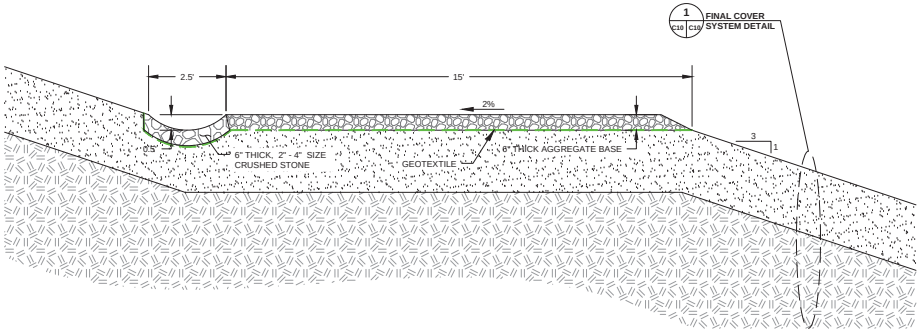
1" = 1'



DRIVE-THROUGH SWALE

DETAIL 2 (C03 | C10)

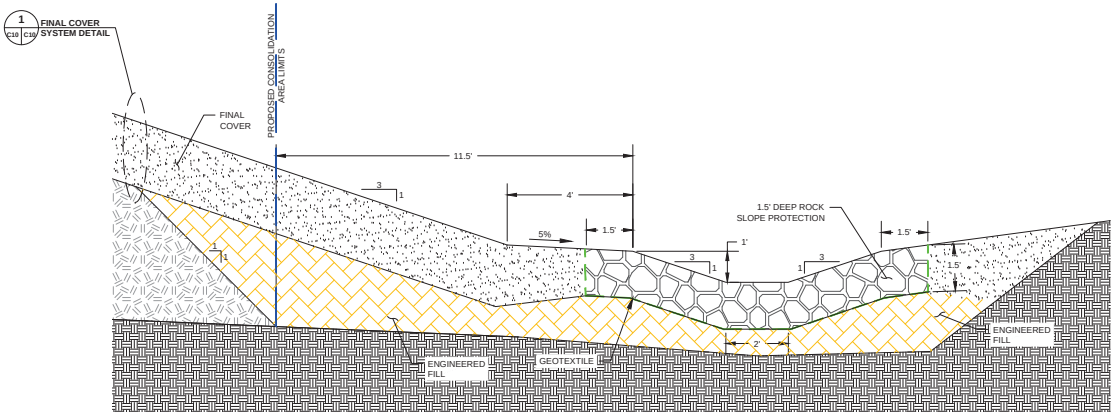
1" = 2'



ACCESS ROAD

DETAIL 3 (C03 | C10)

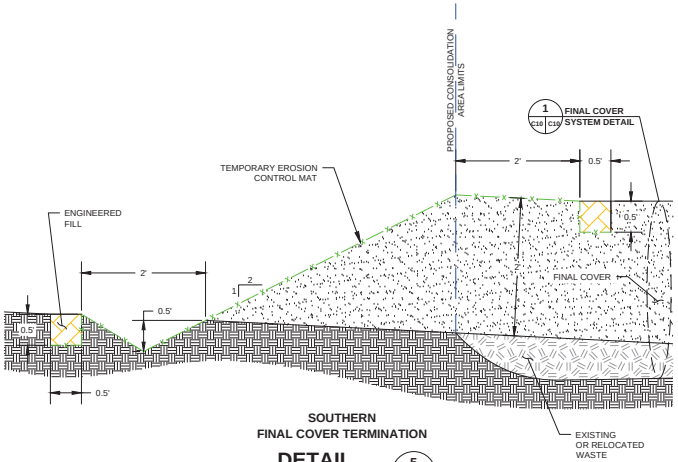
1" = 2'



TRAPEZOIDAL CHANNEL

DETAIL 4 (C03 | C10)

1" = 2'



SOUTHERN
FINAL COVER TERMINATION

DETAIL 5 (C03 | C10)

1" = 1'

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geo-logic.com | 530.272.2448

CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

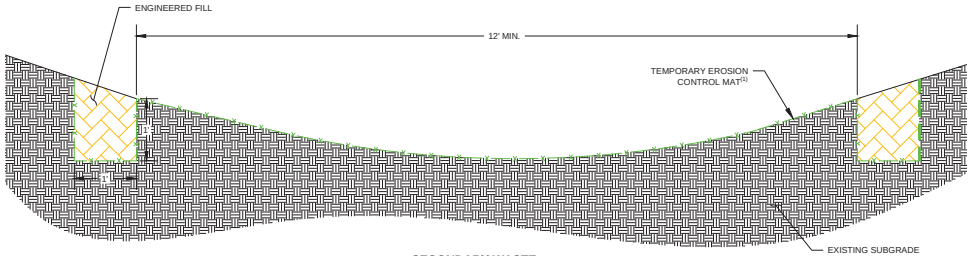
TUOLUMNE COUNTY, CALIFORNIA

DETAILS

DRAWING NO. C10

PROJECT NO. AU23.1081.00

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SECONDARY WASTE AREA CHANNEL

DETAIL 6 (C04 | C11)

1" = 1'

NOTES

1. FINAL SURFACE MAY VARY INCLUDING ADDITION OF EMBEDDED LOGS AND BOULDERS PER THE ENGINEER.

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CalRecycle

ROTELLI BURN DUMP

SITE REMEDIATION PROJECT

TUOLUMNE COUNTY, CALIFORNIA

DETAILS

DRAWING NO. **C11**

PROJECT NO. **AU23.1081.00**

N:\CAL\RECY\LE\AU23.1081.00 CAL\RECYCLE REMEDIATION SERVICES\PHASE 02 - ROTELLI\05_CAD\C10 DETAILS.DWG January 29, 2025 - 10:07 AM BY: GLA USER

Appendix B

Air Quality Calculations

Rotelli Burn Dump Remediation Summary Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

7. Health and Equity Details

7.3. Overall Health & Equity Scores

7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Rotelli Burn Pit Remediation
Construction Start Date	6/1/2025
Lead Agency	CalRecycle
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	41.4
Location	37.97139203939052, -120.3966368962684
County	Tuolumne
City	Unincorporated
Air District	Tuolumne County APCD
Air Basin	Mountain Counties
TAZ	3031
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	1.00	User Defined Unit	3.35	1.00	1.00	—	—	Distrubed area

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-8	Use Renewable Diesel

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Unmit.	1.65	25.7	1,382	138	10,793
Mit.	1.65	25.7	1,382	138	10,793
% Reduced	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—
Unmit.	0.10	1.60	73.9	7.41	649
Mit.	0.10	1.60	73.9	7.41	649
% Reduced	—	—	—	—	—
Annual (Max)	—	—	—	—	—
Unmit.	0.02	0.29	13.5	1.35	107
Mit.	0.02	0.29	13.5	1.35	107
% Reduced	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	60.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

Rotelli Burn Dump Remediation Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

3. Construction Emissions Details

3.1. Grading (2025) - Unmitigated

3.2. Grading (2025) - Mitigated

3.3. Water Truck (2025) - Unmitigated

3.4. Water Truck (2025) - Mitigated

3.5. Excavation (2025) - Unmitigated

3.6. Excavation (2025) - Mitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Rotelli Burn Dump Remediation
Construction Start Date	6/1/2025
Lead Agency	CalRecycle
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	41.4
Location	37.97139203939052, -120.3966368962684
County	Tuolumne
City	Unincorporated
Air District	Tuolumne County APCD
Air Basin	Mountain Counties
TAZ	3031
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Industrial	1.00	User Defined Unit	3.35	1.00	1.00	—	—	Distrubed area

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-8	Use Renewable Diesel

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Unmit.	1.65	25.7	1,382	138	10,793
Mit.	1.65	25.7	1,382	138	10,793
% Reduced	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—
Unmit.	0.10	1.60	73.9	7.41	649
Mit.	0.10	1.60	73.9	7.41	649
% Reduced	—	—	—	—	—
Annual (Max)	—	—	—	—	—
Unmit.	0.02	0.29	13.5	1.35	107
Mit.	0.02	0.29	13.5	1.35	107
% Reduced	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10T	PM2.5T	CO2e

Daily - Summer (Max)	—	—	—	—	—
2025	1.65	25.7	1,382	138	10,793
Daily - Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
2025	0.10	1.60	73.9	7.41	649
Annual	—	—	—	—	—
2025	0.02	0.29	13.5	1.35	107

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10T	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—
2025	1.65	25.7	1,382	138	10,793
Daily - Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
2025	0.10	1.60	73.9	7.41	649
Annual	—	—	—	—	—
2025	0.02	0.29	13.5	1.35	107

3. Construction Emissions Details

3.1. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Off-Road Equipment	0.82	6.57	0.33	0.31	1,507
Dust From Material Movement	—	—	0.23	0.03	—

Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Off-Road Equipment	0.05	0.40	0.02	0.02	90.8
Dust From Material Movement	—	—	0.01	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Off-Road Equipment	0.01	0.07	< 0.005	< 0.005	15.0
Dust From Material Movement	—	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.07	0.05	0.76	0.19	108
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.26	15.7	1,380	138	8,098
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.01	6.05
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.99	73.8	7.36	488
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	< 0.005	1.00
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	13.5	1.34	80.7

3.2. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e

Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Dust From Material Movement	—	—	0.23	0.03	—
Off-Road Equipment	0.82	6.57	0.33	0.31	1,507
Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Dust From Material Movement	—	—	0.01	< 0.005	—
Off-Road Equipment	0.05	0.40	0.02	0.02	90.8
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Dust From Material Movement	—	—	< 0.005	< 0.005	—
Off-Road Equipment	0.01	0.07	< 0.005	< 0.005	15.0
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.07	0.05	0.76	0.19	108
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.26	15.7	1,380	138	8,098
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.01	6.05
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.99	73.8	7.36	488
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	< 0.005	1.00
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	13.5	1.34	80.7

3.3. Water Truck (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Off-Road Equipment	0.23	1.47	0.07	0.07	566
Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Off-Road Equipment	0.01	0.09	< 0.005	< 0.005	34.1
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	< 0.005	5.64
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.02	0.01	0.24	0.06	26.9
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00

3.4. Water Truck (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Off-Road Equipment	0.23	1.47	0.07	0.07	566
Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Off-Road Equipment	0.01	0.09	< 0.005	< 0.005	34.1
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	< 0.005	5.64
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.02	0.01	0.24	0.06	26.9
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	< 0.005	1.51
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00

3.5. Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Off-Road Equipment	0.20	1.93	0.07	0.06	434
Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	< 0.005	26.1
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	< 0.005	4.33
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.04	0.03	0.38	0.09	53.8
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.01	3.03
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.50
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00

3.6. Excavation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10T	PM2.5T	CO2e
Onsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Off-Road Equipment	0.20	1.93	0.07	0.06	434
Onsite truck	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	< 0.005	26.1
Onsite truck	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	< 0.005	4.33
Onsite truck	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—
Worker	0.04	0.03	0.38	0.09	53.8
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—
Average Daily	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.01	3.03
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.50
Vendor	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Total	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—
Total	—	—	—	—	—
Annual	—	—	—	—	—
Total	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Total	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—
Total	—	—	—	—	—
Annual	—	—	—	—	—
Total	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—

Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—
Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—
Annual	—	—	—	—	—
Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—

Total	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—
Total	—	—	—	—	—
Annual	—	—	—	—	—
Total	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Total	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—
Total	—	—	—	—	—
Annual	—	—	—	—	—
Total	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10T	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—
Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—

Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—
Annual	—	—	—	—	—
Avoided	—	—	—	—	—
Subtotal	—	—	—	—	—
Sequestered	—	—	—	—	—
Subtotal	—	—	—	—	—
Removed	—	—	—	—	—
Subtotal	—	—	—	—	—
—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	7/3/2025	8/3/2025	5.00	22.0	off road equipment
Water Truck	Grading	7/3/2025	8/3/2025	5.00	22.0	On-road water truck
Excavation	Trenching	7/3/2025	8/3/2025	5.00	22.0	Excavate waste material

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Water Truck	Off-Highway Trucks	Diesel	Average	1.00	8.00	148	0.41
Excavation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Water Truck	Off-Highway Trucks	Diesel	Average	1.00	8.00	148	0.41
Excavation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	10.0	13.0	LDA,LDT1,LDT2
Grading	Vendor	—	8.76	HHDT,MHDT

Grading	Hauling	93.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Water Truck	—	—	—	—
Water Truck	Worker	2.50	13.0	LDA,LDT1,LDT2
Water Truck	Vendor	—	8.76	HHDT,MHDT
Water Truck	Hauling	0.00	20.0	HHDT
Water Truck	Onsite truck	—	—	HHDT
Excavation	—	—	—	—
Excavation	Worker	5.00	13.0	LDA,LDT1,LDT2
Excavation	Vendor	—	8.76	HHDT,MHDT
Excavation	Hauling	0.00	20.0	HHDT
Excavation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	10.0	13.0	LDA,LDT1,LDT2
Grading	Vendor	—	8.76	HHDT,MHDT
Grading	Hauling	93.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Water Truck	—	—	—	—
Water Truck	Worker	2.50	13.0	LDA,LDT1,LDT2
Water Truck	Vendor	—	8.76	HHDT,MHDT
Water Truck	Hauling	0.00	20.0	HHDT
Water Truck	Onsite truck	—	—	HHDT
Excavation	—	—	—	—
Excavation	Worker	5.00	13.0	LDA,LDT1,LDT2
Excavation	Vendor	—	8.76	HHDT,MHDT

Excavation	Hauling	0.00	20.0	HHDT
Excavation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	6,800	9,700	3.35	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.6	annual days of extreme heat
Extreme Precipitation	12.4	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	13.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.1
AQ-PM	21.1
AQ-DPM	24.1
Drinking Water	36.9
Lead Risk Housing	38.2
Pesticides	0.00
Toxic Releases	1.25
Traffic	21.2
Effect Indicators	—
CleanUp Sites	76.7
Groundwater	54.5
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	12.5
Solid Waste	72.4
Sensitive Population	—
Asthma	63.3
Cardio-vascular	61.4
Low Birth Weights	35.4
Socioeconomic Factor Indicators	—
Education	28.1
Housing	44.5
Linguistic	—

Poverty	45.7
Unemployment	11.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	54.0613371
Employed	31.70794303
Median HI	30.86102913
Education	—
Bachelor's or higher	57.94944181
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	45.25856538
Active commuting	66.66238932
Social	—
2-parent households	11.67714616
Voting	72.78326703
Neighborhood	—
Alcohol availability	72.09033748
Park access	33.54292314
Retail density	19.3763634
Supermarket access	28.93622482
Tree canopy	98.63980495
Housing	—
Homeownership	49.89092776

Housing habitability	70.39650969
Low-inc homeowner severe housing cost burden	77.76209419
Low-inc renter severe housing cost burden	50.46836905
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	48.91569357
Arthritis	0.0
Asthma ER Admissions	29.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	54.0
Cognitively Disabled	24.2
Physically Disabled	21.7
Heart Attack ER Admissions	7.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	56.5
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	74.8
SLR Inundation Area	0.0
Children	87.9
Elderly	8.1
English Speaking	83.7
Foreign-born	6.4
Outdoor Workers	23.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	22.6
Traffic Access	0.0
Other Indices	—
Hardship	34.1
Other Decision Support	—
2016 Voting	79.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	60.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Information from Project Description
Construction: Construction Phases	Project is excavating and moving old waste and placing it in new area, and then cover waste with soil from on-site borrow pit.
Construction: Off-Road Equipment	Estimates based on typical projects of this type.
Construction: Dust From Material Movement	Information from Project Description for excavated waste area and project Egineer for Geo-Logic
Construction: On-Road Fugitive Dust	All hauling work will occur on unpaved roads within the project boundaries. Estimates of vehicle weights are based on averages from various manufacturers via a Google search.
Construction: Demolition	Site will be re-graded after excavation and burying waste per the project description

Appendix C

Biological Resources Technical Memorandum

Biological Resources Evaluation Report

CalRecycle Rotelli Burn Dump Remediation Project

Sonora, CA



CalRecycle
Solid Waste and Tire Cleanup Program
1001 I Street
Sacramento, CA 95812

March 5, 2025

NCE
1003 W. Cutting Blvd., Suite 110
Point Richmond, CA 94804

NCE Project No. 870.04.55

Collaboration. Commitment. Confidence.℠

Biological Resources Evaluation Report

CalRecycle Rotelli Burn Dump Remediation Project

Sonora, CA

March 5, 2025

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Executive Summary

This Biological Resources Evaluation Report was prepared for the California Department of Resources Recycling and Recovery (CalRecycle) Rotelli Burn Dump Remediation Project (Project) in Sonora, Tuolumne County, California. CalRecycle proposes to excavate and reconsolidate waste within the Rotelli Burn Dump Project area. After the waste has been moved and placed, CalRecycle will construct a soil cap over the waste footprint and seed the exposed soil. The remediation work will be conducted pursuant to the requirements of the Solid Waste Disposal and Codisposal Site Cleanup Program. Nichols Consulting Engineers, Chtd. biologists conducted reconnaissance-level biological field surveys of the Project area and a 200-foot buffer area (collectively, survey area) on March 14, 2024, December 19, 2024, and February 27, 2025, to verify the accuracy of database research and identify special-status plants and wildlife that may occur within the survey area based on their habitat requirements and the existing conditions. The survey area is characterized by 2 ephemeral drainages that run through the Project area, streets, disturbed ground, paved trails, and undeveloped land. Low quality non-native annual grassland, chaparral, coniferous forest, and ephemeral drainages within the survey area provide potential habitat for 18 special-status plant species, 2 special-status amphibian species, and 3 special-status mammal species. This includes the Federally and California Endangered foothill yellow-legged frog (*Rana boylii*), Federally Threatened California red-legged frog (*R. draytonii*), and Federally Threatened Layne's ragwort (*Packera layneae*). While no special-status species were observed during the surveys, special-status species may become established within the Project area and NCE recommends protective measures during construction (see Discussion and Recommendations section). Additionally, prior to implementing the Project, CalRecycle will be required to confirm aquatic resources to be impacted and obtain regulatory permits from the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and Central Valley Regional Water Quality Control Board.

Table of Contents

1 Introduction 1

1.1 Project Description 1

2 Relevant Regulations 3

2.1 Federal Requirements 3

2.2 State Requirements 3

2.3 Local Requirements 5

3 Biological Resources Evaluation Methodology 7

4 Results 8

4.1 Database Searches 8

4.2 Vegetation Communities 8

4.3 Aquatic Resources 9

4.4 SSS Surveys 10

5 Discussion and Recommendations 13

5.1 Aquatic Resources 13

5.2 General Mitigation Measures During Remediation 13

5.3 Remediation Mitigation Measures for Special-Status Species 14

6 References 19

List of Appendices

Appendix A
Figures

Appendix B
Tables

Appendix C
USFWS Information for Planning and Consultation Report

1 Introduction

The California Department of Resources Recycling and Recovery (CalRecycle) has evaluated illegally dumped materials at the Rotelli Burn Dump Site in Tuolumne County, California, and is considering the Rotelli Burn Dump Remediation Project (Project) to remediate it pursuant to the requirements of the Solid Waste Disposal and Codisposal Site Cleanup Program. The Project area is defined as the areas within the Rotelli Burn Dump Site that will be disturbed by remediation activities.

In its current condition, the Project area is not compliant with California Code of Regulations Title 27 solid waste regulations such as final cover, grading, and drainage and erosion control. CalRecycle has removed solid waste from the Project area that was generated by transient encampments and will make a determination to proceed with the Project after consultation with the Department of Toxic Substances Control, and possibly the Regional Water Quality Control Board (RWQCB), to identify the lead agency providing regulatory oversight in accordance with Burn Dump Protocol.

Nichols Consulting Engineers, Chtd. (NCE) conducted background research and reconnaissance-level field surveys to document and describe the existing biological and botanical resources observed at the Project area and in the surrounding survey area. Many taxa native to California have low population numbers, limited distributions, or are otherwise vulnerable to extinction or extirpation within the state and are therefore protected by state and federal laws. Although they may include ecologically significant units, species, and/or sub-species, these taxa are collectively referred to as special-status species (SSS). NCE's survey documented the habitat and the presence/absence of SSS within the Project area and survey area.

This biological resource evaluation report presents the results of background research and the reconnaissance-level field surveys for SSS and their habitats. This report includes a discussion of avoidance or minimization measures recommended during remediation and will assist in the determination of whether involvement by the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) is necessary.

1.1 Project Description

The Project is intended to reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed burn waste at the closed Rotelli Burn Dump by consolidating and covering waste with topsoil and revegetating the area.

The proposed Project is located near Mill Villa Court adjacent to State Route 49 (SR-49), southwest of the town of Sonora in unincorporated Tuolumne County (**Figure 1**, report figures located in **Appendix A**). The Project area is located within 3 parcels owned by different entities: Assessor's Parcel Numbers 056-020-004 (Rotelli), 056-020-027 (Smith), and 056-020-029 (Hattler) on the west side of SR-49 **(Figures 2, 3, and 4**). The Project consists of 2 areas containing burn waste with the majority of the burn waste situated in a Primary Area located on the Rotelli property. A much smaller Secondary burn dump area is located on the Smith property.

The Project would remove surficial waste and excavate waste materials (buried waste, ash, and contaminated soil) from both the Primary and Secondary Areas, consolidating the waste in the Consolidation Area, and capping it with clean fill from the Borrow Area. At the start of construction, the Primary Area, Secondary Area, Consolidation Area, and Borrow Area would be cleared and grubbed, and all trees would be removed. Transport within the Project area would occur along the existing access roads between the Staging Area, Borrow Area, the 2 burn waste areas, and the Consolidation Area. The final cover grading would consist of an approximately 60-

foot-wide by 200-foot-long flat area that slopes to the east with a slope of approximately 4 percent. The side slopes of the final cover would be between 3:1 to 3.5:1 horizontal to vertical (H:V) and separated by the 15-foot-wide access road. After placement and compaction of excavated burn waste and cover soil is completed, the final cover soil would be graded to promote positive drainage patterns and reduce erosion potential.

Improvements to the stormwater management system would include erosion protection to 2 existing ephemeral drainages that run through the existing waste limits and modifications to the conveyance channels and inlets. Within the Primary Area, after the waste is removed from the drainage, the existing drainage would be reconstructed as a trapezoidal stream channel lined with rock-slope protection. Erosion control measures such as fiber rolls and hydroseeding would be put in place. Within the Consolidation Area, a stabilized topsoil cover is proposed to help reduce the potential for erosive forces and exposure of waste material. Within the Secondary Area, after the waste is removed from the ephemeral drainage, the drainage would be reestablished to its connection with 1 of 2 culverts (southern and northern) that will convey stormwater east of SR-49. For the southern culvert, the existing drop inlet and culvert would be cleaned. The drainage would be covered with a temporary erosion control mat and hydroseeded with a native seed mix, unless otherwise directed by regulatory agencies during permitting. The existing inlet for the northern culvert will be modified to convey stormwater runoff from the Consolidation Area.

2 Relevant Regulations

Federal, state, and local regulations that are relevant to the proposed Project are described below.

2.1 Federal Requirements

2.1.1 Clean Water Act

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into Waters of the U.S. under Sections 401 and 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Section 401 of the Clean Water Act requires that an applicant proposing to conduct any activity that may result in a discharge to Waters of the U.S must first apply for and secure a Section 401 Water Quality Certification prior to remediation activities. Because the Project will impact federally jurisdictional waters and has a potential to impact water quality, both a Section 404 permit and a Section 401 Water Quality Certification are required.

2.1.2 Federal Endangered Species Act (ESA)

The Federal Endangered Species Act (ESA) protects plants and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS).

Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 Code of Federal Regulations 17.3). This statute also governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law.

Section 7 of the ESA requires federal agencies to consult with the USFWS or National Oceanic and Atmospheric Administration, National Marine Fisheries Service, as applicable, if their actions could adversely affect an endangered plant or wildlife species or its critical habitat.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act makes it unlawful to at any time, by any means or in any manner pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The list of bird species protected under the Migratory Bird Treaty Act, which includes raptors, can be found in the Code of Federal Regulations Title 50, Part 10.13.

2.2 State Requirements

2.2.1 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) prohibits the take of state-listed endangered or threatened species, as well as species being considered for listing (candidate species). Under CESA, take is defined as an activity that would directly or indirectly kill an individual of a species. Pursuant to CESA, an Incidental Take Permit from the CDFW is required for projects that could result in the take of a state listed threatened or endangered species.

2.2.2 California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented that make the mitigation measures or alternatives infeasible.

CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency.

2.2.3 California Fish and Game Code Section 1600

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by the CDFW under Sections 1600 of the California Fish and Game Code.

2.2.4 California Fish and Game Code Section 1602 – Lake and Streambed Alteration Agreement

Under Section 1602 of the California Fish and Game Code, it is unlawful for any person to substantially divert or obstruct the natural flow, substantially change the bed, or use any material from the streambeds, channel, or bank of any river, stream, or lake designated by the CDFW without first notifying CDFW and obtaining a Lake or Streambed Alteration Agreement authorizing such activity. Such an agreement typically stipulates that measures will be implemented to protect the habitat value of the drainage in question.

Section 1602 of the California Fish and Game Code requires that the CDFW review any project that may involve 1 or more of the following actions:

- Diverting or obstructing the natural flow of any river, stream, or lake.
- Altering the bed, channel, or bank of any river, stream, or lake.
- Use of material from any river, stream, or lake.
- Deposit or disposal of material into any river, stream, or lake.

2.2.5 California Fish and Game Code Sections 1900 – 1913 - California Native Plant Protection Act

California Fish and Game Code Sections 1900 – 1913, The Native Plant Protection Act of 1977, was created to “preserve, protect and enhance rare and endangered plants in this State.” The Fish and Wildlife Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. Implementation of the CESA provided further protection for rare and endangered plant species, but the Native Plant Protection Act remains part of the California Fish and Game Code.

2.2.6 California Fish and Game Code Section 2080

Section 2080 of the California Department of Fish and Game Code prohibits the taking, possession, purchase, sale, import, and export of endangered, threatened, or candidate species unless otherwise authorized by permit or in the regulations.

2.2.7 California Fish and Game Code Section 2081

Pursuant to Section 2081 of the California Fish and Game Code, an Incidental Take Permit from the CDFW is required for projects that could result in the take of a state listed threatened or endangered species.

2.2.8 California Fish and Game Code Section 3503

Nesting birds are protected in California under Section 3503 of the California Fish and Game Code, which states "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Construction causing disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment.

Disturbance that causes nest abandonment and/or loss of reproductive effort is considered taking by the CDFW.

Birds of prey are protected in California under provisions of the State Fish and Game Code Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

2.2.9 California Fish and Game Code Sections 3511, 4700, 5050, 5515

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit take or possession of 37 fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. CDFW has informed non-federal agencies and private parties that they must avoid take of any fully protected species in carrying out projects.

2.3 Local Requirements

2.3.1 2018 Tuolumne County General Plan

Chapter 15, the Natural Resources Element of the Tuolumne County General Plan, discusses goals and policies for the management of natural resources in Tuolumne County. The goals and policies of Tuolumne County relevant to biological resources are provided below.

Natural Resources Element

- Goal 16B: Support the diversity and quality of biological resources while balancing the needs of public and private property rights.
    - Policy 16.B.5 – Evaluate and mitigate impacts to biological resources in accordance with the requirements of State and Federal law.
- Goal 16C: Support efforts to conserve biological resources.
    - Policy 16.C.5 – Encourage the conservation of oak woodlands and the preservation of heritage trees.

2.3.2 Tuolumne County Ordinance Code

Title 9, Chapter 24 describes the procedures and penalties for the premature removal of native oak trees before a discretionary entitlement has been issued by the County of Tuolumne for a land development project. Native

oak trees meeting 1 or more of the criteria listed below that have been removed from a project site within the 5 years preceding the submittal of an application for a discretionary entitlement is deemed premature removal of oak trees:

- Removal of native oak trees resulting in a 10% or more average decrease in native oak canopy cover within an oak woodland.
- Removal of any native oak tree that is 24 inches or greater in diameter at breast height.
- Removal of any valley oak measuring 5 inches or greater in diameter at breast height.

Section 9.24.040 describes exemptions from the provisions of this chapter, including the removal of native oak trees as part of a construction project for which a permit has been issued by a state agency.

3 Biological Resources Evaluation Methodology

NCE conducted background or preliminary research to evaluate known occurrences of SSS or their potential occurrences based on observed habitat in the survey area. Maps were also prepared to support the findings from background research. The following databases were reviewed:

- USFWS Information for Planning and Consultation (IPaC) (USFWS 2024)
- CDFW California Natural Diversity Database (CNDDB) (CDFW 2024a)
- California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California (CNPS 2024a)

NCE Senior Biologist Cord Hute and Staff Biologists Annabel Li and Ruby Rodriguez conducted field reconnaissance surveys within the survey area on March 14, 2024, and December 19, 2024, and Senior Biologist Emily Pullman and Ruby Rodriguez completed a tree survey on February 27, 2025. The purpose of field reconnaissance was to verify the accuracy of the preliminary research and to identify SSS that may occur within the survey area based on their habitat requirements and the existing conditions. Surveys involved walking parallel and meandering transects within the survey area ensuring 100 percent coverage for potential rare plants. The field survey entailed observing and recording plant communities and wildlife (including tracks and signs), evaluating habitats for SSS, and determining the rarity and listing status of existing plants.

4 Results

4.1 Database Searches

The background research and field survey were used to evaluate the habitat and assess the potential for SSS to occur within or near the survey area. **Appendix B, Tables 1 and 2** list SSS with the potential to occur within the survey area. SSS listed as "present" were observed in the survey area during the survey or have historical occurrence data within the survey area, while SSS listed as "potential" were not observed during the field survey, but suitable habitat was present within the survey area. SSS listed as "unlikely" were not observed and would not be expected to occur in the survey area due to limited habitat potential, except perhaps as a transient. SSS listed as "absent" may be known to occur in the broader geographic region, but were not observed during the survey, and/or are precluded from occurring in the survey area because specific habitat requirements are not met.

The CNDDB occurrence map (**Appendix A, Figure 4**) shows several SSS occurrences and sensitive habitat types within 1 mile of the Project area. A USFWS species list was accessed through the IPaC website for the proposed Project (**Appendix C**). No critical habitat was identified within the Project area.

Based on the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database (NRCS n.d.), the survey area contains 1 soil mapping unit: Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes (Soil Unit Number 8172). This soil mapping unit is a well-drained, non-hydric soil[1] component that occurs on the slopes of high hills and is formed from colluvium over residuum derived from metasedimentary rock. Elevations within the survey area range approximately 1,699 – 1,775 feet above mean sea level.

Potential habitat for 18 special-status plant species and 5 special-status wildlife species is present within the survey area (**Appendix B, Tables 1 and 2**). A biological survey was conducted to determine the presence or absence of these species.

4.2 Vegetation Communities

Wildlife habitat classifications for this report are based on the CDFW Wildlife Habitat Relationships System (CDFW 2024b), which places an emphasis on dominant vegetation, vegetation diversity, and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment and includes such features as type, size, diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species,[2] creation of openings, and reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying combinations of plant species

[1] Hydric soils are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop an anaerobic condition within the upper part.

[2] Understory is also known as underbrush or undergrowth and includes plant life growing beneath the forest canopy without penetrating it to any great extent, but above the forest floor.

providing different resources for use by wildlife. As a result, wildlife habitats are often classified in a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under 1 type of wildlife habitat.

The following is a discussion of existing vegetation communities found within the survey area. Where appropriate, vegetation community types are described using the CNPS Manual of California Vegetation (CNPS 2024b). For a list of plant species observed in these vegetation communities during the biological survey, please refer to **Appendix B, Table 3**.

1. **Non-native annual grassland** was observed throughout the northern and central portions of the Primary Area, the northern and central portions of the Secondary Area, and throughout the Borrow Area. This community is characterized by a high prevalence of non-native vegetation which quickly recolonizes disturbed areas. Common species observed were invasive grasses and weedy herbaceous species, including ripgut brome (*Bromus diandrus*), wall barley (*Hordeum murinum*), longbeak stork's bill (*Erodium botrys)*, redstem stork's bill (*E. cicutarium)*, cutleaf geranium (*Geranium dissectum)*, common chickweed (*Stellaria media)*, greater chickweed (*S. neglecta)*, and rye (*Secale cereale)*.
2. ***Baccharis pilularis* Shrubland Alliance** was observed throughout the survey area. Coyote brush (*Baccharis pilularis*) is dominant in the shrub canopy with emergent trees present at low cover including interior live oak (*Quercus wislizeni*) and Ponderosa pine (*Pinus ponderosa*). In the Sierra Nevada Foothills, small stands tend to occupy recently disturbed areas.
3. ***Rubus armeniacus* – *Sesbania punicea* – *Ficus carica* Shrubland Semi-Natural Alliance** was observed in the stream channel corridors along the northern perimeter of the Primary Area and through the center of the Secondary Area. Invasive Himalayan blackberry (*Rubus armeniacus*) is dominant in the shrub canopy with emergent interior live oak trees present at low cover. This community grows along riparian sites, mesic clearings,[3] disturbed areas, and stock ponds throughout cismontane California.
4. ***Pinus ponderosa* Forest and Woodland Alliance** was observed throughout the southern and eastern portion of the Primary Area, throughout the Secondary Area, and throughout the buffers between the Project areas. Ponderosa pine is co-dominant in the tree canopy with Jeffrey pine (*P. jeffreyi*) and interior live oak. The shrub layer is open to continuous, and the herbaceous layer is grassy. In the Sierra Nevada Foothills, isolated trees and groves occur along streams and lower slopes.
5. ***Arctostaphylos viscida* Shrubland Alliance** was observed throughout the Borrow Area. This chapparal community is dominated by whiteleaf manzanita (*Arctostaphylos viscida*) in the shrub canopy with emergent Ponderosa pine trees present at low cover and a sparse herbaceous layer.

4.3 Aquatic Resources

NCE delineated 2 unnamed ephemeral drainages covering 0.10 acres within the Project area (Tuolumne County 2025). These aquatic resources provide potential habitat for many of the SSS discussed below.

[3] Mesic clearing refers to a well-balanced or supply of moisture throughout the growing season. Their ecosystem includes wetlands, riparian zones, and wet meadows.

4.4 SSS Surveys

4.4.1 SSS Survey - Plant Species

The CNPS Rare Plant Database, CNDDB, and USFWS IPaC identified 49 special-status plant species that may occur in the survey area (**Appendix B, Table 1**). The habitat type and/or elevational range required by 23 of these special-status plant species is not present within the survey area. These 23 species are considered absent from the survey area, and no impacts to these species are anticipated as a result of the Project.

The biological survey conducted on March 14, 2024, was within the blooming period for Nissenan manzanita (*Arctostaphylos nissenana*), big-scale balsamroot (*Balsamorhiza macrolepis*), grassland suncup (*Camissonia lacustris*), streambank spring beauty (*Claytonia parviflora* ssp*. grandiflora*), mountain lady's-slipper (*Cypripedium montanum*), Ewan's larkspur (*Delphinium hansenii* spp*. ewanianum*), Stanislaus monkeyflower (*Erythranthe marmorata*), and Tuolumne fawn lily (*Erythronium tuolumnense*), but the habitat type that was observed would provide limited support for these SSS, and none were observed in the survey area. Thus, these 8 special-status plant species are considered unlikely to occur within the survey area.

NCE verified during the survey that cismontane woodland, coniferous forest, chaparral, stream channels, and grasslands within the survey area provide potential habitat for the other 18 special-status plant species listed below:

- beaked clarkia (*Clarkia rostrata*)
- Mariposa cryptantha (*Cryptantha mariposae*)
- red hills cryptantha (*C. spithamaea*)
- yellow-lip pansy monkeyflower (*Diplacus pulchellus*)
- tansy-flowered woolly sunflower (*Eriophyllum confertiflorum* var. *tanacetiflorum*)
- Tuolumne button-celery (*Eryngium pinnatisectum*)
- spiny-sepaled button-celery (*E. spinosepalum*)
- Kings River monkeyflower (*Erythranthe acutidens*)
- Gray's monkeyflower (*E. grayi*)
- small-flowered monkeyflower (*E. inconspicua*)
- serpentine bluecup (*Githopsis pulchella* ssp. *serpentinicola*)
- delicate bluecup (*G. tenella*)
- Parry's horkelia (*Horkelia parryi*)
- Tuolumne iris (*Iris hartwegii* ssp. *columbiana*)
- foothill jepsonia (*Jepsonia heterandra*)
- Layne's ragwort (*Packera layneae*)
- Michael's rein orchid (*Piperia michaelii*)
- Hernandez bluecurls (*Trichostema rubisepalum*)

None of the special-status plant species were detected during the March 14, 2024, and December 19, 2024, survey. However, because the biological survey was conducted outside of the blooming period for the remaining 18 special-status plant species listed above, it cannot be concluded with certainty that these species do not occur within the survey area. Protective mitigation measures for these 18 special-status plant species are discussed in the next section.

4.4.2 Tree Survey Results

The tree survey was conducted on February 27, 2025, and NCE documented 175 trees within the Project area (**Appendix B, Table 4**). All oak trees (*Quercus* spp.) with a DBH greater than 5 inches were mapped and their species and DBH were recorded. Non-oak tree species with a DBH greater than 6 inches were mapped and their species and DBH were recorded. Notes on a tree's health were recorded when the tree had visible signs of stress or other injury. The complete survey results are included in Table 4 (**Appendix B**) and are illustrated in Figure 5.

4.4.3 SSS Survey - Wildlife Species

The CNDDB and USFWS IPaC identified 18 special-status wildlife species that may occur in the survey area (**Appendix B, Table 2**). The survey area is characterized by a history of mining, dumping, and encampments, which has resulted in a highly disturbed site covered by trash and large debris and crossed by unpaved roads. The survey area contains low quality non-native annual grassland, chaparral, coniferous forest, and ephemeral drainages, and is surrounded by streets and natural habitat areas. Therefore, the habitat required by 13 of the 18 special-status wildlife species identified in the CNDDB and IPaC databases is not present within the survey area. These 13 species are considered absent from the survey area, and no impacts to these species are anticipated as a result of the Project. Potential habitat for 5 special-status wildlife species is present within the survey area, as described below. We did not observe any special-status wildlife during the biological survey.

Amphibian and Reptile Species Survey

CNDDB and USFWS IPaC identified 3 special-status amphibian species and 2 special-status reptile species that may be of concern for the survey area (see **Appendix B, Table 2**).

Habitat required by the 2 special-status reptile species and 1 special-status amphibian species is not present within the survey area. These 3 species are considered absent from the Project area, and no impacts to these species are anticipated as a result of the Project.

NCE verified during the survey that the pond northwest of the Secondary Area provides low quality, potential breeding habitat for California red-legged frog (CRLF; *Rana draytonii*), and upland areas within the Project area provide potential aestivation habitat[4] for this species. Additionally, the ephemeral drainage within the Secondary Area provides low quality potential habitat for foothill yellow-legged frog (FYLF) (*R. boylii*). Although no special-status wildlife was observed during the March 14, 2024, and December 19, 2024, surveys, protective measures that shall be implemented during the remediation Project for these 2 amphibian species are discussed in the next section.

[4] Aestivation is a state of inactivity and metabolic reduction in response to a lack of water or high temperature. It is a common part of the life cycle of vertebrates that occupy periodically dry habitats.

Avian Species Survey

CNDDB and USFWS IPaC identified 4 special-status avian species that may be of concern for the survey area (see **Appendix B, Table 2**).

The survey area does not contain potential habitat for any of the 4 special-status bird species identified by CNDDB and USFWS IPaC as potential species of concern. These 4 species are considered absent from the Project area because there is no potential foraging or nesting habitat, and no impact to these species are anticipated as a result of the Project. Although no special-status avian species are anticipated to be impacted by the Project, standard CDFW mitigation measures will be implemented as a part of the Project.

Mammal Species Survey

CNDDB and USFWS IPaC identified 5 special-status mammal species that may be of concern for the survey area (**Appendix B, Table 2**). Grassland, forest, and riparian vegetation within the survey area provide potential foraging habitat for the pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii***).** However, these species are highly sensitive to disturbance of roosting sites and are thus precluded from roosting in the survey area due to disturbance and human activity. Therefore, these 2 species are considered absent from the Project area and no mitigation measures are proposed during the remedial construction Project.

NCE verified during the survey that mixed conifer forest, deciduous woodland, chaparral, grasslands, and ephemeral drainages within the survey area provide potential habitat for spotted bat (*Euderma maculatum)*, western mastiff bat *(Eumops perotis californicus*), and western red bat (*Lasiurus frantzii*). Western mastiff bat and western red bat roost in trees, while spotted bat roosts in rock crevices on cliff faces or caves. The Project area contains large, mature trees and rock crevices that provide potential roosting habitat for these species. Although no special-status wildlife was observed during the March 14, 2024, and December 19, 2024, surveys, protective measures that shall be implemented during the remediation Project for these 3 species are discussed in the next section.

5 Discussion and Recommendations

5.1 Aquatic Resources

CalRecycle will obtain regulatory permits from the USACE (Section 404 permit), RWQCB (Section 401 permit), and CDFW (Lake and Streambed Alteration Agreement) to comply with state and federal regulations for the aquatic resources that will be impacted by the Project. CalRecycle would provide mitigation for impacts to aquatic resources in the form of mitigation bank credits or onsite mitigation/restoration at a ratio agreed to between CalRecycle, USACE, RWQCB, and CDFW.

5.2 General Mitigation Measures During Remediation

NCE recommends the following general mitigation measures be implemented by CalRecycle during construction of the remediation Project to protect wildlife species and their habitats:

- Petroleum materials from equipment should not be released into adjacent habitat areas, including waters of the State and U.S.
- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location outside of sensitive habitat.
- Wash sites must be located in upland locations to ensure wash water does not flow into stream channels or wetlands.
- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment should be inspected daily to ensure no leaks. Any leaks should be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.
- Oil absorbent and spill containment materials should be located on site when mechanical equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional work shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW and CalRecycle are contacted and have evaluated the impacts of the spill.
- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices should be placed around construction sites in these areas to contain spoils from construction excavation activities.
- Surveys for all potential SSS and their habitats should be conducted by qualified biologists at the appropriate times and using the appropriate methodology before construction starts. If no SSS or habitat are found, no further action other than the Best Management Practices identified in this section is required. If individuals are found, including nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take, and CalRecycle will consult with CDFW to determine appropriate protection measures.
- Due to the potential for SSS to occur or move through or into the Project area, an on-site biological monitor should, at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or

tubing with diameter 4 inches or larger should be sealed by the relevant contractor with tape at both ends to prevent animals from entering at night. All trenches and other excavations shall be backfilled the same day they are opened or shall have an exit ramp built into the excavation to allow animals to escape.

- Environmental Awareness Training should be presented to all personnel working in the field on the proposed Project. Training should consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain SSS concerns. Species biology, habitat needs, identification, status under the California and Federal ESAs, and protection measures should also be discussed. As part of the training, an environmental awareness handout will be provided to all personnel that describes the SSS at the Project area, including photographs, and lists applicable permit conditions identified by local, state, and federal agencies to protect these resources. If any Project personnel are added to the proposed Project, they must receive the mandatory training before starting work.
- Project area boundaries should be clearly delineated by stakes and/or flagging to minimize inadvertent degradation or loss of adjacent habitat areas during Project operations. Staff and/or its contractors should post signs and/or place fence around the Project area to restrict access of vehicles and equipment unrelated to Project operations.
- To avoid entanglement of wildlife, CalRecycle should not use plastic mono-filament netting, jute netting, or any material with cross joints that are bound/stitched (such as that found in straw wattles/fiber rolls and some erosion control blankets) on the Project area for any purpose. CalRecycle should ensure that all fiber rolls and erosion control blankets or netting are made of loose-weave mesh that is not fused at the intersections of the weave, such as coconut (coir) fiber, or other products without welded weave. CalRecycle should cover the edges of erosion control blankets or netting with soil, sandbags, or similar materials to prevent wildlife from crawling underneath the material and becoming entrapped.

5.3 Remediation Mitigation Measures for Special-Status Species

5.3.1 Remediation Mitigation Measures for Plant Species

Cismontane woodland, coniferous forest, chaparral, stream channels, and grasslands within the survey area provide potential habitat for 18 special-status plant species. The Project may impact these 18 species if they are located within the Project area during Project activities. Direct impacts to these plant species could result from ground disturbance activities during Project implementation within areas of potential habitat, including construction equipment crushing individuals or removal of individuals during grubbing. These impacts could result in direct mortality of individuals or small populations of special-status plant species.

A qualified botanist shall conduct protocol-level field surveys to identify populations of special-status plant species within the Project area prior to the initiation of any construction activities. These surveys shall coincide

with the appropriate flowering periods of the special-status plant species that have potential to occur in the Project area. If any population(s) of special-status plant species is identified directly adjacent to the Project area, a qualified biologist retained by CalRecycle shall clearly delineate the location of the plant population and install protective fencing between the disturbance zone and the population to ensure that the population is adequately protected. CalRecycle shall consult with CDFW and USFWS to determine the appropriate measures to avoid or mitigate for impacts to the species or population. CalRecycle will adjust the boundaries of the disturbance zone where feasible to avoid impacts to the plant species/population. Where avoidance is not feasible, CalRecycle will implement 1 or more of the following measures:

1. Transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, 2 more additional plants shall be planted for a total of 3. Plantings shall be managed, monitored and shall survive to 5 years after planting.
2. Seed or purchase plants and place them in an area adjacent to the disturbance zone.
3. Purchase credits at an approved mitigation bank at a ratio approved by CDFW, USFWS, and CalRecycle.

5.3.2 Remediation Mitigation Measures for Amphibian and Reptile Species

A small pond immediately outside the Project area and just northwest of the Secondary Area, and upland habitat within the Project area provide potential breeding and aestivation habitat for CRLF, a Federally Threatened species and a CDFW Species of Special Concern. Additionally, an ephemeral drainage within the Secondary Area provides potential habitat for FYLF (Federally Proposed Threatened and CDFW Species of Special Concern). The Project may result in direct impacts to these amphibian species should they be present with the Project area during Project implementation. Direct impacts to individual species could result from ground disturbance within aquatic habitat and adjacent upland refuge habitat when movement across these areas is occurring. Impacts could also occur in refuge habitat if individual special-status amphibians are aestivating in underground refugia or under debris. These species could be directly impacted from being crushed by remediation equipment or vehicles. These impacts could result in direct mortality of individuals or small populations of special-status amphibians.

In order to prevent impacts to, or mortality of individual special-status amphibians or reptiles, CalRecycle shall retain a qualified biologist approved by CDFW and USFWS. The qualified biologist will implement the following standard USFWS mitigation and avoidance measures:

- Preconstruction surveys before remediation activities for CRLF and FYLF shall be completed within 48 hours prior to commencement of any earth-moving activity, construction, or vegetation removal within the Project area, whichever comes first. The preconstruction survey shall include 2 nights of nocturnal surveys in areas of suitable habitat before any remediation activities should occur.
- If any CRLF and FYLF are encountered during the surveys, all work in the work area shall be placed on hold while the findings are reported to the CDFW and USFWS and it is determined what, if any, further actions must be followed to prevent possible take of this species.
- If CRLF or FYLF are identified within the Project area during preconstruction surveys, CalRecycle shall pause Project activities, and if required by CDFW, obtain an Incidental Take Permit prior to Project

construction resuming. Any actions taken regarding this species will follow the measures outlined in the Incidental Take Permit.

- Prior to the commencement of Project activities, remediation work areas in or near special-status amphibian habitat shall be fenced in a manner that prevents equipment and vehicles from entering adjacent habitat areas. Vegetation removal or excavation needed to install the exclusionary fencing may occur first. A qualified biologist, in consultation with CalRecycle, USFWS, and CDFW, shall assist in determining the boundaries of the area to be fenced and the type of exclusionary fencing, and direct installation of the fence. Exclusionary fencing shall be at least 24 inches in height, buried at least 6 inches below the ground surface, reinforced with compacted soil against the bottom edge on both sides, and shall be permanent enough to ensure that it remains in good condition throughout the duration of Project activities. The exclusionary fencing shall be inspected daily, and maintenance or repairs of the fence shall be implemented immediately. A qualified biologist shall conduct biological surveys to move any individual special-status amphibians from within the fenced area to suitable habitat outside of the fence. All workers shall be advised that equipment and vehicles must remain within the fenced work areas.
- Clearance surveys for special-status amphibians shall occur daily in the work area, especially along the interface between open space and remediation areas. If CRLF are found within the fenced work area, activities shall cease until the authorized biologist moves the individuals.
- A qualified biologist shall be present during all vegetation removal and ground-disturbing activities immediately adjacent to or within habitat that supports CRLF or FYLF.
- Prior to placement of any fill, the qualified biologist shall visually survey the area for CRLF and FYLF.
- If any CRLF or FYLF are found in a remediation area where fencing was deemed unnecessary, work shall cease until the authorized biologist removes the individuals. The qualified biologist, in consultation with CDFW and USFWS, shall then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the qualified biologist.
- Any CRLF or FYLF found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities.
- The qualified biologist shall have the authority to stop all activities until appropriate corrective measures have been completed.
- To ensure that diseases are not conveyed between work sites by the qualified biologist or their assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times (USFWS n.d.).
- Project activities shall be limited to daylight hours, except during an emergency, in order to avoid nighttime activities when special-status amphibians may be present. Because special-status amphibians

are often most actively foraging and dispersing during dusk and dawn, all activities shall cease 30 minutes before sunset and shall not begin prior to one half hour before sunrise.

- Traffic speed shall be maintained at 5 miles per hour or less in the work area.

5.3.3 Remediation Mitigation Measures for Migratory Birds

Trees in the Project area provide suitable nesting habitat for migratory birds. If a migratory bird, regardless of its federal or state status, were to nest in trees on or near the Project area prior to or during Project remediation activities, such activities could result in the abandonment of active nests or direct mortality to these birds.

Below are 2 remediation requirements to ensure that no unanticipated effects on nesting migratory birds and raptors will occur during Project remediation:

- **Standard CDFW Requirement #1**: If Project work must occur during the nesting season (February 1 – September 1), CalRecycle shall utilize a qualified biologist to survey nesting birds within the Project area no more than 3 days prior to the beginning of tree and vegetation removal or ground disturbing activities. A copy of the survey shall be submitted to CalRecycle prior to the start of construction activities.
- **Standard CDFW Requirement #2**: If nesting birds are detected within the Project area during the survey, consultation with CDFW and USFWS is recommended to establish acceptable avoidance or minimization measures to avoid impacts to migratory birds and raptors. Avoidance measures could include the establishment of a suitable activity-free buffer around active nests/roosting sites. The size of the buffer, duration of buffer, acceptable activities, and other details will be established through consultation with the CDFW and USFWS. The avoidance or minimization plan shall be submitted to CalRecycle, CDFW, and USFWS for review and approval before remediation begins. These measures will ensure that no nesting birds are impacted by remediation activities.

5.3.4 Remediation Mitigation Measures for Mammal Species

Riparian vegetation within the survey area provides potential foraging habitat for spotted bat, western mastiff bat and western red bat, 3 CDFW Species of Special Concern. Large, mature trees within the Project area provide potential roosting habitat for western mastiff bat and western red bat, while rock crevices in the survey area provide potential roosting habitat for spotted bat. Removal of trees and disturbance from construction activities in the vicinity of maternity roosts could result in roost abandonment and mortality of young. The following measures should be implemented to ensure that no unanticipated effects on bat species will occur during Project construction:

- A qualified biologist shall conduct a habitat assessment and survey of the Project area and vicinity for special-status and common bats. The habitat assessment shall be conducted a minimum of 30 days prior to vegetation removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage roosting species).

If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if:

(a) presence of bats is presumed, or documented during the surveys in trees with suitable bat habitat, and removal using the 2-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 – April 15 or September 1 – October 15,

or

(b) after a qualified bat biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats.

The 2-step tree removal shall be conducted over 2 consecutive days, as follows:

1. The first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting 2-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided.
2. The second day, the entire tree shall be removed.

6 References

California Department of Fish and Wildlife (CDFW). 2024a. "California Natural Diversity Database and Spotted Owl Viewer." https://wildlife.ca.gov/Data/CNDDB/Mapsand-Data#43018408-cnddb-in-bios.

California Department of Fish and Wildlife (CDFW). 2024b. "California Wildlife Habitat Relationship System." Version 10.1.29. https://wildlife.ca.gov/Data/CWHR.

California Invasive Plant Council (CAL-IPC). 2022. "CAL-IPC Inventory" Biogeographic Data Branch, Sacramento, CA. https://www.cal-ipc.org/plants/inventory/.

California Native Plant Society (CNPS). 2024a. "Rare Plant Inventory." Online Edition, V 9.5. https://www.rareplants.cnps.org.

California Native Plant Society (CNPS). 2024b. "A Manual of California Vegetation." Online Edition. http://www.cnps.org/cnps/vegetation/.

Tuolumne County. 2018. "Chapter 16 Natural Resources." https://www.tuolumnecounty.ca.gov/DocumentCenter/View/11954/Chapter-16-Natural-Resources- Final.

Tuolumne County. 2018. "Chapter 9.25 Premature Removal of Native Oak Trees." https://www.tuolumnecounty.ca.gov/DocumentCenter/View/342/Chapter-924---Premature-Removal- of-Native-Oak-Trees?bidId=.

Tuolumne County. 2025. *Aquatic Resources Delineation Report for CalRecycle Rotelli Burn Dump Remediation Project*. Prepared by NCE for Tuolumne County.

U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). n.d. Accessed March 12, 2024. "Soil Survey Geographic (SSURGO) Database for Contra Costa County, California." https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

U.S. Fish and Wildlife Service (USFWS). n.d. Accessed March 12, 2024. *The Declining Amphibian Task Force Fieldwork Code of Practice*. https://www.fws.gov/sites/default/files/documents/declining-amphibian-task-force-fieldwork-code-of-practice.PDF.

U.S. Fish and Wildlife Service (USFWS). 2024. "Information for Planning and Consultation." Fish and Wildlife Service, Sacramento Field Office. http://ecos.fws.gov/ipac.

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Distribution and Quality Control

Biological Resources Evaluation Report

CalRecycle Rotelli Burn Dump Remediation Project

Sonora, CA

March 5, 2025

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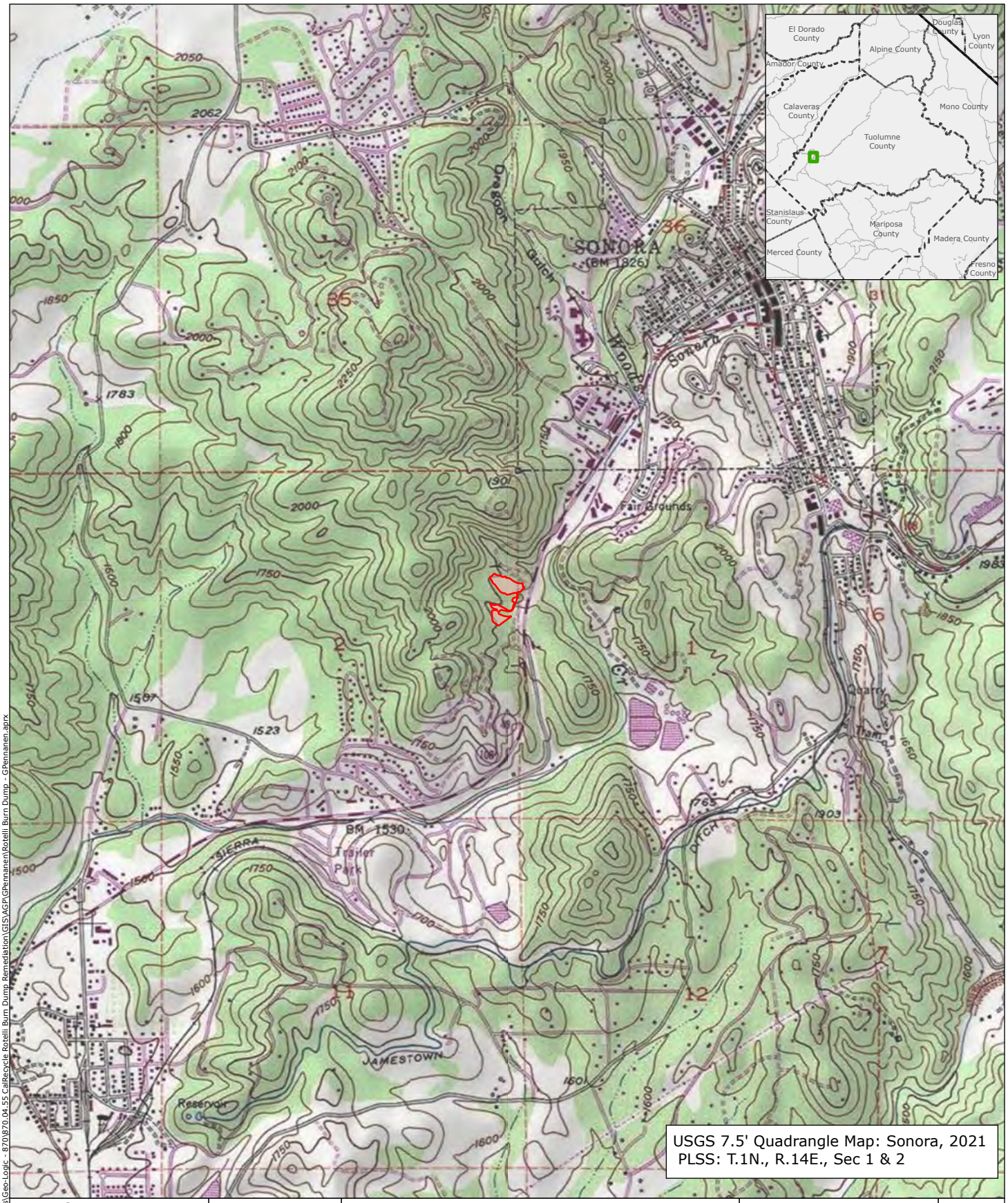
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NCE Project No. 870.04.55

Appendix A

Figures



Legend

Project Area

CalRecycle Rotelli Burn Dump Remediation Project

Project Vicinity Map

N

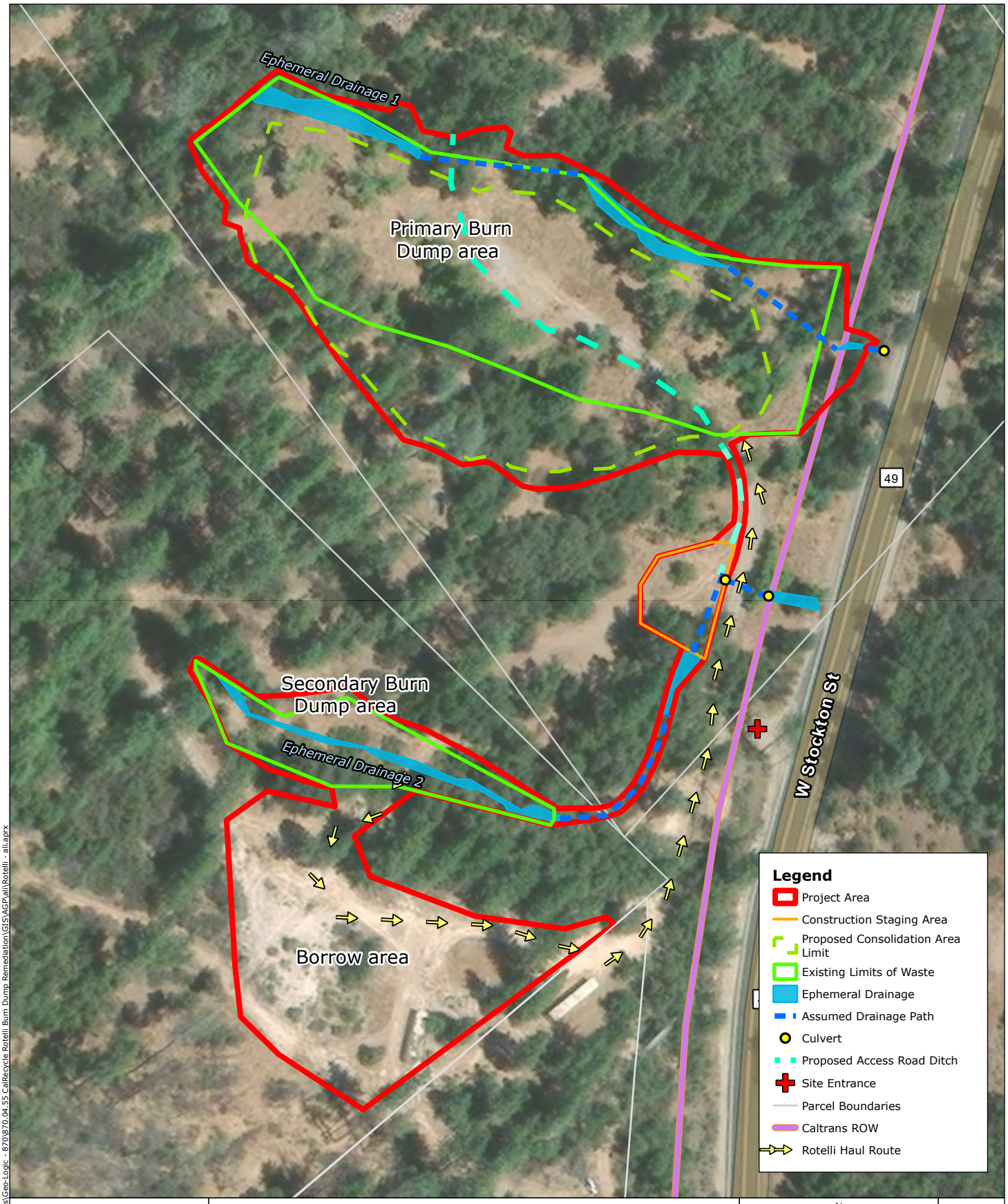
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0 0.1 0.2 0.3 Miles

FIGURE 1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI USA Topo Basemap	870.04.55	G. Pennanen	4/2/2024	2/26/2025	J.Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\GPennanen\Rotelli Burn Dump - GPennanen.aprx



Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\allRotelli - all.aprx

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Project Detail Map

N

1 in. = 100 ft.

0 50 100 ft.

FIGURE 2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery with Metadata	870.04.55	R. Rodriguez	3/5/2024	2/26/2025	J. Hall



Legend

- Project Area
- Parcel Boundaries
- Caltrans ROW
- Rotelli Haul Route

NCE
CalRecycle
Geo-Logic
ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Parcel Map

N

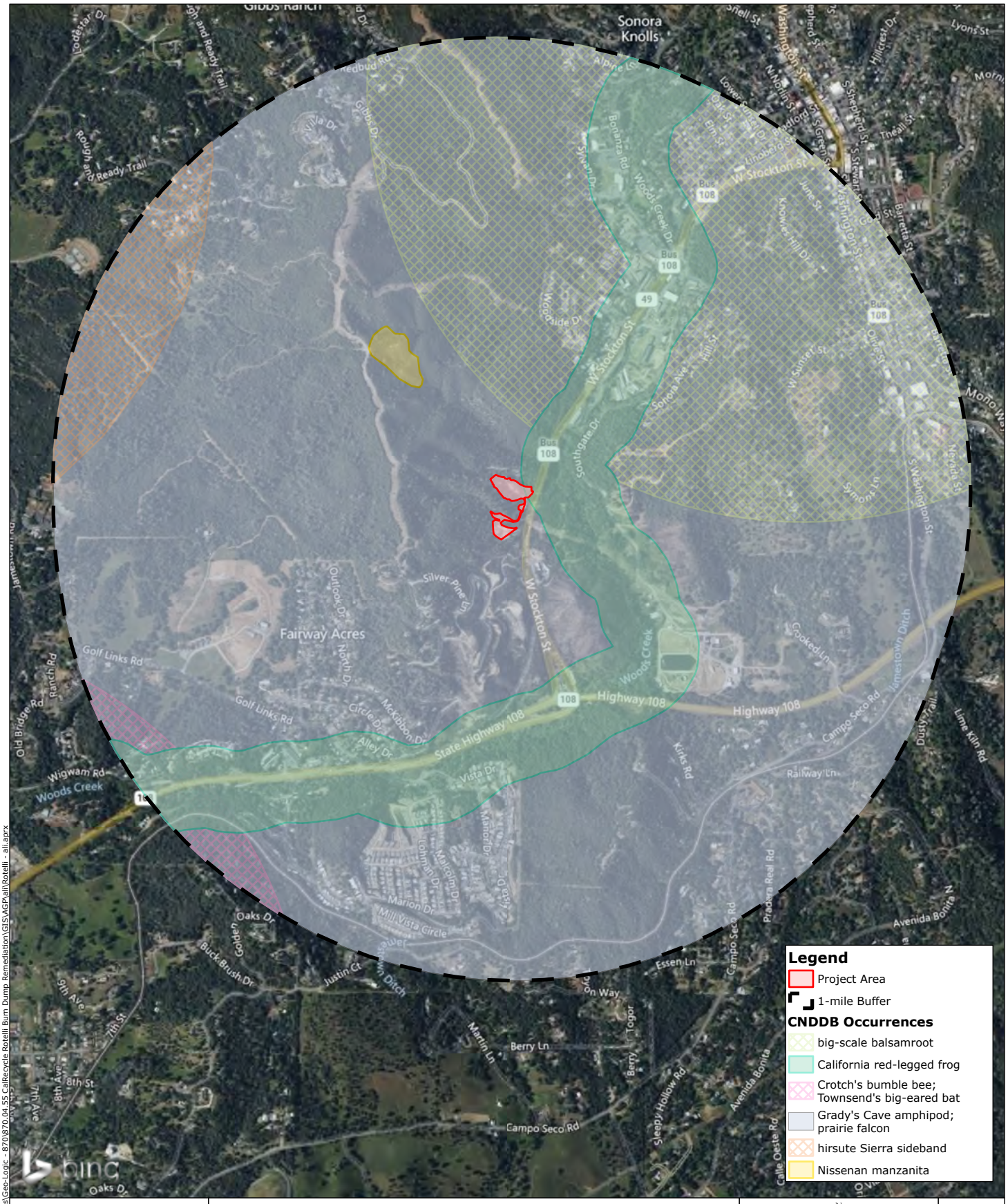
1 in. = 150 ft.

0 150 ft.

FIGURE 3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery Basemap w/ Metadata	870.04.55	R. Rodriguez	2/18/2025	4/11/2025	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\GPennanen\Rotelli Burn Dump - GPennanen.aprx



CalRecycle Rotelli Burn Dump Remediation Project

CNDDB Occurrence Map

N

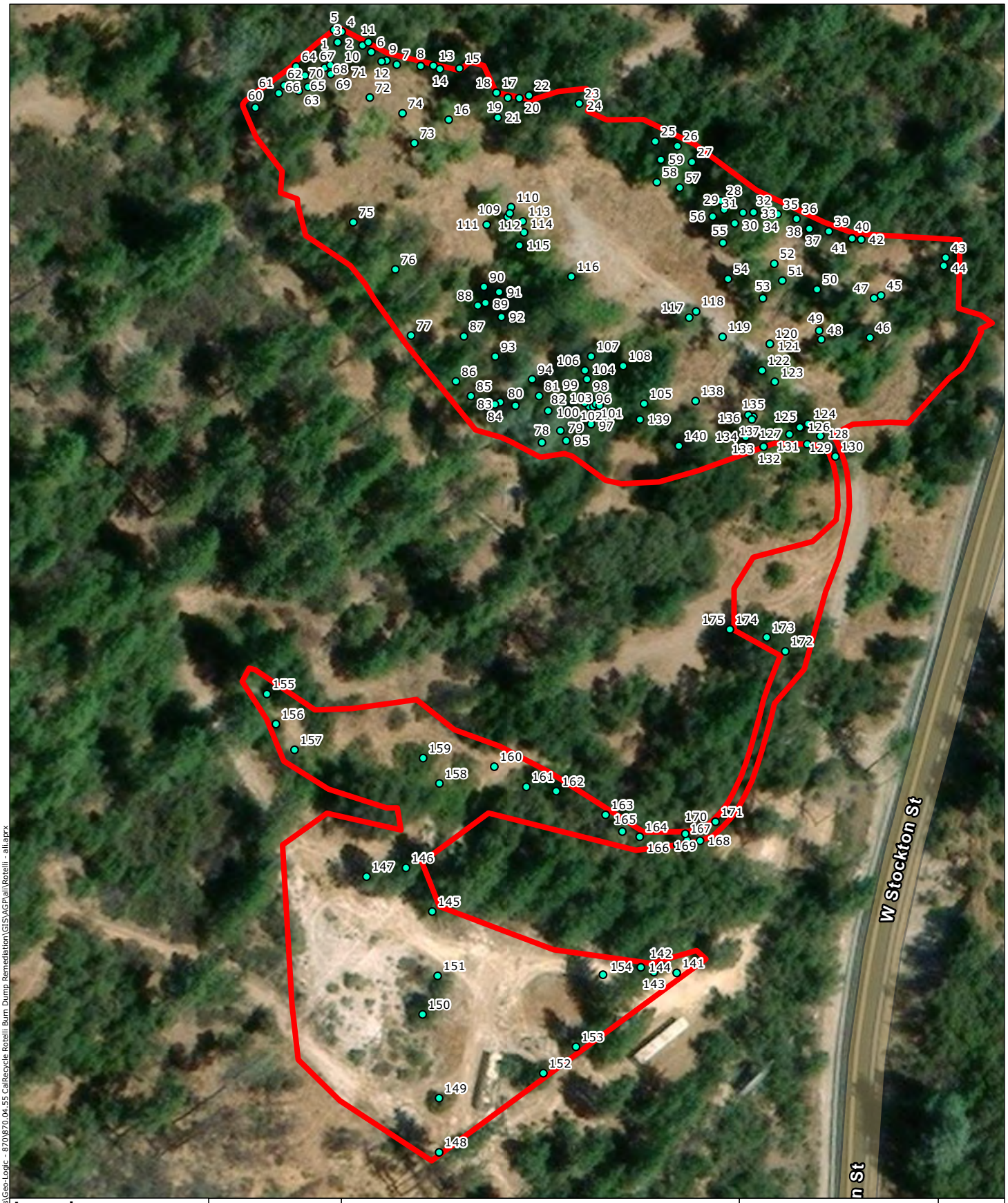
1 in. = 1,600 ft.

0 800 1,600 ft.

FIGURE 4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap; CDFW 2024	870.04.55	rrodriguez	3/5/2024	2/26/2025	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\all\Rotelli - all.aprx



Legend

- Project Area
- Tree Location (175 Trees)

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Tree Survey Map

N

1 in. = 92 ft.

0 40 80 ft.

FIGURE 5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery with Metadata	870.04.55	rrodriguez	2/27/2025	3/3/2025	C. Vaz

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\allRotelli - all.aprx

Appendix B

Tables

Table 1. Special Status Plant Species Considered for the Project

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
Agrostis hendersonii Henderson's bent grass	None	None	3.2	Valley and foothill grassland (mesic), Vernal pools. Elevation: 70 – 305 m (230 – 1000 ft)	Apr – Jun	Absent. Habitat not present within survey area. Elevational requirements not met.
Allium jepsonii Jepson's onion	None	None	1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest. Serpentine, Volcanic. Elevation: 300 – 1320 m (985 – 4330 ft)	Apr – Aug	Absent. Habitat not present within survey area. Substrate requirements not met.
Allium sanbornii* var. *congdonii Congdon's onion	None	None	4.3	Chaparral, Cismontane woodland. Serpentine, Volcanic. Elevation: 300 – 1395 m (985 – 4575 ft)	Apr – Jul	Absent. Habitat not present within survey area. Substrate requirements not met.
Allium tuolumnense Rawhide Hill onion	None	None	1B.2	Cismontane woodland (serpentinite). Elevation: 300 – 600 m (985 – 1970 ft)	Mar – May	Absent. Habitat not present within survey area. Substrate requirements not met.
Arctostaphylos nissenana Nissenan manzanita	None	None	1B.2	Chaparral, Closed-cone coniferous forest. Rocky. Elevation: 450 – 1100 m (1475 – 3610 ft)	Feb – Mar	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						period were negative for this species.
Balsamorhiza macrolepis big-scale balsamroot	None	None	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. Serpentine (sometimes). Elevation: 45 – 1555 m (150 – 5100 ft)	Mar – Jun	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering period were negative for this species.
Brodiaea pallida Chinese Camp brodiaea	FT	CE	1B.1	Cismontane woodland, Valley and foothill grassland. Serpentine (often). Elevation: 165 – 385 m (540 – 1265 ft)	May – Jun	Absent. Habitat not present within survey area. Elevational requirements not met.
Calycadenia hooveri Hoover's calycadenia	None	None	1B.3	Cismontane woodland, Valley and foothill grassland. Rocky. Elevation: 65 – 300 m (215 – 985 ft)	Jul – Sep	Absent. Habitat not present within survey area. Elevational requirements not met.
Camissonia lacustris grassland suncup	None	None	1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland. Granitic, Gravelly, Serpentine. Elevation: 180 – 1220 m (590 – 4005 ft)	Mar – Jun	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering period were

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						negative for this species.
Ceanothus fresnensis Fresno ceanothus	None	None	4.3	Cismontane woodland (openings), Lower montane coniferous forest. Elevation: 900 – 2210 m (2955 – 7250 ft)	(Apr)May – Jul	Absent. Habitat not present within survey area. Elevational requirements not met.
Chlorogalum grandiflorum Red Hills soaproot	None	None	1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest. Gabbroic, Serpentine. Elevation: 245 – 1690 m (805 – 5545 ft)	(Apr)May – Jun	Absent. Habitat not present within survey area. Substrate requirements not met.
Clarkia biloba* ssp. *australis Mariposa clarkia	None	None	1B.2	Chaparral, Cismontane woodland. Serpentine. Elevation: 300 – 1460 m (985 – 4790 ft)	Apr – Jul	Absent, Habitat not present within survey area. Substrate requirements not met.
Clarkia rostrata beaked clarkia	None	None	1B.3	Cismontane woodland, Valley and foothill grassland. Elevation: 60 – 500 m (195 – 1640 ft)	Apr – May	Potential. Cismontane woodland and grassland within the Project area provides potential habitat for this species.
Claytonia parviflora* ssp. *grandiflora streambank spring beauty	None	None	4.2	Cismontane woodland. Rocky. Elevation: 250 – 1200 m (820 – 3935 ft)	Feb – May	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						conducted within the flowering period were negative for this species.
Cryptantha mariposae Mariposa cryptantha	None	None	1B.3	Chaparral (rocky, serpentinite). Elevation: 200 – 650 m (655 – 2135 ft)	Apr – Jun	Potential. Chaparral and rocky habitats within the Project area provide potential habitat for this species.
Cryptantha spithamaea Red Hills cryptantha	None	None	1B.3	Chaparral, Cismontane woodland. Openings (sometimes), Serpentine, Streambanks (sometimes). Elevation: 275 – 460 m (900 – 1510 ft)	Apr – May	Potential. Chaparral, cismontane woodland, and streambanks within the Project area provides potential habitat for this species.
Cypripedium montanum mountain lady's-slipper	None	None	4.2	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest. Elevation: 185 – 2225 m (605 – 7300 ft)	Mar – Aug	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering period were negative for this species.
***Delphinium hansenii* ssp.**	None	None	4.2	Cismontane woodland, Valley and foothill grassland. Rocky. Elevation: 60 – 600 m (195 – 1970 ft)	Mar – May	Absent. Potential habitat within the Project buffer is of

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
ewanianum Ewan's larkspur						low quality. Botanical surveys conducted within the flowering period were negative for this species.
Diplacus pulchellus yellow-lip pansy monkeyflower	None	None	1B.2	Lower montane coniferous forest, Meadows and seeps. Clay, Disturbed areas (often), Vernally Mesic. Elevation: 600 – 2000 m (1970 – 6560 ft)	Apr – Jul	Potential. Coniferous forest and disturbed areas within the Project area provide potential habitat for this species.
Eriogonum tripodum tripod buckwheat	None	None	4.2	Chaparral, Cismontane woodland. Serpentine (often). Elevation: 200 – 1600 m (655 – 5250 ft)	May – Jul	Absent. Habitat not present within survey area. Substrate requirements not met.
Eriophyllum confertiflorum* var. *tanacetiflorum tansy-flowered woolly sunflower	None	None	4.3	Cismontane woodland, Lower montane coniferous forest. Elevation: 305 – 1340 m (1000 – 4395 ft)	May – Jul	Potential. Cismontane woodland and coniferous forest within the Project area provide potential habitat for this species.
Eryngium pinnatisectum Tuolumne button-celery	None	None	1B.2	Cismontane woodland, Lower montane coniferous forest, Vernal pools. Mesic. Elevation: 70 – 915 m (230 – 3000 ft)	May – Aug	Potential. Cismontane woodland and mesic habitats within the Project

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						area provide potential habitat for this species.
Eryngium spinosepalum spiny-sepaled button-celery	None	None	1B.2	Valley and foothill grassland, Vernal pools. Elevation: 80 – 975 m (260 – 3200 ft)	Apr – Jun	Potential. Valley and foothill grassland within the Project area provides potential habitat for this species.
Erythranthe acutidens Kings River monkeyflower	None	None	3	Cismontane woodland, Lower montane coniferous forest. Elevation: 305 – 1220 m (1000 – 4005 ft)	Apr – Jul	Potential. Cismontane woodland and coniferous forest within the Project area provide potential habitat for this species.
Erythranthe grayi Gray's monkeyflower	None	None	4.3	Lower montane coniferous forest, Upper montane coniferous forest. Mesic. Elevation: 550 – 2900 m (1805 – 9515 ft)	May – Jul	Potential. Coniferous forest and mesic habitats within the Project area provide potential habitat for this species.
Erythranthe inconspicua small-flowered monkeyflower	None	None	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest. Mesic. Elevation: 274 – 760 m (900 – 2495 ft)	May – Jun	Potential. Chaparral and mesic habitats within the Project area provides potential habitat for this species.

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
Erythranthe marmorata Stanislaus monkeyflower	None	None	1B.1	Cismontane woodland, Lower montane coniferous forest. Elevation: 100 – 900 m (330 – 2955 ft)	Mar – May	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering period were negative for this species.
Erythronium tuolumnense Tuolumne fawn lily	None	None	1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest. Elevation: 510 – 1365 m (1675 – 4480 ft)	Mar – Jun	Absent. Potential habitat within the Project buffer is of low quality. Botanical surveys conducted within the flowering period were negative for this species.
Fritillaria agrestis stinkbells	None	None	4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland. Clay, Serpentine (sometimes). Elevation: 10 – 1555 m (35 – 5100 ft)	Mar – Jun	Absent. Habitat not present within survey area. Substrate requirements not met.
Gilmania luteola golden-carpet gilmania	None	None	1B.3	Chenopod scrub (alkaline barrens). Elevation: -15 – 610 m (-50 – 2000 ft)	(Feb)Mar – Apr	Absent, Habitat not present within survey area. Substrate requirements not met.

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
Githopsis pulchella* ssp. *serpentinicola serpentine bluecup	None	None	4.3	Cismontane woodland (loam, serpentinite). Elevation: 320 – 610 m (1050 – 2000 ft)	May – Jun	Potential. Cismontane woodland and loam within the Project area provide potential habitat for this species.
Githopsis tenella delicate bluecup	None	None	1B.3	Chaparral, Cismontane woodland. Mesic, Serpentine. Elevation: 325 – 1900 m (1065 – 6235 ft)	Apr – Jun	Potential. Cismontane woodland and mesic habitats within the Project area provide potential habitat for this species.
Horkelia parryi Parry's horkelia	None	None	1B.2	Chaparral, Cismontane woodland. Elevation: 80 – 1070 m (260 – 3510 ft)	Apr – Sep	Potential. Chaparral and cismontane woodland within the Project area provide potential habitat for this species.
Hosackia oblongifolia* var. *cuprea copper-flowered bird's-foot trefoil	None	None	1B.3	Meadows and seeps (edges), Upper montane coniferous forest. Mesic. Elevation: 2400 – 2750 m (7875 – 9025 ft)	Jun – Aug	Absent. Habitat not present within survey area. Elevational requirements not met.
Iris hartwegii* ssp. *columbiana Tuolumne iris	None	None	1B.2	Cismontane woodland, Lower montane coniferous forest. Elevation: 425 – 1400 m (1395 – 4595 ft)	May – Jun	Potential. Cismontane woodland and coniferous forest

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						within the Project area provide potential habitat for this species.
Jepsonia heterandra foothill jepsonia	None	None	4.3	Cismontane woodland, Lower montane coniferous forest. Metamorphic, Rocky. Elevation: 50 – 500 m (165 – 1640 ft)	Aug – Dec	Potential. Cismontane woodland and rocky habitats within the Project area provide potential habitat for this species.
Lagophylla dichotoma forked hare-leaf	None	None	1B.1	Cismontane woodland, Valley and foothill grassland. Clay (sometimes). Elevation: 45 – 335 m (150 – 1100 ft)	Apr – May	Absent. Habitat not present within survey area. Elevational requirements not met.
Lomatium congdonii Congdon's lomatium	None	None	1B.2	Chaparral, Cismontane woodland. Serpentine. Elevation: 300 – 2100 m (985 – 6890 ft)	Mar – Jun	Absent. Habitat not present within survey area. Substrate requirements not met.
Lupinus spectabilis shaggyhair lupine	None	None	1B.2	Chaparral, Cismontane woodland. Serpentine. Elevation: 260 – 825 m (855 – 2705 ft)	Apr – May	Absent. Habitat not present within survey area. Substrate requirements not met.
Monardella venosa veiny monardella	None	None	1B.1	Cismontane woodland, Valley and foothill grassland. Clay. Elevation: 60 – 410 m (195 – 1345 ft)	May – Jul	Absent. Habitat not present within survey area.

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
						Substrate and elevational requirements not met.
Navarretia miwukensis Mi-Wuk navarretia	None	None	1B.2	Lower montane coniferous forest. Openings. Elevation: 800 – 1500 m (2625 – 4920 ft)	May – Jun(Jul)	Absent. Habitat not present within survey area. Elevational requirements not met.
Navarretia paradoxiclara Patterson's navarretia	None	None	1B.3	Meadows and seeps. Openings, Serpentine, Vernally Mesic. Elevation: 150 – 430 m (490 – 1410 ft)	May – Jun(Jul)	Absent. Habitat not present within survey area. Elevational requirements not met.
Packera layneae Layne's ragwort	FT	CR	1B.2	Chaparral, Cismontane woodland. Gabbroic (sometimes), Rocky, Serpentine (sometimes). Elevation: 200 – 1085 m (655 – 3560 ft)	Apr – Aug	Potential. Chaparral, cismontane woodland and rocky habitats within the Project area provide potential habitat for this species.
Perideridia bacigalupii Bacigalupi's yampah	None	None	4.2	Chaparral, Lower montane coniferous forest. Serpentine. Elevation: 450 – 1255 m (1475 – 4120 ft)	Jun – Aug	Absent. Habitat not present within survey area. Substrate requirements not met.

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
Piperia michaelii Michael's rein orchid	None	None	4.2	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal scrub, Lower montane coniferous forest. Elevation: 3 – 915 m (10 – 3000 ft)	Apr – Aug	Potential. Chaparral and coniferous forest habitats within the Project area provide potential habitat for this species.
Sagittaria sanfordii Sanford's arrowhead	None	None	1B.2	Marshes and swamps (shallow freshwater). Elevation: 0 – 650 m (0 – 2135 ft)	May – Oct(Nov)	Absent. Habitat not present within S survey area. Substrate requirements not met.
Senecio clevelandii* var. *heterophyllus Red Hills ragwort	None	None	1B.2	Cismontane woodland (seeps, serpentinite). Elevation: 260 – 385 m (855 – 1265 ft)	May – Jul	Absent. Habitat not present within survey area. Elevational requirements not met.
Trichostema rubisepalum Hernandez bluecurls	None	None	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Vernal pools. Gravelly, Serpentine (sometimes), Volcanic (sometimes). Elevation: 300 – 1435 m (985 – 4710 ft)	Jun – Aug	Potential. Chaparral and gravelly habitats within the Project area provide potential habitat for this species.
Verbena californica Red Hills vervain	FT	CT	1B.1	Cismontane woodland, Valley and foothill grassland. Mesic, Seeps (usually), Serpentine (usually). Elevation: 260 – 400 m (855 – 1310 ft)	May – Sep	Absent. Habitat not present within survey area. Elevational requirements not met.

Scientific Name Common Name	Regulatory Status			Habitat Requirements	Blooming Period	Potential for Occurrence in the Survey Area and Results of Survey
	Federal	State	CNPS			
Special Status Codes <u>Federally Listed Species (Federal)</u>: FE = Federally Endangered FT = Federally Threatened FD = Federally Delisted PT = Proposed Threatened FCE = Federally Endangered Candidate FPD = Proposed for Delisting		<u>California Listed Species (State)</u>: CE = State Endangered CT = State Threatened CR = State Rare CC = State Candidate			<u>California Native Plant Society (CNPS) List Categories</u>: 1 = Rare in California and elsewhere 2 = Rare in California, but not elsewhere A = Presumed extirpated or extinct B = Rare, threatened, or endangered 3 = Plants about which we need more information 4 = Plants of limited distribution <u>CNPS Threat Code Extensions</u>: .1 = Seriously endangered in California (Over 80% of occurrences threatened) .2 = Fairly endangered in California (20 – 80% occurrences threatened) .3 = Not very endangered in California (< 20% of occurrences threatened)	
Source: CNPS 2024						

Table 2. Special Status Wildlife Species Considered for the Project

Scientific Name Common Name	Federal Status	State Status		USFS Status	Habitat Requirements	Potential for Occurrence in the Survey Area and Results of Survey
		CESA	CDFW			
Amphibians						
Rana boylii pop. 5 foothill yellow-legged frog - south Sierra DPS	FE	CE	None	S	Sierra Nevada from South Fork American River subbasin (HU 8) in El Dorado County south to Tehachapi Mountains in Kern County. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Potential. Shaded shallow stream channel with rocky substrate within the Secondary Burn Dump area provides low quality potential habitat for this species. This species was not observed during the survey.
Rana draytonii California red-legged frog	FT	None	SSC	None	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Potential. Small pond northwest of the Secondary Burn Dump area provides low quality potential breeding habitat and vegetation within the Project area provides potential aestivation habitat for this species. This species was not observed during the survey.
Ambystoma californiense California tiger salamander	FT	CT	WL	None	Annual grasslands and oak woodlands with hot, dry summers and cool, rainy winters. Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Absent. Habitat not present within survey area. Nearest recorded observation of this species is 24 miles northwest of the site and was made in 1995. This species was not observed during surveys. No burrows were observed during surveys.
Birds						
Agelaius tricolor tricolored blackbird	None	CT	SSC	None	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and	Absent. Habitat not present within Project area or buffer.

Scientific Name Common Name	Federal Status	State Status		USFS Status	Habitat Requirements	Potential for Occurrence in the Survey Area and Results of Survey
		CESA	CDFW			
					foraging area with insect prey within a few km of the colony.	
Athene cunicularia burrowing owl	None	None	SSC	None	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Absent. Annual grasslands within Project area and buffer provide potential foraging habitat, but no burrows were observed during surveys.
Haliaeetus leucocephalus bald eagle	FD	CE	FP	S	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Absent. Habitat not present within Project area or buffer. Project Site is not near open water.
Strix nebulosa great gray owl	None	CE	None	S	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	Absent. Habitat not present within project site or buffer. Project area has low canopy closure and no large diameter snags were observed.
Fish						
Hesperoleucus symmetricus symmetricus central California roach	None	None		SSC	Generally found in small streams of the Sierra Nevada foothills flowing into the Central Valley and are particularly well adapted to life in intermittent watercourses; dense populations are frequently observed in isolated pools. Rarely above 1,000 meters in elevation. Tolerant of wide temperature ranges and dissolved oxygen levels. Most abundant when only species present, occupying large pools in open water.	Absent. Habitat not present within Project area or buffer.

Scientific Name Common Name	Federal Status	State Status		USFS Status	Habitat Requirements	Potential for Occurrence in the Survey Area and Results of Survey
		CESA	CDFW			
					With other fish, found in shallow margins, pool edges, or dense cover.	
Invertebrates						
Branchinecta lynchi vernal pool fairy shrimp	FT	None	None	None	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools. Occurs only in cool-water pools. Individuals hatch from cysts during cold-weather winter storms; require water temperature of 50F or lower to hatch	Absent. Habitat not present within survey area.
Danaus plexippus Monarch butterfly	FC	None	None	S	Prairies, meadows, grasslands and along roadsides. Require milkweeds and flowering plants for reproduction.	Absent. Project area and buffer do not contain milkweed or large Eucalyptus trees. Habitat not present within Project area or buffer.
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT	None	None	None	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.	Absent. Project area and buffer do not contain elderberry, and elevational requirements not met. Habitat not present within Project area or buffer.
Mammals						
Antrozous pallidus pallid bat	None	None	SSC	S	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.	Absent. Project area and buffer are highly disturbed by people living within the site. Habitat not present within Project area or buffer.

Scientific Name Common Name	Federal Status	State Status		USFS Status	Habitat Requirements	Potential for Occurrence in the Survey Area and Results of Survey
		CESA	CDFW			
Corynorhinus townsendii Townsend's big-eared bat	None	None	SSC	S	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Absent. Project area and buffer are highly disturbed by people living within the site. Habitat not present within Project area or buffer.
Euderma maculatum spotted bat	None	None	SSC	None	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Potential. Grassland, mixed conifer forest, and ephemeral streams within the Project area provides potential foraging habitat for this species. Project buffer contains potential roosting habitat.
Eumops perotis californicus western mastiff bat	None	None	SSC	None	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.	Potential. Conifer and deciduous woodlands within the Project area provide potential habitat for this species.
Lasiurus frantzii western red bat	None	None	SSC	None	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Potential. Mixed conifer forest habitat within the Project area provides potential habitat for this species.
Reptiles						
Emys marmorata western pond turtle	PT	None	SSC	S	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Absent. Potential habitat within the survey area is marginal. Nearest recorded observation is 8 miles away and was made in 2003. This species was not observed during surveys.
Phrynosoma blainvillii coast horned lizard	None	None	SSC	None	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open	Absent. Habitat not present survey area.

Scientific Name Common Name	Federal Status	State Status		USFS Status	Habitat Requirements	Potential for Occurrence in the Survey Area and Results of Survey
		CESA	CDFW			
					areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	

Special Status Codes

Federal
Federally Listed Species (Federal):
FE = Federally Endangered
FT = Federally Threatened
FD = Federally Delisted
PT = Proposed Threatened
FC = Federal Candidate
FPD = Proposed for Delisting

State
California State Listed Species (CA):
CE = State Endangered
CT = State Threatened
CR = State Rare
CC = State Candidate
CD = State Delisted

CDFW
SSC = Species of Special Concern
FP = Federally Protected
WL = Watch List

USFS
S = USFS Sensitive Species

Sources: CDFW 2024, USFS 2024, USFWS 2024

Table 3. Plant Species Observed During Surveys

Scientific Name	Common Name	Native (Y/N)
Acer negundo	box elder	Y
Arctostaphylos viscida	whiteleaf manzanita	Y
Baccharis pilularis	coyote brush	Y
Bromus diandrus	ripgut brome	N Cal-IPC: Moderate
Capsella bursa-pastoris	shepherd's purse	N
Carduus pycnocephalus	Italian thistle	N Cal-IPC: Moderate
Chlorogalum pomeridianum	wavy-leafed soap plant	Y
Claytonia perfoliata	miner's lettuce	Y
Cynosurus echinatus	bristly dogtail grass	N Cal-IPC: Moderate
Erodium botrys	longbeak stork's bill	N
Erodium cicutarium	redstem stork's-bill	N
Galium aparine	goosegrass	Y
Geranium dissectum	cutleaf geranium	N
Heteromeles arbutifolia	toyon	Y
Hirschfeldia incana	short-pod mustard	N Cal-IPC: Moderate
Hordeum murinum	wall barley	N Cal-IPC: Moderate
Lamium amplexicaule	henbit	N
Lotus corniculatus	bird's-foot trefoil	N

Scientific Name	Common Name	Native (Y/N)
Luzula comosa	Pacific woodrush	Y
Marrubium vulgare	white horehound	N
Medicago polymorpha	burclover	N
Pentagramma triangularis	goldback fern	Y
Pinus jeffreyi	Jeffrey pine	Y
Pinus ponderosa	ponderosa pine	Y
Plantago lanceolata	English plantain	N
Pseudognaphalium beneolens	fragrant everlasting	Y
Quercus wislizeni	interior live oak	Y
Rubus armeniacus	Himalayan blackberry	N Cal-IPC: High
Rumex crispus	curly dock	N
Secale cereale	rye	N
Silybum marianum	milk thistle	N
Sisymbrium orientale	Indian hedgemustard	N
Spartium junceum	Spanish broom	N Cal-IPC: High
Spergularia rubra	red sand-spurrey	N
Stellaria media	common chickweeds	N
Stellaria neglecta	greater chickweed	N
Torilis arvensis	tall sock-destroyer	N Cal-IPC: Moderate

Scientific Name	Common Name	Native (Y/N)
Verbascum thapsus	woolly mullein	N
Vicia sativa	common vetch	N

Table 4. Wildlife Species Observed During Surveys

Scientific Name	Common Name	Native (Y/N)
Birds		
Cyanocitta stelleri	Steller's jay	Y
Calypte anna	Anna's hummingbird	Y
Colaptes auratus	northern flicker	Y
Psaltriparus minimus	American bushtit	Y
Cathartes aura	turkey vulture	Y
Turdus migratorius	American robin	Y
Corthylio calendula	ruby-crowned kinglet	Y
Amphibians		
Pseudacris regilla	Pacific tree frog	Y

Table 4: Tree Survey Results during surveys

Tree Number	Species		DBH	Native	Notes
	Scientific Name	Common Name			
1	*Quercus wislizeni*	interior live oak	8.5, 9, 9	Y	3 trunks
2	*Quercus wislizeni*	interior live oak	8	Y	
3	*Quercus wislizeni*	interior live oak	4.5	Y	
4	*Quercus wislizeni*	interior live oak	5, 9, 7	Y	3 trunks
5	*Quercus wislizeni*	interior live oak	10, 8	Y	2 trunks
6	*Quercus wislizeni*	interior live oak	6.5, 6, 6.5	Y	3 trunks
7	*Quercus wislizeni*	interior live oak	24, 20, 26	Y	3 trunks
8	*Pinus jeffreyi*	Jeffrey pine	8	Y	
9	*Pinus jeffreyi*	Jeffrey pine	7	Y	
10	*Pinus jeffreyi*	Jeffrey pine	6.5	Y	
11	*Quercus wislizeni*	interior live oak	9, 9	Y	2 trunks
12	*Quercus wislizeni*	interior live oak	7, 14	Y	2 trunks
13	*Pinus jeffreyi*	Jeffrey pine	7	Y	
14	*Pinus jeffreyi*	Jeffrey pine	13	Y	
15	*Pinus jeffreyi*	Jeffrey pine	37.5	Y	
16	*Ailanthus altissima*	Tree of heaven	7	N	poor health
17	*Pinus jeffreyi*	Jeffrey pine	29.5	Y	
18	*Quercus wislizeni*	interior live oak	9	Y	
19	*Quercus wislizeni*	interior live oak	12	Y	
20	*Quercus wislizeni*	interior live oak	8.5, 7, 11, 11	Y	4 trunks
21	*Quercus wislizeni*	interior live oak	12	Y	
22	*Pinus jeffreyi*	Jeffrey pine	22	Y	
23	*Quercus wislizeni*	interior live oak	22,18	Y	2 trunks
24	*Quercus wislizeni*	interior live oak	9	Y	
25	*Quercus wislizeni*	interior live oak	9	Y	
26	*Quercus wislizeni*	interior live oak	10	Y	
27	*Quercus wislizeni*	interior live oak	17	Y	
28	*Pinus jeffreyi*	Jeffrey pine	29.6	Y	
29	*Pinus jeffreyi*	Jeffrey pine	22	Y	
30	*Pinus jeffreyi*	Jeffrey pine	15	Y	
31	*Pinus jeffreyi*	Jeffrey pine	10	Y	
32	*Pinus jeffreyi*	Jeffrey pine	14	Y	
33	*Pinus jeffreyi*	Jeffrey pine	20	Y	
34	*Quercus garryana*	Oregon Oak	16	Y	
35	*Quercus wislizeni*	interior live oak	6, 7, 6	Y	
36	*Quercus garryana*	Oregon Oak	9	Y	

37	*Pinus jeffreyi*	Jeffrey pine	13	Y	
38	*Pinus jeffreyi*	Jeffrey pine	12	Y	
39	*Quercus lobata*	valley oak	19	Y	
40	*Quercus garryana*	Oregon Oak	7.5	Y	
41	*Quercus garryana*	Oregon Oak	11	Y	
42	*Quercus garryana*	Oregon Oak	10, 7	Y	2 trunks
43	*Quercus wislizeni*	interior live oak	15, 18	Y	
44	*Quercus wislizeni*	interior live oak	18	Y	
45	*Quercus garryana*	Oregon Oak	8, 9	Y	poor health
46	*Ailanthus altissima*	Tree of heaven	12	N	
47	*Ailanthus altissima*	Tree of heaven	7	N	
48	*Ailanthus altissima*	Tree of heaven	8	N	
49	*Ailanthus altissima*	Tree of heaven	10	N	
50	*Ailanthus altissima*	Tree of heaven	11	N	
51	*Quercus wislizeni*	interior live oak	8, 5	N	2 trunks
52	*Ailanthus altissima*	Tree of heaven	7	N	
53	*Ailanthus altissima*	Tree of heaven	11	N	
54	*Ailanthus altissima*	Tree of heaven	16	N	
55	*Ailanthus altissima*	Tree of heaven	11,10	N	2 trunks
56	*Quercus wislizeni*	interior live oak	14, 15	N	2trunks
57	*Ailanthus altissima*	Tree of heaven	15, 5	N	2 trunks
58	*Ailanthus altissima*	Tree of heaven	7	N	
59	*Quercus wislizeni*	interior live oak	11	Y	
60	*Quercus wislizeni*	interior live oak	10	Y	
61	*Quercus wislizeni*	interior live oak	10, 9	Y	2 trunks
62	*Quercus wislizeni*	interior live oak	7	Y	
63	*Quercus wislizeni*	interior live oak	11	Y	
64	*Quercus wislizeni*	interior live oak	10, 10	Y	2 trunks
65	*Quercus wislizeni*	interior live oak	5, 6, 7	Y	3 trunks
66	*Quercus wislizeni*	interior live oak	14	Y	
67	*Quercus wislizeni*	interior live oak	16	Y	
68	*Quercus wislizeni*	interior live oak	4, 7	Y	2 trunks
69	*Quercus wislizeni*	interior live oak	7	Y	2 trunks
70	*Quercus wislizeni*	interior live oak	6,9	Y	2 trunks
71	*Quercus wislizeni*	interior live oak	8, 6, 6, 5	Y	4 trunks
72	*Ailanthus altissima*	Tree of heaven	11,9	N	
73	*Ailanthus altissima*	Tree of heaven	6, 6, 4, 7	N	4 trunks
74	*Ailanthus altissima*	Tree of heaven	7	N	
75	*Quercus garryana*	Oregon Oak	14	Y	
76	*Quercus wislizeni*	interior live oak	9	Y	
77	*Quercus wislizeni*	interior live oak	18	Y	
78	*Quercus wislizeni*	interior live oak	18	Y	
79	*Quercus wislizeni*	interior live oak	11,8	Y	poor health

80	*Quercus wislizeni*	interior live oak	16	Y	
81	*Quercus wislizeni*	interior live oak	13, 7	Y	2 trunks
82	*Quercus wislizeni*	interior live oak	7	Y	
83	*Quercus wislizeni*	interior live oak	11	Y	
84	*Quercus wislizeni*	interior live oak	13	Y	
85	*Pinus jeffreyi*	Jeffrey pine	13	Y	
86	*Quercus wislizeni*	interior live oak	14	Y	poor health
87	*Quercus wislizeni*	interior live oak	9	Y	
88	*Quercus wislizeni*	interior live oak	5, 4	Y	2 trunks
89	*Quercus wislizeni*	interior live oak	8	Y	
90	*Quercus wislizeni*	interior live oak	5	Y	
91	*Quercus wislizeni*	interior live oak	7	Y	
92	*Pinus jeffreyi*	Jeffrey pine	33	Y	
93	*Quercus wislizeni*	interior live oak	10	Y	
94	*Quercus wislizeni*	interior live oak	10, 8, 13	Y	3 trunks
95	*Quercus wislizeni*	interior live oak	13, 7	Y	2 trunks
96	*Quercus wislizeni*	interior live oak	5	Y	
97	*Quercus wislizeni*	interior live oak	5	Y	
98	*Quercus wislizeni*	interior live oak	7	Y	
99	*Quercus wislizeni*	interior live oak	10	Y	
100	*Quercus wislizeni*	interior live oak	9, 7	Y	2 trunks
101	*Quercus wislizeni*	interior live oak	5	Y	
102	*Quercus wislizeni*	interior live oak	8	Y	
103	*Quercus wislizeni*	interior live oak	9	Y	
104	*Quercus wislizeni*	interior live oak	12	Y	
105	*Quercus wislizeni*	interior live oak	23	Y	
106	*Quercus wislizeni*	interior live oak	11	Y	
107	*Quercus wislizeni*	interior live oak	7	Y	
108	*Pinus jeffreyi*	Jeffrey pine	31	Y	
109	*Ailanthus altissima*	Tree of heaven	7, 9	N	2 trunks
110	*Ailanthus altissima*	Tree of heaven	7.5	N	
111	*Ailanthus altissima*	Tree of heaven	6.5	N	
112	*Ailanthus altissima*	Tree of heaven	8	N	
113	*Ailanthus altissima*	Tree of heaven	8, 8, 13	N	3 trunks
114	*Ailanthus altissima*	Tree of heaven	8	N	
115	*Ailanthus altissima*	Tree of heaven	7	N	
116	*Ailanthus altissima*	Tree of heaven	10, 6	N	2 trunks
117	*Ailanthus altissima*	Tree of heaven	19	N	poor health
118	*Ailanthus altissima*	Tree of heaven	8	N	poor health
119	*Ailanthus altissima*	Tree of heaven	14	N	
120	*Ailanthus altissima*	Tree of heaven	15	N	
121	*Ailanthus altissima*	Tree of heaven	11	N	
122	*Ailanthus altissima*	Tree of heaven	6.5	N	

123	*Ailanthus altissima*	Tree of heaven	7	N	
124	*Ailanthus altissima*	Tree of heaven	6.5	N	
125	*Ailanthus altissima*	Tree of heaven	7	N	
126	*Ailanthus altissima*	Tree of heaven	7	N	
127	*Ailanthus altissima*	Tree of heaven	8	N	
128	*Ailanthus altissima*	Tree of heaven	6.5	N	
129	*Ailanthus altissima*	Tree of heaven	6.5	N	
130	*Ailanthus altissima*	Tree of heaven	6.5	N	
131	*Ailanthus altissima*	Tree of heaven	6.5	N	
132	*Ailanthus altissima*	Tree of heaven	9	N	
133	*Ailanthus altissima*	Tree of heaven	9	N	
134	*Ailanthus altissima*	Tree of heaven	15	N	
135	*Ailanthus altissima*	Tree of heaven	13	N	
136	*Ailanthus altissima*	Tree of heaven	11	N	
137	*Ailanthus altissima*	Tree of heaven	11	N	
138	*Pinus jeffreyi*	Jeffrey pine	7	Y	
139	*Quercus wislizeni*	interior live oak	5, 5	Y	2 trunks
140	*Quercus wislizeni*	interior live oak	20, 11	Y	2 trunks
141	*Pinus jeffreyi*	Jeffrey pine	14	Y	
142	*Pinus jeffreyi*	Jeffrey pine	9	Y	
143	*Pinus jeffreyi*	Jeffrey pine	14	Y	
144	*Pinus jeffreyi*	Jeffrey pine	8	Y	
145	*Pinus jeffreyi*	Jeffrey pine	17	Y	
146	*Pinus jeffreyi*	Jeffrey pine	13	Y	
147	*Pinus jeffreyi*	Jeffrey pine	12	Y	
148	*Pinus jeffreyi*	Jeffrey pine	18	Y	
149	*Pinus jeffreyi*	Jeffrey pine	7.5	Y	
150	*Pinus jeffreyi*	Jeffrey pine	11	Y	
151	*Pinus jeffreyi*	Jeffrey pine	7	Y	
152	*Pinus jeffreyi*	Jeffrey pine	7, 8, 8, 9	Y	4 trunks
153	*Pinus jeffreyi*	Jeffrey pine	12	Y	
154	*Pinus jeffreyi*	Jeffrey pine	26	Y	
155	*Quercus wislizeni*	interior live oak	6	Y	
156	*Quercus wislizeni*	interior live oak	6	Y	
157	*Quercus wislizeni*	interior live oak	6	Y	
158	*Quercus wislizeni*	interior live oak	6	Y	
159	*Quercus wislizeni*	interior live oak	7	Y	
160	*Quercus wislizeni*	interior live oak	6, 4	Y	2 trunks
161	*Quercus wislizeni*	interior live oak	8	Y	
162	*Quercus wislizeni*	interior live oak	16	Y	
163	*Quercus wislizeni*	interior live oak	10	Y	
164	*Quercus wislizeni*	interior live oak	12	Y	
165	*Quercus wislizeni*	interior live oak	12	Y	

166	*Quercus wislizeni*	interior live oak	10	Y	
167	*Quercus wislizeni*	interior live oak	8	Y	
168	*Quercus wislizeni*	interior live oak	8	Y	
169	*Quercus wislizeni*	interior live oak	6.5	Y	
170	*Quercus wislizeni*	interior live oak	12	Y	
171	*Quercus wislizeni*	interior live oak	6, 6	Y	2 trunks
172	*Pinus jeffreyi*	Jeffrey pine	26	Y	
173	*Quercus wislizeni*	interior live oak	9	Y	
174	*Quercus wislizeni*	interior live oak	10	Y	
175	*Pinus jeffreyi*	Jeffrey pine	10	Y	

Appendix C

USFWS Information for Planning and Consultation Report

United States Department of the Interior

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

In Reply Refer To: March 04, 2024
Project Code: 2024-0057767
Project Name: CalRecycle Rotelli Burn Dump Remediation Project

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2024-0057767
Project Name: CalRecycle Rotelli Burn Dump Remediation Project
Project Type: Non-NPL Site Remediation
Project Description: CalRecycle staff have completed an evaluation and recommend conditional approval of the CalRecycle-managed removal and remediation of the illegal dumping incidental thereto at the Rotelli Private Dump (Facility No. 55-CR-0037) pursuant to the requirements of the Solid Waste Disposal and Codisposal Site Cleanup Program.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.9722254,-120.39583389456092,14z



Counties: Tuolumne County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

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

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

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

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

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: South Sierra Distinct Population Segment (South Sierra DPS) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5133	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/498

FLOWERING PLANTS

NAME	STATUS
Chinese Camp Brodiaea *Brodiaea pallida*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8290

Red Hills Vervain *Verbena californica*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7344

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: NCE
Name: Ruby Rodriguez
Address: 1003 west cutting boulevard
Address Line 2: suite 110
City: point richmond
State: CA
Zip: 94804
Email rrodriguez@ncenet.com
Phone: 5102153620

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Central Valley Regional Water Quality Control Board (Region 5)

Appendix D

Aquatic Resources Delineation

Aquatic Resources Delineation Report

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County, California



CalRecycle
Solid Waste and Tire Cleanup Program
1001 I Street
Sacramento, CA 95812

February 2025

NCE
1003 W. Cutting Blvd., Suite 110
Point Richmond, CA 94804

NCE Project No. 870.04.55

Collaboration. Commitment. Confidence.℠

Aquatic Resources Delineation Report

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County, California

February 2025

Prepared for:

CalRecycle
Solid Waste and Tire Cleanup Program
1001 I Street
Sacramento, CA 95812

Prepared by:

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(510) 215-3620

NCE Project No. 870.04.55

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Executive Summary

NCE performed a field investigation on March 14, 2024, and December 19, 2024, at the Rotelli Burn Dump Site in Tuolumne County, California, for the Rotelli Burn Dump Remediation Project (Project). The purpose of the field investigation was to evaluate the proposed areas of impact on the Project area for aquatic resources that are potential jurisdictional waters of the United States.

The U.S. Fish and Wildlife Service National Wetlands Inventory and the U.S. Geological Survey does not identify any aquatic resources within the Project area.

NCE surveyed a total of 3.35 acres and delineated 2 potentially jurisdictional features within the Project area (**Appendix A, Figure 1**):

- Ephemeral Drainage 1: An ephemeral drainage Cowardin classified as riverine, ephemeral, covering approximately 0.06 acres (496 linear feet) within the Project area.
- Ephemeral Drainage 2: An ephemeral drainage Cowardin classified as riverine, ephemeral, covering approximately 0.04 acres (390 linear feet) within the Project area.

These findings should be considered preliminary until the U.S. Army Corps of Engineers issues an approved jurisdictional determination. This delineation was conducted in accordance with the following guidance:

- 1987 Corps of Engineers Wetland Delineation Manual.
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), May 2010.
- A Field Guide to the Identification of the Ordinary High-Water Mark in the Arid West Region of the Western United States, August 2008.

Table of Contents

1 Introduction 1

1.1 Contact and Project Information 1

1.2 Purpose 1

2 Background 2

2.1 Site Description 2

2.1.1 Location 2

2.1.2 Directions to Site 2

2.1.3 Vegetation 2

2.1.4 Soils 2

2.1.5 Hydrology 3

2.1.6 USGS and National Wetland Inventory 3

3 Methods 4

3.1 Literature Review 4

3.2 Research and Field Methodology 4

3.2.1 Wetlands 4

3.2.2 Drainage 4

3.3 Survey Data Integration 5

3.4 Property Access 5

4 Results 6

4.1 Landscape Setting 6

4.2 Aquatic Resources 6

4.2.1 Ephemeral Drainage 1 6

4.2.2 Ephemeral Drainage 2 7

4.3 Aquatic Resource Types, Amounts, and Federal Jurisdictional Status 8

4.3.1 Federal Jurisdictional Status 8

5 References 10

List of Tables

Table 1. Soils within the Project Area 3

Table 2. Data Points of Aquatic Resources 6

Table 3. Aquatic Resources within the Project Area 8

Table 4. Proposed Jurisdictional Status of Aquatic Resources 9

List of Appendices

Appendix A

Aquatic Resources Delineation Map

Appendix B

Supporting Maps

Appendix C

Representative Photographs

Appendix D

Dominant Plant List

Appendix E

Ordinary High Water Mark Datasheets

Appendix F

Aquatic Resources Spreadsheet and GIS Metadata (Submitted Under Separate Cover)

List of Abbreviations

Abbreviation	Definition
CalRecycle	California Department of Resources Recycling and Recovery
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships
County	Tuolumne County
EPA	Environmental Protection Agency
GIS	Geographic Information System
GPS	Global Positioning System
NCE	Nichols Consulting Engineers Chtd.
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
Project	CalRecycle Rotelli Burn Dump Remediation Project
RPW	Relatively Permanent Waters
SR-49	State Route 49
TNW	traditional navigable waterway
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WGS	World Geodetic System
WOUS	Waters of the United States

1 Introduction

1.1 Contact and Project Information

On behalf of Geo-Logic Associates, Tuolumne County (County), and the California Department of Resources Recycling and Recovery (CalRecycle), NCE (Nichols Consulting Engineers Chtd.) conducted a formal U.S. Army Corps of Engineers (USACE) aquatic resources delineation[1] within the CalRecycle Rotelli Burn Dump Remediation Project (Project).

The 3.35-acre Project area is located in Tuolumne County, California (**Appendix B, Figure 1**) north of Silver Pine Drive and west of California State Route 49 (SR-49) and is composed of 5 distinct areas: 1) Rotelli Primary Burn Dump Area (Primary Area), 2) Secondary Burn Dump Area (Secondary Area), 3) Borrow Area, 4) Consolidation Area, and 5) Construction Staging Area, as well as connecting haul routes and drainage improvement areas (**Appendix B, Figure 2**). These areas are collectively referred to as the Project area. Two ephemeral drainages are present on the Project area. One drainage flows through the Primary Area and the second drainage flows through the Secondary Area. Both on and surrounding the Project area are paved and unpaved streets and roads, disturbed ground, unimproved trails, and undeveloped land. The Project area can be found on U.S. Geological Survey (USGS) 7.5-minute series topographic Sonora, California quadrangle map (**Appendix B**, **Figure 3**).

Three NCE scientists conducted an aquatic resources delineation on March 14, 2024, and 2 NCE scientists conducted a second aquatic resources delineation on December 19, 2024, due to a change in the Project area boundaries. Cord Hute will act as the agent for CalRecycle.

The CalRecycle contact is Phillip Kovacs:

Phillip Kovacs
Waste Management Engineer
1001 I Street
Sacramento, CA 95812
(916) 341-6620
Phillip.Kovacs@calrecycle.ca.gov

1.2 Purpose

The purpose of this report is to identify and describe aquatic resources in the Project t area that may be considered as jurisdictional waters of the U.S. This report facilitates efforts to:

- Avoid or minimize impacts to jurisdictional aquatic resources during the Project development process.
- Document aquatic resource boundary determinations for review by the USACE.
- Provide background information.
- Support permit applications.

[1]In order for the USACE to determine the amount and extent of waters of the U.S. at the project area, aquatic resources must first be delineated in accordance with regulatory standards, guidance and protocol.

2 Background

2.1 Site Description

2.1.1 Location

The Project area is located in Tuolumne County, California, north of Silver Pine Drive and west of SR-49 (**Appendix B, Figures 1** and **2**). The Project area is within the Sonora USGS 7.5-minute quadrangle map (**Appendix B, Figure 3**) and is situated in Sections 1 and 2 of Township 1 North, Range 14 East of the Mount Diablo Meridian. Coordinates within the Project area are 37.970418°N, 120.395691°W.

2.1.2 Directions to Site

To access the Project area from Sacramento, northwest of Tuolumne County, continue south on State Route 99 South for 25.3 miles, then take exit 273 for Liberty Road toward Frontage Road. From the exit, turn left onto Liberty Road and continue for 12.5 miles, then take the 1st exit at the traffic circle onto State Route 88 West and continue for 22.6 miles. Turn left onto State Route 12 East/West Highway 12 and continue straight for 29.3 miles onto West St. Charles Street, then continue straight onto SR-49 South for 22.3 miles. Turn right onto Rawhide Road and continue for 1.9 miles, then keep left to continue on Rawhide Road for 2 miles. Turn left onto State Route 108 East and continue for 1.5 miles, then merge onto SR-49 North and continue for 0.7 miles just past Milla Villa Court. The Project area will be on the left.

2.1.3 Vegetation

Based on the California Wildlife Habitat Relationships (CWHR) Dataset, the vegetation communities within the Project area include Mixed Chaparral and Montane Hardwood habitats (**Appendix B, Figure 4**).

2.1.4 Soils

The soils at the Project area have been mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), and soil survey data were downloaded from the Web Soil Survey (NRCS n.d.). NRCS identified 1 soil type within the Project area (**Appendix B**, **Figure 5**). The soil type and its hydric status[2] is presented below (**Table 1**).

8172 – Nedsgulch- Wallyhill-Arpatutu complex, 15 to 30 percent slopes

Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes is a soil component that occurs on the slopes of high hills. The parent material consists of colluvium over residuum derived from metasedimentary rock. This soil is well drained and is not hydric (NRCS n.d.).

[2]A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions within the upper part.

Table 1. Soils within the Project Area

Map Unit Symbol	Name	Acres in Project Area	Percent of Project Area	National Hydric List (Y/N)
8172	Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes	3.35	100%	N

2.1.5 Hydrology

The main source of water for the Project area is direct precipitation. The Secondary Area also receives water from a groundwater spring northwest of the site. The 2 ephemeral drainages continue east of the site into culverts below SR-49 and connect to Woods Creek. Woods Creek flows into the Don Pedro Reservoir, which flows into the Tuolumne River. The Tuolumne River is a traditional navigable waterway (TNW).[3]

2.1.6 USGS and National Wetland Inventory

There are no USGS blue-line mapped drainages[4] within the Project area, and the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) does not identify any aquatic resources within the Project area.

[3]The EPA and the USACE have issued guidance for determining if a waterbody qualifies as a "traditional navigable water" under the Rapanos guidance, the Clean Water Act (CWA), and related regulations. This guidance is specific to these purposes and not for other uses. Determinations should consider USACE regulations, previous decisions by the USACE and federal courts, and case law. Each case should be assessed based on its unique facts by Corps districts and EPA regions.

[4]A "blue-line drainage" is a stream bed or natural channel identified on USGS 7.5 Minute Series quadrangle maps as a blue line. The USACE uses USGS blue-line stream markings as a preliminary indicator of federal jurisdictional waters of the United States.

3 Methods

3.1 Literature Review

NCE reviewed available natural resource information for the region. References reviewed for this aquatic resources delineation are listed in **Section 5** (References). Pertinent site-specific reports and general references utilized for this delineation include the following:

- U.S. Forest Service (USFS) Existing Vegetation dataset (USFS 2019)
- California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships Vegetation Type Dataset (CDFW 2024)
- NRCS Soil Survey Geographic Database for Tuolumne County, California (NRCS n.d.)
- USFWS NWI Mapper (USFWS 2024)
- USGS Sonora, California 7.5-minute series topographic quadrangle (USGS 2021)
- USACE National Wetland Plant List, version 3.5 (USACE 2020)
- Google Earth
- Munsell Soil Color Charts (Gretag 2000)
- Corps of Engineers Wetland Delineation Manual (USACE 1987)
- A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (USACE 2008)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE 2010)

3.2 Research and Field Methodology

Prior to the field investigation, NCE reviewed USGS topographic maps, aerial photographs, USFWS NWI mapping, and the NRCS custom soil report of the Project area for indications of ephemeral, intermittent, and perennial drainages as well as mapped wetlands and spring locations.

3.2.1 Wetlands

NCE investigated the Project area for wetlands using the USACE 1987 3-parameter (vegetation, hydrology, and soils) methodology. This methodology was refined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), May 2010 and requires the collection of data on soils, vegetation, and hydrology at several locations to establish the potential jurisdictional boundary of wetlands.

3.2.2 Drainage

The Project area was delineated for drainages based on the presence of ordinary high water mark (OHWM) indicators, evidence of frequent surface water flows, and a connection to a TNW. These characteristics were indicative of jurisdictional waters of the United States. Arid West Ephemeral and Intermittent Stream OHWM

Data Sheets were completed for each of the 2 drainages for which OHWM indicators were observed to be present and are provided in **Appendix E**. Each of these 2 drainages were followed to determine whether they flowed into other drainages with OHWM indicators, or until there was no presence of OHWM indicators. Where OHWM indicators were present, the drainage width was measured, and the average width calculated. The height from the OHWM to the drainage bottom was also measured. OHWM indicator locations were recorded with a Trimble R2 Global Positioning System (GPS) unit and representative photographs were taken at each location.

3.3 Survey Data Integration

Boundaries of the potential aquatic resources within the Project area were mapped using a Trimble R2 GPS unit and digitized in ESRI ArcGIS Pro 2.4.0 software. WGS 84[5] was used for horizontal spatial data collection. No vertical data was collected.

3.4 Property Access

If USACE would like to conduct a site visit, access should be arranged with CalRecycle.

[5]The World Geodetic System 1984 (WGS 84) is a global coordinate system that describes the Earth's shape, gravity, and magnetism. It is used for positioning, navigation, and mapping. WGS 84 is the standard reference system for the Global Positioning System.

4 Results

4.1 Landscape Setting

Topography within the Project area and vicinity slopes from northwest to southeast (**Appendix B, Figure 3**), and elevation of the Project area ranges from 1,688 to 1,775 feet above mean sea level.

4.2 Aquatic Resources

Two ephemeral drainages were delineated and are presented below. Representative photographs are presented in **Appendix C**, with photograph point locations and directions indicated in **Appendix B, Figure 7**. A list of the dominant plants identified during the survey is presented in **Appendix D**, and the OHWM datasheets are presented in **Appendix E**.

Table 2 presents the OHWM data points collected for the Project area.

Table 2. Data Points of Aquatic Resources

Project Area	Common Name	Data Point (DP)	Average Width of Drainage (inches)	Average Depth of Drainage (inches)
Primary Area	Ephemeral Drainage 1	OHWM 1	108	34
Primary Area	Ephemeral Drainage 1	OHWM 4	120	24
Primary Area	Ephemeral Drainage 1	OHWM 5	22	3
Secondary Area	Ephemeral Drainage 2	OHWM 2	72	12
Secondary Area	Ephemeral Drainage 2	OHWM 3	24	2
Secondary Area	Ephemeral Drainage 2	OHWM 6	50	4
Secondary Area	Ephemeral Drainage 2	OHWM 7	0	0
Secondary Area	Ephemeral Drainage 2	OHWM 8	57	15
Secondary Area	Ephemeral Drainage 2	OHWM 9	0	0

4.2.1 Ephemeral Drainage 1

Ephemeral Drainage 1 covers 0.06 acres (496 linear feet in length) and runs west to east along the northern perimeter of the Primary Area. The dominant OHWM indicator was a break in the bank slope. At the time of the field surveys, Ephemeral Drainage 1 was dry. The average OHWM width was measured to be 6.94 feet. The

average OHWM depth was measured to be 1.69 feet. Data points OHWM 1, OHWM 4 and OHWM 5 were taken at representative locations of Ephemeral Drainage 1:

- Data point OHWM 1 had an approximate OHWM width of 9 feet with a depth of 2.83 feet.
- Data point OHWM 4 had an approximate OHWM width of 10 feet with a depth of 2 feet.
- Data point OHWM 5 had an approximate OHWM width of 1.83 feet with a depth of 0.25 feet.

Ephemeral Drainage 1 is not identified on maps or databases by the USGS or USFWS NWI. Ephemeral Drainage 1 loses OHWM indicators at 3 locations due to historic landfill/trash dump activities. The absence of consistent OHWM indicators required NCE to digitize an assumed drainage path on **Appendix A, Figure 1**. Ephemeral Drainage 1 discharges into a culvert under SR-49 and then discharges into Woods Creek. Woods Creek discharges to the Don Pedro Reservoir, which is a tributary to the Tuolumne River, a TNW.

4.2.2 Ephemeral Drainage 2

Ephemeral Drainage 2 covers 0.04 acres (390 linear feet in length) and runs west to east through the center of the Secondary Area of the Project area. The dominant OHWM indicator was a break in bank slope. During the March 2024 field survey, Ephemeral Drainage 2 was observed to have low flowing water at 2 OHWM data points (OHWM 2 and OHWM 8). The average OHWM width was measured to be 2.82 feet. The average OHWM depth was measured to be 0.46 feet. Data points OHWM 2, OHWM 3, OHWM 6, OHWM 7, OHWM 8, and OHWM 9 were recorded at representative locations of Ephemeral Drainage 2:

- Data point OHWM 2 had an approximate OHWM width of 6 feet with a depth of 1 foot. Flowing water with an approximate depth of 0.16 feet was present at the time of the March field survey.
- Data point OHWM 3 had an approximate OHWM width of 2 feet with a depth of approximately 0.16 feet.
- Data point OHWM 6 had an approximate OHWM width of 4.17 feet with a depth of 0.33 feet.
- Data point OHWM 7 had no indicators due to historic landfill/trash dump activities.
- Data point OHWM 8 had an approximate OHWM width of 4.75 feet with a depth of 1.25 feet. Flowing water with an approximate depth of 0.16 feet was present at the time of the March field survey.
- Data point OHWM 9 had no indicators due to historic landfill/trash dump activities; at this data point is a culvert to OHWM 6.

Ephemeral Drainage 2 is not identified on maps or databases by the USGS or USFWS NWI. Ephemeral Drainage 2 loses OHWM indicators at 2 locations due to historic landfill/trash dump activities. The absence of consistent OHWM indicators required NCE to digitize an assumed drainage path on **Appendix A, Figure 1**. Ephemeral Drainage 2 discharges into a culvert under SR-49 and then discharges into Woods Creek. Woods Creek discharges to the Don Pedro Reservoir, which is a tributary to the Tuolumne River, a TNW.

4.3 Aquatic Resource Types, Amounts, and Federal Jurisdictional Status

Table 3 summarizes the aquatic resources identified within the Project area.

Table 3. Aquatic Resources within the Project Area

Name	Cowardin Classification	Location (lat/long)	Area (acres)	Length (linear feet, drainages only)
Ephemeral Drainage 1	R6 – Riverine, Ephemeral	37.97252781° N/ -120.39632428° W	0.06	496
Ephemeral Drainage 2	R6 – Riverine, Ephemeral	37.97113471° N/ -120.3958859° W	0.04	390

4.3.1 Federal Jurisdictional Status

The USACE Jurisdictional Determination Form Instructional Guidebook (USACE 2007) was consulted to aid in the preliminary determination of whether any of the Project areas would be subject to USACE jurisdiction under Section 404 of the Clean Water Act. On September 8, 2023, the Environmental Protection Agency (EPA) and USACE issued a rule to conform the regulatory definition of waters of the United States (WOUS) to the 2023 Supreme Court decision in *Sackett* v. *EPA*. The rule deleted existing regulatory language referring to the "significant nexus" test and revised the definition of "adjacent" to simply "having a continuous surface connection." Under the new rule, the definition of WOUS subject to Clean Water Act jurisdiction now includes only:

1. Traditional navigable waters (TNWs), the territorial seas, and interstate waters.
2. Tributaries to TNWs, the territorial seas, and interstate waters that are "relatively permanent, standing or continuously flowing bodies of waters."
3. Wetlands that have a continuous surface connection to waters in either (1) or (2).

To be consistent with the jurisdictional determination guidance, each water body delineated was evaluated as a TNW, Relatively Permanent Water (RPW), or non-RPW based on the following definitions:

- TNWs include all waters subject to the ebb and flow of the tide, waters that are presently used, have been used in the past, or may be used in the future to transport interstate or foreign commerce, and all waters that are navigable in fact under federal law for any purpose.
- RPWs are waters that flow continuously at least seasonally (typically at least 3 months of the year) and are not TNWs.
- Non-RPWs are waters that do not have continuous flow at least seasonally.

NCE's professional opinion is that Ephemeral Drainage 1 and Ephemeral Drainage 2 are RPWs that flow seasonally and are tributaries to the Tuolumne River, a TNW. NCE believes Ephemeral Drainages 1 and 2 are federally jurisdictional WOUS.

Table 4 presents the proposed jurisdictional status of the aquatic resources within the Project area.

Table 4. Proposed Jurisdictional Status of Aquatic Resources

Class	Total Acres	Jurisdictional Acres	Non-jurisdictional Acres
Riverine, Ephemeral	0.10	0.10	0

Appendix F contains the Aquatic Resource Excel Sheet and the GIS (Geographical Information System) metadata. This appendix presents data on the aquatic resource types present on the Project area and the boundary data for each aquatic resource.

The above findings should be considered preliminary until the USACE makes an approved jurisdictional determination. Areas deemed jurisdictional will then be subject to the regulatory requirements of the federal Clean Water Act.

5 References

Bing Maps. n.d. Sonora, California. Retrieved 2024, from ArcGIS Pro.

California Department of Fish and Wildlife (CDFW). 2024. "California Wildlife Habitat Relationships." California Department of Fish and Wildlife - Data. Accessed March 5, 2024. https://wildlife.ca.gov/Data/CWHR.

California State Water Resources Control Board (SWRCB). 2023. *Frequently Asked Questions regarding the U.S. Supreme Court's ruling in Sackett v. EPA.* https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/sackett-faq-external.pdf.

Cowardin, et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Washington D.C.

Gretag, M. 2000. *Munsell Soil Color Charts*. New Windsor, New York.

U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). n.d. "Soil Survey Geographic (SSURGO) Database for Tuolumne County." Accessed March 5, 2024. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

United States Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetland Delineation Manual*.

United States Army Corps of Engineers (USACE). 2007. *Jurisdictional Determination Form Instructional Guidebook*.

United States Army Corps of Engineers (USACE). 2008. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*.

United States Army Corps of Engineers (USACE). 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), May 2010*.

United States Army Corps of Engineers (USACE). 2020. *National Wetland Plant List, version 3.5*. http://wetland-plants.usace.army.mil/.

United States Department of Agriculture, Natural Resources Conservation Service (NRCS). 2024. "Soil Survey Geographic Database for Central Sierra Foothills Area, California, Parts of Calaveras and Tuolumne Counties, California." Accessed March 5, 2024. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

United States Department of Agriculture, Forest Service (USFS). 2019. *EVeg Mid Region 5 Central Valley*. https://data.fs.usda.gov/geodata/edw/edw_resources/fc/S_USA.EVMid_R05_CentralValley.gdb.zip

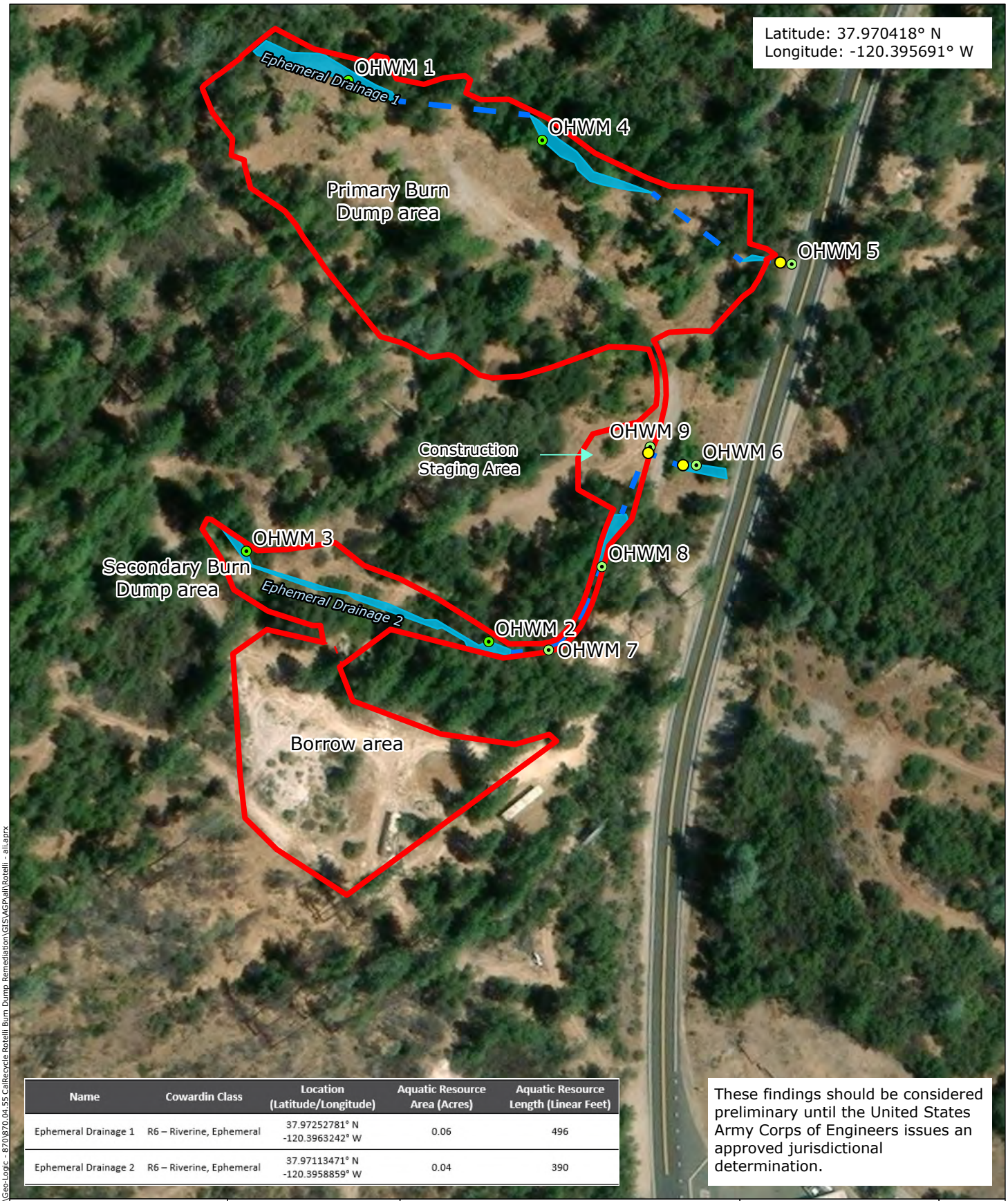
United States Fish and Wildlife Service (USFWS). 2024. "National Wetlands Inventory Mapper." Accessed March 5, 2024. https://www.fws.gov/wetlands/data/mapper.html

United States Forest Service (USFS) 2019. "Existing Vegetation Dataset". Accessed March 5, 2024. https://data.fs.usda.gov/geodata/edw/datasets.php?xmlKeyword=Existing+vegetation%3A+Region+5

United States Geological Survey (USGS). 2021. *Sonora, California 7.5-minute series topographic quadrangle*.

Appendix A

Aquatic Resources Delineation Map



Name	Cowardin Class	Location (Latitude/Longitude)	Aquatic Resource Area (Acres)	Aquatic Resource Length (Linear Feet)
Ephemeral Drainage 1	R6 – Riverine, Ephemeral	37.97252781° N -120.3963242° W	0.06	496
Ephemeral Drainage 2	R6 – Riverine, Ephemeral	37.97113471° N -120.3958859° W	0.04	390

These findings should be considered preliminary until the United States Army Corps of Engineers issues an approved jurisdictional determination.

Legend

- Project Area
- Ephemeral Drainage 1 & 2
- Assumed Drainage Path
- OHWM Data Point
- Culvert

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Proposed Delineation Map

N

1 in. = 120 ft.

0 60 120 ft.

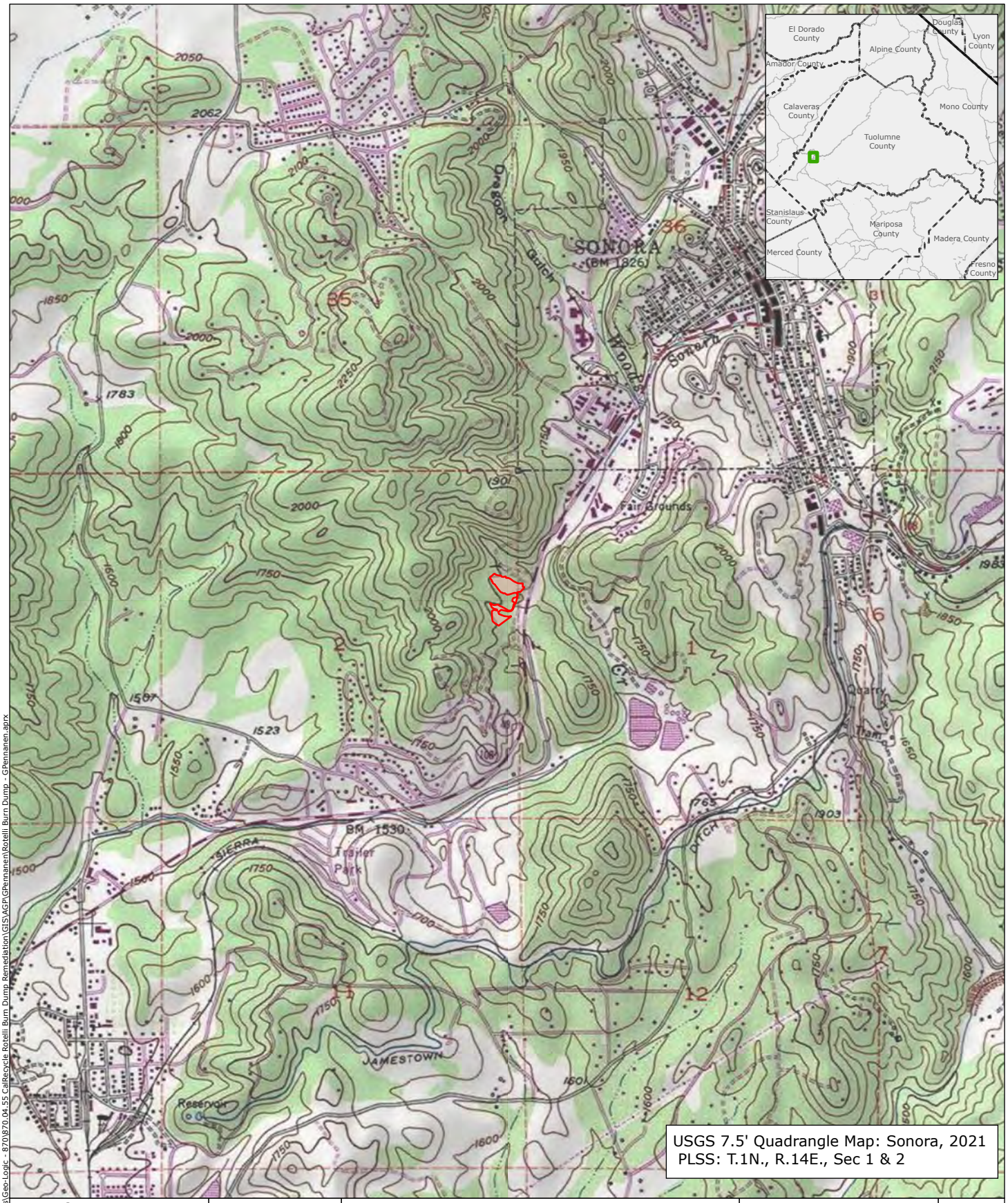
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Appendix B

Supporting Maps



Legend

Project Area

CalRecycle Rotelli Burn Dump Remediation Project

Project Vicinity Map

N

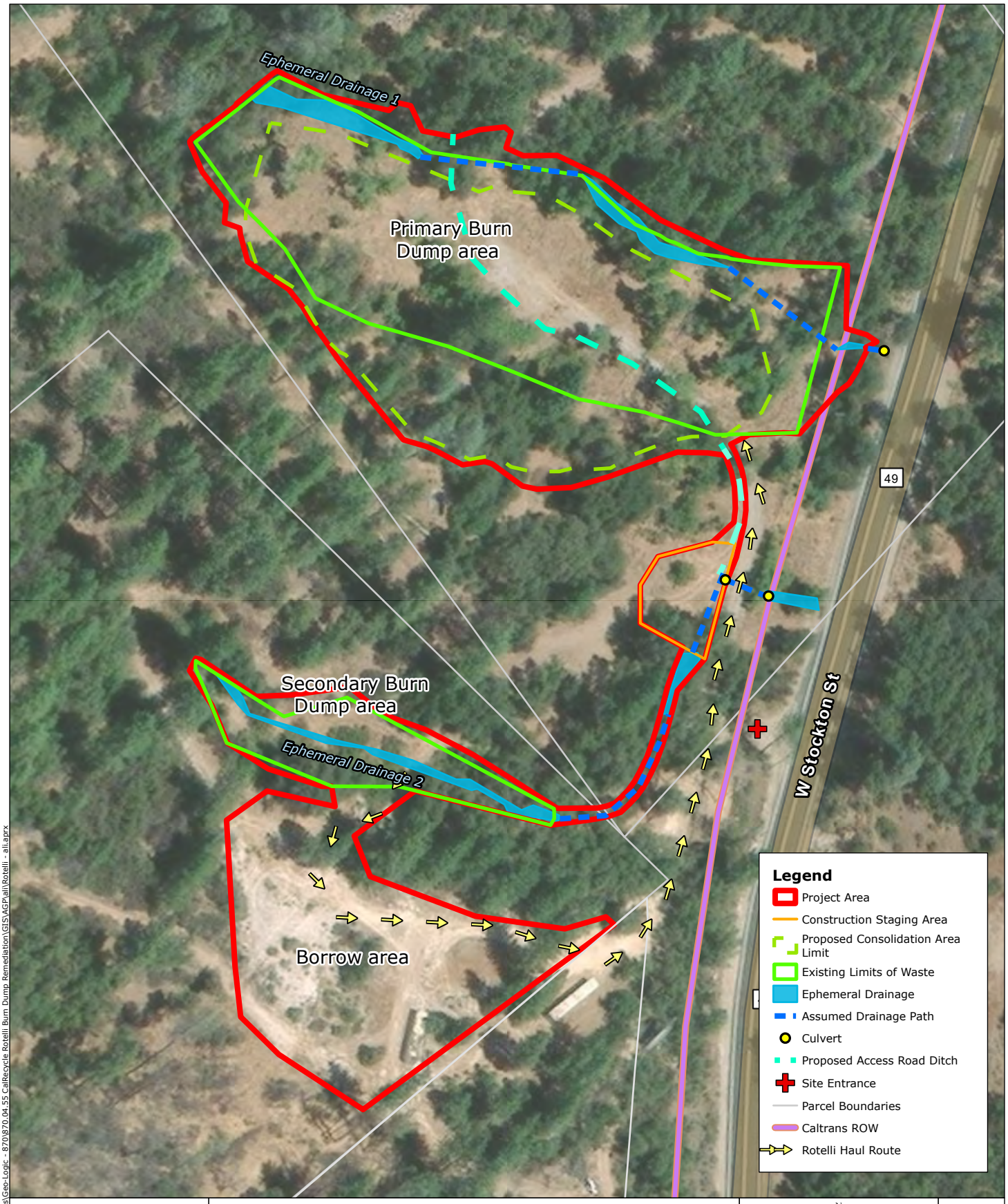
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FIGURE 1

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NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Project Detail Map

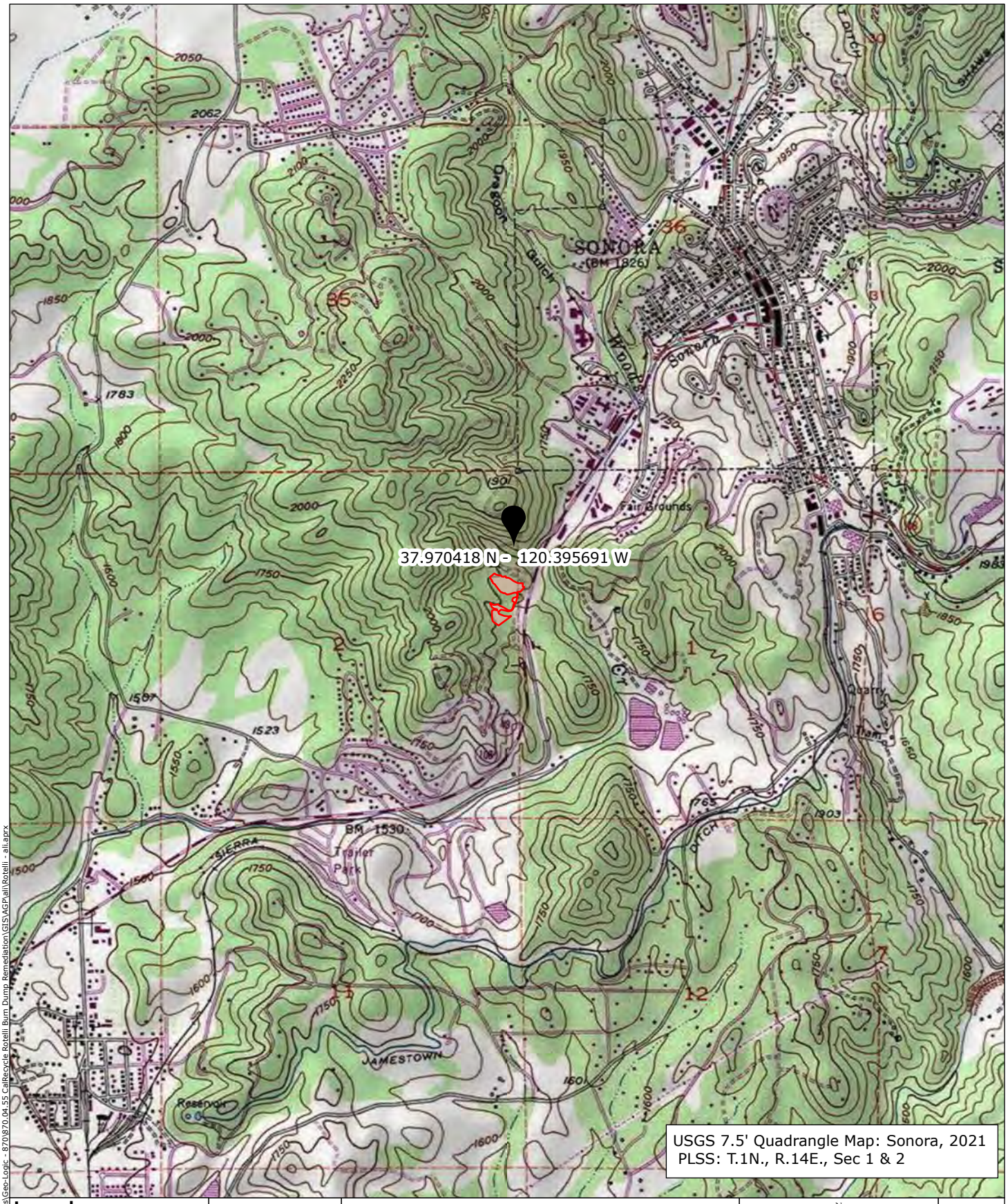
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1 in. = 100 ft.

0 50 100 ft.

FIGURE 2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
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Legend

Project Area

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CalRecycle Rotelli Burn Dump Remediation Project

USGS Topographic Map

N

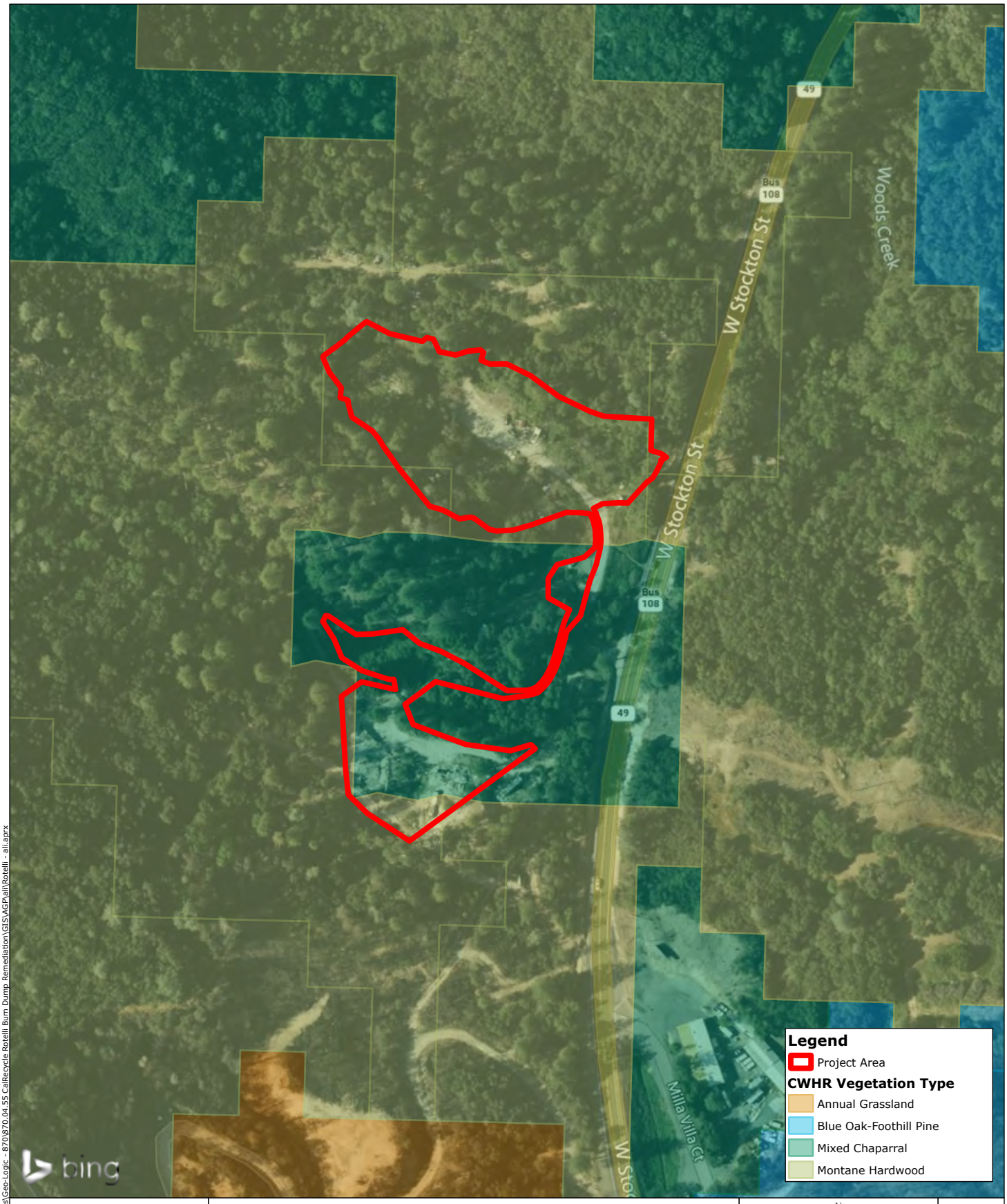
1 in. = 2,000 ft.

0 1,000 2,000 ft.

FIGURE 3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
USGS Topographic Basemap	870.04.55	rrodriguez	3/20/2024	2/26/25	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\all\Rotelli - all.aprx



NCE

CalRecycle

Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

CA Wildlife Habitat Relationships (CWHR) Vegetation Type Map

N

1 in. = 200 ft.

0 100 200 ft.

FIGURE 4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap; CDFW 2024	870.04.55	rrodriguez	3/5/2024	2/26/2025	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AG\Pall\Rotelli - all.aprx



Legend

Project Area

Soil Type

8172 - Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

NRCS Soil Map

N

1 in. = 200 ft.

0 100 200 ft.

FIGURE 5

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap; USDA 2023	870.04.55	rrodriguez	3/5/2024	2/26/25	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\allRotelli - all.aprx



Legend

- Project Area
- Freshwater Forested/Shrub Wetland

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

National Wetlands Inventory (NWI) Map

N

1 in. = 200 ft.

0 100 200 ft.

FIGURE 6

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
Bing Aerial Basemap; USFWS 2023	870.04.55	R. Rodriguez	3/5/2024	2/26/2025	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\allRotelli - all.aprx



Legend

- Project Area
- Photo Location and Direction
- Ephemeral Drainage
- Assumed Drainage Path

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Photo Location Map

N

1 in. = 100 ft.

0 50 100 ft.

FIGURE 7

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
World Imagery; NCE 2024	870.04.55	rrodriguez	01/06/25	2/26/2025	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\allRotelli - all.aprx

Appendix C

Representative Photographs



Photo Point (PP) 1: Standing in Ephemeral Drainage 1, looking east/downstream.



PP2: Standing in Ephemeral Drainage 1, looking northwest/upstream.



PP3: Standing in Ephemeral Drainage 1, looking east/downstream, no OHWM indicators.



PP4: Standing in Ephemeral Drainage 1, looking northwest/upstream, no OHWM indicators.



PP4: Standing in Ephemeral Drainage 1, looking east/downstream.



PP5: Standing in Ephemeral Drainage 1, looking west/upstream, no OWHM indicators.



PP6: Looking east/downstream at Ephemeral Drainage 1.



PP7: Standing near Ephemeral Drainage 1, looking northwest/upstream.



Standing in Ephemeral Drainage 1, looking at culvert outfall on the eastern side of State Route 49.



PP8: Standing in Ephemeral Drainage 1, looking northwest/upstream.



PP8: Standing in Ephemeral Drainage Channel 1, looking east/downstream.



PP 9: Standing in Ephemeral Drainage 2, looking east/downstream.



PP10: Standing in Ephemeral Drainage 2, looking west/upstream.



PP11: Standing upland, looking southeast/downstream at Ephemeral Drainage 2. Low flow present.



PP12: Standing in Ephemeral Drainage 2, looking west/upstream.



PP12: Standing in Ephemeral Drainage 2, looking northeast/downstream.



PP13: Standing in Ephemeral Drainage 2, looking south/upstream.



PP 13: Standing in Ephemeral Drainage 2, looking northeast/downstream.



PP14: Standing in Ephemeral Drainage 2, looking south/upstream.



PP14: Standing in Ephemeral Drainage 2, looking northeast/downstream.



PP15: Standing in Ephemeral Drainage 2, looking south/upstream and OHWM 9.



PP15: Standing in Ephemeral Drainage 2, looking east/downstream and looking at box structure.



PP16: Standing in Ephemeral Drainage 2, looking northwest/upstream at culvert.



P16: Standing in Ephemeral Drainage 2, looking east/downstream.



PP17: Standing in Ephemeral Drainage 2, looking northwest/upstream.



PP17: Standing in Ephemeral Drainage 2, looking east/downstream at the culvert under State Route 49.

Appendix D

Dominant Plant List

Plant Species Identified Within the Limits of Construction for the Aquatic Resources Delineation March 2024

Species Name	Common Name	Native; Y, N	Wetland Indicator Status*
Acer negundo	box elder	Y	FACW
Arctostaphylos viscida	whiteleaf manzanita	Y	NI
Baccharis pilularis	coyote brush	Y	NI
Bromus diandrus	ripgut brome	N	NI
Capsella bursa-pastoris	shepherd's purse	N	FACU
Carduus pycnocephalus	Italian thistle	N	NI
Chlorogalum pomeridianum	wavy-leafed soap plant	Y	NI
Claytonia perfoliata	miner's lettuce	Y	FAC
Cynosurus echinatus	bristly dogtail grass	N	NI
Erodium botrys	longbeak stork's bill	N	FACU
Erodium cicutarium	redstem stork's-bill	N	NI
Galium aparine	goosegrass	Y	FACU
Geranium dissectum	cutleaf geranium	N	NI
Heteromeles arbutifolia	toyon	Y	NI
Hirschfeldia incana	short-pod mustard	N	NI
Hordeum murinum	wall barley	N	FACU
Lamium amplexicaule	henbit	N	NI

Species Name	Common Name	Native; Y, N	Wetland Indicator Status*
Lotus corniculatus	bird's-foot trefoil	N	FAC
Luzula comosa	Pacific woodrush	Y	FAC
Marrubium vulgare	white horehound	N	FACU
Medicago polymorpha	burclover	N	FACU
Pentagramma triangularis	goldback fern	Y	NI
Pinus jeffreyi	Jeffrey pine	Y	NI
Pinus ponderosa	ponderosa pine	Y	FACU
Plantago lanceolata	English plantain	N	FAC
Pseudognaphalium beneolens	fragrant everlasting	Y	NI
Quercus wislizeni	interior live oak	Y	NI
Rubus armeniacus	Himalayan blackberry	N	FAC
Rumex crispus	curly dock	N	FAC
Secale cereale	rye	N	NI
Silybum marianum	milk thistle	N	NI
Sisymbrium orientale	Indian hedgemustard	N	NI
Spartium junceum	Spanish broom	N	NI
Spergularia rubra	red sand-spurrey	N	FAC
Stellaria media	common chickweeds	N	FACU
Stellaria neglecta	greater chickweed	N	NI

Species Name	Common Name	Native; Y, N	Wetland Indicator Status*
Torilis arvensis	tall sock-destroyer	N	NI
Verbascum thapsus	woolly mullein	N	FACU
Vicia sativa	common vetch	N	FACU

* Wetland Indicator Status:

OBL = Obligate Wetland; occurs in aquatic resources > 99% of time
FACW = Facultative Wetland; occurs in aquatic resources 67-99% of time
FAC = Facultative; occurs in aquatic resources 34-66% of time
FACU = Facultative Upland; occurs in aquatic resources 1-33% of time
UPL = Obligate Upland; occurs in uplands > 99% of time
NL = Not Listed

Appendix E

Ordinary High Water Mark Datasheets

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: CalRecycle Rotelli Burn Dump Remediation **Date:** 3/14/2024 **Time:** 9:37 AM
Project Number: 870.04.55 Ephemeral **Town:** Sonora **State:** CA
Stream: stream channel 1 Drainage 1 **Photo begin file#:** **Photo end file#:**
Investigator(s): Cord Hute, Annabel Li, Ruby Rodriguez

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details: runs along northern perimeter of Rotelli Area

Projection: ~~NAD~~ WGS 84 **Datum:** MDBM
Coordinates: 37.97252881 / -120.39632428

Potential anthropogenic influences on the channel system:
channel filled with human trash, nested debris.

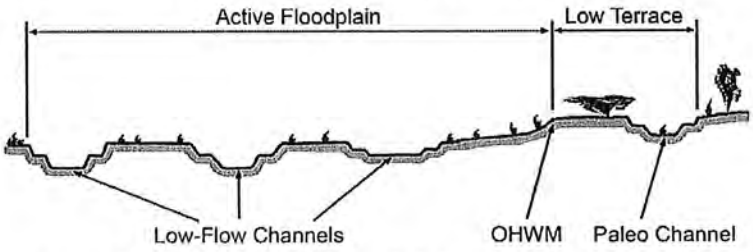
Brief site description:
Site was previously used for mining, then landfill/trash dump, and once contained encampments.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☑ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



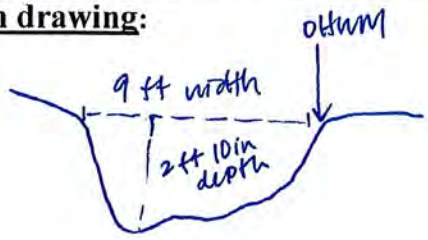
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

Ephemeral Drainage 1

Project ID: **Cross section ID:** **Date:** 3/14/2024 **Time:**

Cross section drawing:



OHWM

GPS point: OHWM 1

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Lots of debris & trash present within channel.

No water present.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 1

Characteristics of the floodplain unit:

Average sediment texture: Fine silt

Total veg cover: 80 % Tree: 10 % Shrub: 0 % Herb: 70 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

No water in channel; lots of trash & rusted debris.

Approx. 9 ft. wide and 2ft 10 in. depth from bottom to top of bank.

Ephemeral Drainage 1

Project ID: **Cross section ID:** **Date:** 3/14/2024 **Time:**

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 4

Characteristics of the floodplain unit:

Average sediment texture: Fine silt

Total veg cover: 90 % Tree: 50 % Shrub: 20 % Herb: 20 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

NO water present.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: CalRecycle Rotelli Burn Dump Remediation **Date:** 3/14/2024 **Time:** 11:07 AM
Project Number: 870.04.55 Ephemeral Drainage 2 **Town:** Sonora **State:** CA
Stream: stream channel 2 **Photo begin file#:** **Photo end file#:**
Investigator(s): Cord Hute, Annabel Li, Ruby Rodriguez

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details: Runs west → east through center of BLM wedge area

Projection: WGS 84 **Datum:** MDBM
Coordinates: 37.97113471 / -120.3958859

Potential anthropogenic influences on the channel system:
channel filled with trash, broken glass.

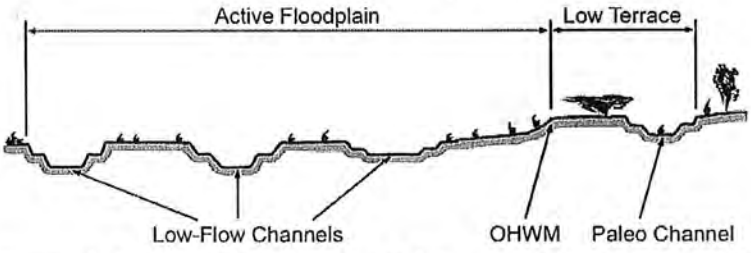
Brief site description:
Site was previously used for mining, then landfill / trash dump, and once contained encampments.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☑ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



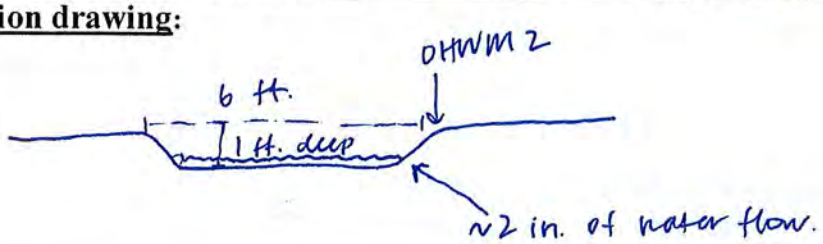
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

Ephemeral Drainage 2

Project ID: **Cross section ID:** **Date:** 3/14/2024 **Time:**

Cross section drawing:



OHWM

GPS point: OHWM 2

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Low flow present in downstream/eastern reach of channel.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 2

Characteristics of the floodplain unit:

Average sediment texture: Granule to Pebble

Total veg cover: 80 % Tree: 75 % Shrub: ____ % Herb: 5 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Low flow in downstream/eastern reach of channel, approx. 2 in. deep. Average 6 ft. wide and 1 ft. deep. from bottom to top of bank.

Ephemeral Drainage 2

Project ID: **Cross section ID:** **Date:** 3/14/2024 **Time:**

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 3

Characteristics of the floodplain unit:

Average sediment texture: granule to pebble

Total veg cover: 60 % Tree: 10 % Shrub: ____ % Herb: 50 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: erosional features
- ☐ Other: ____
- ☐ Other: ____

Comments:

Width 1-3 ft., 1-2 inches depth from bottom to top of bank.
No flow in upstream reach from western end of site to approx. 225 ft. downstream (east).

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: ____

Characteristics of the floodplain unit:

Average sediment texture: ____

Total veg cover: ____ % Tree: ____ % Shrub: ____ % Herb: ____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: ____
- ☐ Other: ____
- ☐ Other: ____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: CalRecycle Rotelli Burn Dump Remedial **Date:** 12-19-24 **Time:** 11:00
Project Number: **Town:** **State:** CA
Stream: Main Burn Dump Ephemeral Drainage 1 **Photo begin file#:** 9
Investigator(s): Debra Lemke, Ruby R **Photo end file#:** 10

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: WGS 84 **Datum:** MD BM
Coordinates:

Potential anthropogenic influences on the channel system:

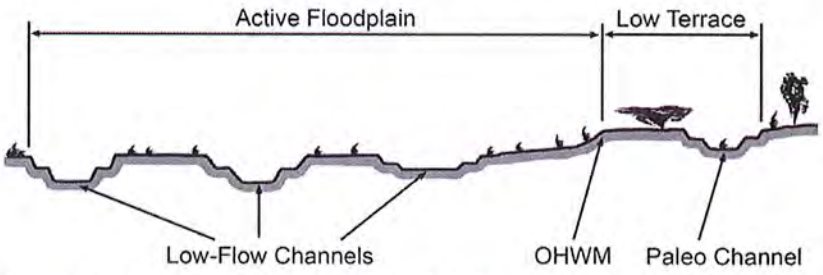
drainage filled w/ trash & Debris

Brief site description: Dry drainage, no evidence of flow, drainage lacks ohwm features due to historical trash activities. non-native trees upslope & native oaks at data point, and black berries

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



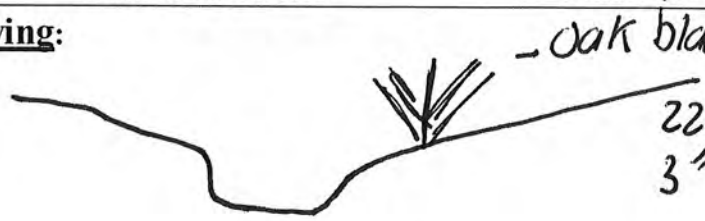
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☒ GPS
   - ☐ Other:

Ephemeral Drainage 1

Project ID: **Cross section ID:** **Date:** 12-19-24 **Time:** 11:00

Cross section drawing:



downstream is a 36" corrugated metal culvert - under highway

OHWM

GPS point: OHWM5

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope very faint
- ☐ Other: _____
- ☐ Other: _____

Comments:

no OHWM indicators present, likely due to historic landfill/trash dump. However at one point in time this likely was a drainage especially due to 36" CMP/culvert under highway.

Floodplain unit: ☒ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 5

Characteristics of the floodplain unit:

Average sediment texture: Gravel to Pebble

Total veg cover: ____ % Tree: 40 % Shrub: ____ % Herb: 100 % w/ leaf litter

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: CalRecycle Rotelli Burn Dump **Date:** 12-19-24 **Time:** 11:30
Project Number: **Town:** **State:**
Stream: Stream Channel 2 - Eph. Drainage South **Photo begin file#:** 11
Investigator(s): Debra Lemke, Ruby R **Photo end file#:** 14

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: WGS 84 **Datum:** MDBM
Coordinates:

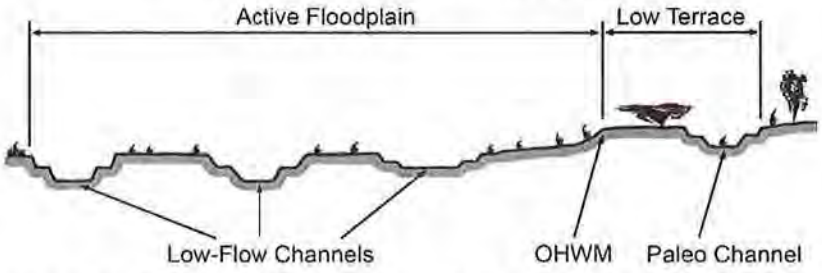
Potential anthropogenic influences on the channel system: Drainage filed w/ trash & Debris

Brief site description: Dry drainage, no evidence of flow, drainage loses OHWM features due to historical trash activities. Non-native trees upslope & native oak at data Point, and blackberries

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☐ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

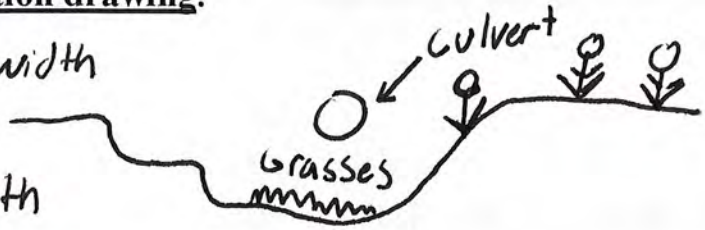


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☒ GPS
   - ☐ Digitized on computer
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** 12-19-24 **Time:** 11:30

Cross section drawing:



Culvert is 18" Across

Trees may be Quacking Aspen

OHWM

GPS point: OHWM 6 + PPF

There may be a Green Ash tree will need to be id when in bloom

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope → faint
- ☐ Other: _____
- ☐ Other: _____

Comments:

Drainage does not exhibit strong OHWM indicators - due to it being ephemeral, And landfill/trash dump history

Floodplain unit: ☒ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHWM 6 + PPF

Characteristics of the floodplain unit:

Average sediment texture: Gravel to Pebble

Total veg cover: 110 % Tree: 10 % Shrub: ____ % Herb: 100 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☒ Presence of bed and bank → Faint
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments: Photo - 11 And 12

Downstream of PPF; Photo 13 looking upstream

Photo 14 looking downstream at 18" culvert under highway

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Calrecycle Rotelli burn Dump Remediation **Date:** 12-19-24 **Time:** 11:30
Project Number: **Town:** **State:** CA
Stream: Ephemeral Drainage South **Photo begin file#:** 13
Investigator(s): Debra Lemke, Ruby R **Photo end file#:** 20

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: WGS 84 **Datum:** MDBM
Coordinates:

Potential anthropogenic influences on the channel system:

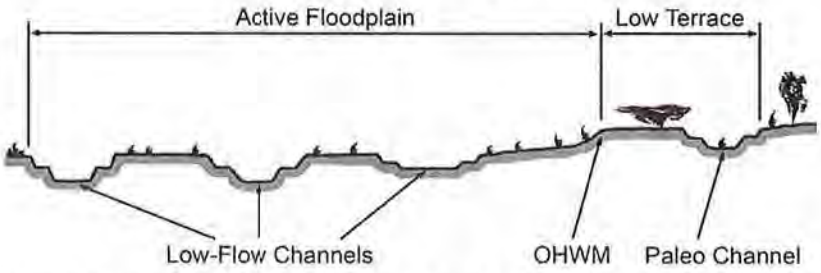
Drainage filed w/ trash & Debris

Brief site description: Dry Drainage, no evidence of flow, drainage looses OHWM features due to historical trash activities. non-native trees upslope & native oak at data point, and black berries

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

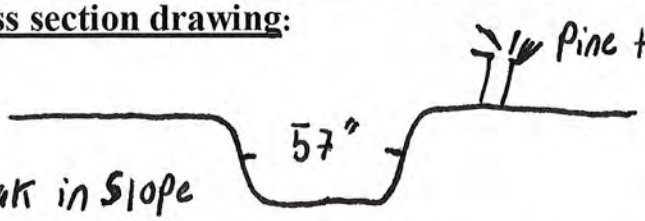


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☒ GPS
   - ☐ Digitized on computer
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** 12-19-24 **Time:** 11:30

Cross section drawing:



OHWM

GPS point: OHWM 7 + PPH; PP I Photo 17 looking upstream "18" downstream no OHwm indicators

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☒ Break in bank slope – OHwm 8
- ☐ Other: _____
- ☐ Other: _____

Comments: OHwm 7 = no indicators due to landfill/trash dump, Photo 15 looking upstream photo 16 looking downstream (PPH)

OHwm 8 + PPJ - Photo 19 - upstream; Photo 20 downstream

Floodplain unit: ☒ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHwm 8

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Cal Recycle Rotelli burn Dump Remediation **Date:** 12-19-24 **Time:** 12:15
Project Number: **Town:** **State:** CA
Stream: Ephemeral Drainage South **Photo begin file#:** 21
Investigator(s): Debra Lemke, Ruby R **Photo end file#:** 22

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☒ / N ☐ Is the site significantly disturbed?

Location Details:

Projection: WGS 84 **Datum:** NAD 83
Coordinates:

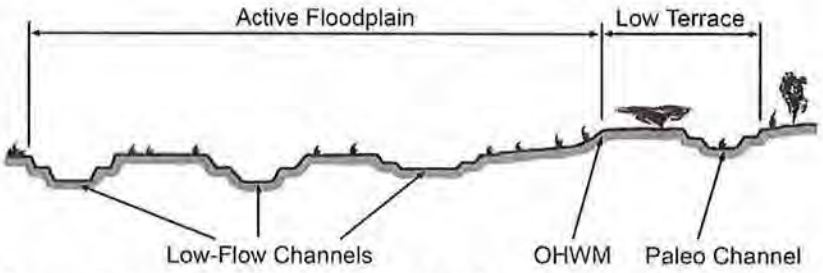
Potential anthropogenic influences on the channel system:
Drainage filed w/ trash & Debris

Brief site description: no drainage present, but there is a concrete box structure with a culvert, Drainage not present likely due to historic landfill/trash dump

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☒ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☒ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☒ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

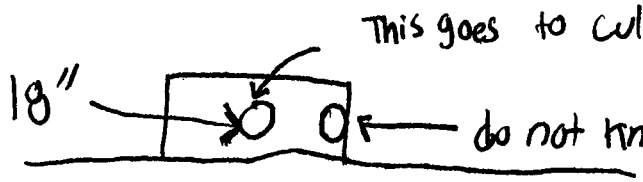


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☒ GPS
   - ☐ Digitized on computer
   - ☐ Other:

Project ID: **Cross section ID:** **Date:** 12-19-24 **Time:** 12:15

Cross section drawing:



tall dead grasses

OHWM

GPS point: OHwm 9 - no indicaters due to historic landfill/trash dump activities

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☐ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

PPJ, OHwm9 - location of concrete box for culvert - downstream, Photo 21 - look upstream, Photo 22 box structure

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: OHwm 9

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____% Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Appendix F

Aquatic Resources Spreadsheet and GIS Metadata (Submitted Under Separate Cover)

Appendix E

Cultural Resources Technical Memorandum

MEMORANDUM

Date:	March 4, 2025
To:	CalRecycle
From:	NCE
Subject:	Sensitive Information Distribution

The documents delivered herein contain highly sensitive information concerning cultural resources within or adjacent to the project area(s). These are to be considered confidential documents and used for internal planning purposes only and not distributed to the public.

Undertakings in the state of California may trigger the California Environmental Quality Act. As required by NCE's agreement with the California Historical Resources Information System, and following the California Code of Regulations, Section 15120 (d), these documents contain locational information pertaining to archaeological and/or sacred sites and are not to be shared with the public or anyone within the organization other than for planning purposes. If Native American Tribes, identified as part of the Assembly Bill 52 for this project, have requested a review of the enclosed document(s), it is acceptable to share with them.

For any federal undertaking, per the National Historic Preservation Act, 54 U.S.C. 307103 (a), the head of a Federal agency or public official receiving grant assistance will withhold information from the public about the location, character, or ownership of a historic property when disclosure may: cause a significant invasion of privacy; risk harm to the historic property; or impede the use of a traditional religious site by practitioners.

Please let me know if you have questions concerning the content of the attached deliverable.

Respectfully,

NCE

Cultural Resources Inventory Report

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County, California

U.S. Army Corps of Engineers

San Francisco District, Regulatory Division
1455 Market Street, 16th Floor
San Francisco, CA 94103



March 2025

NCE
224 Kingsbury Grade Road, Suite 203
Stateline, NV 89449
NCE Project No. 870.04.55

Collaboration. Commitment. Confidence.℠

Cultural Resources Inventory Report

CalRecycle Rotelli Burn Dump Remediation Project

Tuolumne County, California

March 2025

Prepared for:

U.S. Army Corps of Engineers
San Francisco District, Regulatory Division
1455 Market Street, 16th Floor
San Francisco, CA 94103

Prepared by:

Genevieve Pennanen
Staff Cultural Resources Specialist

Jeremy Hall
Senior Cultural Resources Manager

NCE
224 Kingsbury Grade Road, Suite 203
Stateline, NV 89449
(775) 588-2505

NCE Project No. 870.04.55

Administrative Summary

The Department of Resources Recycling and Recovery (CalRecycle) proposes implementing the CalRecycle Rotelli Burn Dump Remediation Project (Project). The Project is intended to reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed burn waste at the closed Rotelli Burn Dump by consolidating and covering waste with topsoil and revegetating the area. The Project must comply with Public Resource Code Section 21083.2 of the California Environmental Quality Act and, due to federal involvement by the U.S. Army Corps of Engineers, Section 106 of the National Historic Preservation Act.

The 3.35-acre APE is composed of 5 distinct areas: 1) Rotelli Primary Burn Dump Area (Primary Area), 2) Secondary Burn Dump Area (Secondary Area), 3) Borrow Area, 4) Consolidation Area, and 5) Construction Staging, as well as access roads and stream improvement areas (**Figures 1, 2, and 3**; report figures located in **Appendix A**). The APE is located within three parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), 056-020-027 (Smith), and 056-020-029 (Hattler) on the west side of SR-49 (**Figure4**). Because the ADI is located on private property surrounded by trees, visibility of the ADI is limited. Long-term auditory impacts will be negligible. As a result, the AII is defined as having the same boundary as the ADI.

An investigation was conducted to locate, describe, and evaluate cultural resources present within the APE. One resource, a large refuse dump, was previously identified and recorded, and was identified in the field and re-recorded as a part of this investigation. The resource is recommended ineligible for both the National Register of Historic Places and the California Register of Historical Resources. It should be noted that the APE has been previously disturbed by erosion, modern dumping, scavenging, and occupation by transients. Various forms of illegal grading, excavating, leveling, and historic mine alteration were also noted in a "Opportunity to Correct" order issued by the Tuolumne County Environmental Health Division (Tuolumne County 2021).

It is recommended the Project will not impact historical or prehistoric resources meeting the criteria outlined in Section 5024.1 of the California Public Resources Code or Title 36 of the Code of Federal Regulations Part 60.4. The Project will not result in a significant, substantial change to character-defining elements associated with the archaeological or historical resources listed in or eligible for listing in the California Register of Historical Resources (Public Resources Code Section 21083, 50201). Further, it is recommended the Project will not impact historical properties and a finding of "no historic properties present" is applicable, as that phrase is viewed within the context of compliance with the Advisory Council on Historic Preservation regulations (36 Code of Federal Regulations Part 800.4(d)(1)).

Table of Contents

1 Introduction 1
1.1 Project Description 1
1.2 Report Purpose 1
1.3 Area of Potential Effect 2
2 Consultation Communications 3
2.1 Native American Coordination 3
3 Literature Review 4
3.1 Previous Inventories 4
3.2 Previously Recorded Resources 5
3.3 Historic Maps Consulted 5
4 Cultural Setting 7
4.1 Prehistoric Overview 7
4.1.1 Early Holocene/Lower Archaic (11,000 to 5500 B.P.) 7
4.1.2 Early Period/Middle Archaic (5500 to 2500 B.P.) 7
4.1.3 Middle Period/ Upper Archaic (2500 to 900 B.P.) 8
4.1.4 Initial Late Period/Lower Emergent (900 to Contact) 8
4.2 Ethnographic Overview 9
4.3 Historic Overview 9
5 Field Methodology 11
5.1 Inventory Areas and Field Methods 11
5.2 Professional Qualifications 11
6 Inventory Results 12
6.1 General Observations 12
6.2 Previously Recorded Archaeological Resources 12
6.2.1 P-55-007863/CA-TUO-005066H/CA-018-TM-333 – Rotelli Burn Dump 12
6.3 Newly Recorded Archaeological Resources 13
7 Eligibility Recommendations 14
7.1 National Register Criteria Overview 14
7.1.1 Integrity 15
7.2 Eligibility Recommendations 15
7.2.1 P-55-007863/CA-TUO-005066H/CA-018-TM-333 – Rotelli Burn Dump (Not Eligible) 15

8 Management Summary 17
8.1 Summary 17
8.2 Determination of Effect 17
8.3 Other Considerations 17
9 References 18

List of Tables

Table 1. Tribal Representatives Identified by the NAHC. 3
Table 2. Previous Inventories within 0.25 Miles of the APE. 4
Table 3. Previously Recorded Resources within 0.25 Miles of the APE. 5
Table 4. Newly Recorded Isolates. 11

List of Appendices

Appendix A
Figures
Appendix B
CCaIC Record Search Results
Appendix C
Survey Overview Photos
Appendix D
Cultural Resources Overview Map
Appendix E
DPR Site Form
Appendix F
Isolate Table

List of Abbreviations

Abbreviation	Definition
AB-52	Assembly Bill 52
ADI	Area of Direct Impact
AII	Area of Indirect Impact
APE	Area of Potential Effect
APN	Assessor's Parcel Number
BLM	Bureau of Land Management
California Register	California Register of Historical Resources
CalRecycle	The Department of Resources Recycling and Recovery
CCaIC	Central California Information Center
CEQA	California Environmental Quality Act
CDF	California Department of Finance
CFR	Code of Federal Regulations
GLO	General Land Office
H:V	horizontal to vertical
LEA	law enforcement agency
MS	mineral survey
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
NCE	Nichols Consulting Engineers
Project	CalRecycle Rotelli Burn Dump Remediation Project
SHPO	State Historic Preservation Office
SLF	Sacred Lands File
SR	State Route
TCHS	Tuolumne County Historical Society
TMTC	Tuolumne Me-Wuk Tribal Council
USACE	United States Army Corps of Engineers
USGS	U.S. Geological Survey

1 Introduction

1.1 Project Description

The Department of Resources Recycling and Recovery (CalRecycle) proposes implementing the CalRecycle Rotelli Burn Dump Remediation Project (Project). The Project is intended to reduce the potential for environmental and public health and safety risks associated with unstable slopes and exposed burn waste at the closed Rotelli Burn Dump by consolidating and covering waste with topsoil and revegetating the area.

The proposed project is located near Mill Villa Court adjacent to State Route 49 (SR-49), southwest of the Town of Sonora in unincorporated Tuolumne County (**Figure 1,** report figures located in **Appendix A**). The Project area is located within three parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), 056-020-027 (Smith), and 056-020-029 (Hattler) on the west side of SR-49 (**Figures 2, 3, and 4**). The Project consists of two areas containing burn waste with the majority of the burn waste situated in the Primary Area that is located on the Rotelli property. A much smaller Secondary burn waste area is located on the Smith property.

The Project would remove surficial waste and excavate waste materials (buried waste, ash, and contaminated soil) from both the Primary and Secondary burn dump areas, consolidating the waste in the Consolidation Area, and capping it with clean fill from the Borrow Area. At the start of construction, the Primary Area, Secondary Area, Consolidation Area, and Borrow Area would be cleared and grubbed, and all trees would be removed. Transport within the Project area would occur along the existing access roads between the Staging Area, Borrow Area, the two burn waste areas, and the Consolidation Area. The final cover grading would consist of an approximately 60-foot wide by 200-foot-long flat area that slopes to the east with a slope of approximately 4 percent. The side slopes of the final cover would be between 3:1 to 3.5:1 horizontal to vertical (H:V) and separated by the 15-foot-wide access road. After placement and compaction of excavated burn waste and cover soil is completed, the final cover soil would be graded to promote positive drainage patterns and reduce erosion potential.

Improvements to the stormwater management system would include erosion protection to two existing ephemeral drainages that run through the existing waste limits and modifications to the conveyance channels and inlets. Within the Primary Area, after the waste is removed from the drainage, the existing drainage would be reconstructed as a trapezoidal stream channel lined with rock-slope protection. Erosion control measures such as fiber rolls and hydroseeding would be put in place. Within the Consolidation Area, a stabilized topsoil cover is proposed to help reduce the potential for erosive forces and exposure of waste material. Within the Secondary Area, after the waste is removed from the ephemeral drainage, the drainage would be reestablished to its connection with one of two culverts (southern and northern) that will convey stormwater east of SR-49. For the southern culvert, the existing drop inlet and culvert would be cleaned. The drainage would be covered with a temporary erosion control mat and hydroseeded with a native seed mix, unless otherwise directed by regulatory agencies during permitting. The existing inlet for the northern culvert will be modified to convey stormwater runoff from the Consolidation Area.

1.2 Report Purpose

Since the Project would affect waters of the United States, the project proponent must meet requirements of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, and therefore, will need to

seek permits from the U.S. Army Corps of Engineers (USACE) and the California Department of Fish and Wildlife (CDFW).[1] The Project requires compliance with Section 106 of the National Historic Preservation Act (NHPA) (36 Code of Federal Regulations [CFR] Part 800) and the California Environmental Quality Act (CEQA) (Public Resource Code [PRC] 21083.2 and 21084.1). The USACE is the lead federal agency for Section 106 of the NHPA, and CalRecycle is the lead agency for CEQA. NCE (Nichols Consulting Engineers) has been retained to conduct an environmental review of the proposed Project, including a cultural resources assessment in support of CEQA and Section 106 of the NHPA.

This report describes an archaeological inventory of approximately 3.35 acres conducted by NCE. All work was designed to comply with the current state, federal (USACE), and professional standards. Those standards state that the goals of an intensive archaeological inventory are to:

- Establish an Area of Potential Effect (APE).
- Identify prehistoric and historic period archaeological resources in the APE.
- Evaluate identified resources as to their eligibility for listing in the California Register of Historical Resources (California Register) and the National Register of Historic Places (National Register).
- Provide avoidance/mitigation recommendations pertaining to potential Project-related impacts to those properties considered eligible to the California Register and/or the National Register.

1.3 Area of Potential Effect

The 3.35-acre APE is composed of 5 distinct areas: 1) Rotelli Primary Burn Dump Area (Primary Area), 2) Secondary Burn Dump Area (Secondary Area), 3) Borrow Area, 4) Consolidation Area, and 5) Construction Staging, as well as access roads and stream improvement areas (**Figures 1, 2, and 3**). The APE is located within three parcels owned by different entities, Assessor's Parcel Numbers (APNs) 056-020-004 (Rotelli), 056-020-027 (Smith), and 056-020-029 (Hattler) on the west side of SR-49 (**Figure 4**). Two east-west trending ephemeral drainages run through the APE, one through the Primary Area and the other through the Secondary Area. Multiple dirt access roads run through and adjacent to the three parcels. The APE is approximately 100 feet west of California SR 49/West Stockton Street and 575 feet northeast of Silver Pine Lane.

The APE consists of an Area of Direct Impact (ADI), where the physical impacts of the Project will occur, and an Area of Indirect Impact (AII), where indirect effects of the Project such as visual and/or auditory impacts may be experienced. The ADI consists of the 3.35-acre area where ground disturbance will occur. Site work would involve excavating the burn ash along a slope within the Primary Area and placed at compacted depth of 1 to 15 feet within the Consolidation Area. Burn ash visible within the Secondary Area would also be excavated and will be reconsolidated within the burn dump footprint along with the burn ash excavated from the Primary Area. The reconsolidated burn ash will also be capped with two feet of soil. The ADI also includes areas potentially impacted by machinery and material stockpiles located within the Construction Staging area. Because the APE is located on private property surrounded by trees, visibility of the ADI is limited. Long-term auditory impacts will be negligible. As a result, it is recommended that the AII should be considered coincident with the ADI (**Figure 3**). The term APE will be used henceforth in this report.

[1] In the January 2025 NCE report titled Aquatic Resources Delineation Report, CalRecycle Rotelli Burn Dump Remediation Project, Tuolumne County, California there are two ephemeral drainages that were identified in the APE as potentially jurisdictional status of waters of the United States.

2 Consultation Communications

2.1 Native American Coordination

Following Assembly Bill 52 (AB-52) as identified in PRC Section 21080.3.1(b)(2) of CEQA, Native American tribes identified by the Native American Heritage Commission (NAHC) shall be invited to consult on projects. Native American correspondence was initiated with a letter to the NAHC. The letter requested a search of their Sacred Lands File (SLF) and a contact list for regional tribes that may have knowledge of tribal cultural resources within or immediately adjacent to the APE. A response was received from the NAHC on March 25, 2024, which indicated negative SLF results within the vicinity of the APE.

AB-52 Native American consultation as required under CEQA was not conducted by NCE since CalRecycle has its own tribal liaison on staff responsible for contacting the tribe representatives below. NCE provided CalRecycle with a letter to send to each identified tribe representative. If interested Tribes provide a response, contact information will be noted and follow-up correspondence will inform them that they will be contacted during the next phase of the Project when its elements are better understood.

Table 1. Tribal Representatives Identified by the NAHC.

Name	Title	Affiliation
Lloyd Mathiesen	Chairperson	Chicken Ranch Rancheria of Me-Wuk Indians
Cosme Valdez	Chairperson	Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Leland Valdez	Cultural Resources	Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Neil Peyron	Chairperson	Tule River Indian Tribe
Kenneth Woodrow	Chairperson	Wuksachi Indian Tribe/Eshom Valley Band

Section 106, 33 CFR Part 325 and the USACE Tribal Consultation Policy specify tribal consultation will be directed by the USACE under the guidance of a Tribal Liaison (USACE 2012, 2013). Therefore, it is the responsibility of the USACE to conduct Native American consultation for this Project under Section 106.

3 Literature Review

The purpose of archival research is to create an understanding of previous work that has occurred in the area and the types of cultural resources present, and to build a historic context. Historic contexts are those patterns or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within history is made clear. Prior to the onset of field inventory activities, NCE conducted sufficient archival research to inform expectations in the field and to develop an understanding of the historical context of the region. The archival research included a records search request from the Central California Information Center (CCaIC), and review of various historic maps (e.g., General Land Office [GLO] plat maps and U.S. Geological Survey [USGS] topographic maps). Emphasis was placed on the identification of previous archaeological inventories and sites within a quarter mile of the APE, known as the archival study area. The records search result received from CCaIC (File No. 12865O and 12880O) is provided in **Appendix B**.

3.1 Previous Inventories

Archival research indicates 10 inventories have been conducted within the archival study area (**Table 2**). Only one of these inventories (Report No. TO-06807) overlaps with the present Project's APE. Of the 10 reports, three were written in the last 10 years, five were written 10 – 20 years ago, and the final two are over 30 years old.

Table 2. Previous Inventories within 0.25 Miles of the APE.

Report No.	Title	Author	Year
TO-01049	Sonora Ridge Development Cultural Resources Reconnaissance	Cunningham, J. and C. De Ferrari	1990
TO-05498	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume I: Summary of Methods and Findings.	Leach-Palm, L., P. Mikkelsen, J. King, J. Hatch, and B. Larson	2004
TO-05501	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.	Rosenthal, J. S. and J. Meyer	2004
TO-05505	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II H: Tuolumne County.	Leach-Palm, L., J. King, J. Hatch, and B. Larson	2004
TO-06032	Cultural Resources Survey of a 12.69 Acre Parcel, Near Sonora, Tuolumne County, CA (APN #056-03-07)	Leach-Palm, L., J. Costello, and J. Marvin	2006
TO-06807	Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, Case # CA-018-S-TM-08/02	Barnes, J.	2008
TO-08634	Cultural Resources Survey Report, City of Sonora (Sewer Line Repair and Replacement Project).	Scientific Resource Surveys, Inc.	1982
TO-08988	Archaeological Survey Report for Director's Orders Hazard Tree Removal in District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, CA	Parker, A. and A. Whitaker	2019
TO-09258	Historic Property Survey Report for Director's Orders Hazard Tree Removal Project for District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, California, State Routes 4, 5, 12, 26, 49, 88, 108, 120 and 140; E-FIS 10-1600-0133, EA 10-1F6403, Contract 06A2312, Task Order 11	Waechter, S. A.	2019
TO-09802	Archaeological Survey Report for the District 10 Middle-Mile Broadband Initiative Project, State Routes 132 and 140, Mariposa and Tuolumne Counties, California; 10-MPA/TUO-132 PM 0.027/R0.460/3.774/R7.636/18.746; 10-MPA-140 PM 22.08/51.803; Project ID 1022000254, EA 10-1Q210	Martisius, N. and M. Pacheco Patrick	2024

3.2 Previously Recorded Resources

Archival research indicates three historic cultural resources have been formally recorded within the archival study area (**Table 3**). These resources – Civilian Conservation Corps (CCC) storage buildings, a large refuse dump associated with a private burn dump, and a mining ditch – are unrelated to each other despite their proximity. All three resources were originally recorded in 2008 by James Barnes, BLM Archaeologist, as part of the Sonora Encampment Trespass Cleanup (Report No. TO-06807). None of these resources were evaluated for National or California Register eligibility. Only P-55-007863, the refuse dump, is located within the APE; it is discussed in further detail in Sections 6.2.1 and 7.2.1.

Table 3. Previously Recorded Resources within 0.25 Miles of the APE.

Site Number	Age	Description	Last Recorded	NRHP	Proximity to APE
P-55-007862	Historic	Concrete buildings associated with the CCC	2007	Unevaluated	Outside
P-55-007863	Historic	Refuse dump	2008	Unevaluated	Within
P-55-007864	Historic	Mining ditch	2007	Unevaluated	Outside

3.3 Historic Maps Consulted

Historic maps from the USGS Historical Topographic Map Collection and the Bureau of Land Management GLO Records were reviewed as part of the present study. These maps depict California SR 49 as early as 1893, with an alignment that has remained largely unchanged since. The 1889 survey diagram shows the Golden Gate Quartz Mine and Golden Sulphuret Quartz Mine east of the APE on the other side of Woods Creek, the first evidence of mining activity in the area to appear in the historic maps. Two mine adits first appear on the USGS 1948 Sonora 7.5' map, one approximately 160 feet north of the APE, and the other 550 feet to the south. By 1967, mining operations in this area have developed significantly and include two more quartz mines, four mineral survey (MS) claims, and two placer claims. The 1967 survey plat shows both the Rainbow MS and the Minnie MS claims overlapping the APE. With the development and urbanization of the nearby areas, such as the City of Sonora approximately one mile to the northeast, the network of access roads also evolved and expanded. An unimproved dirt access road appears on the USGS 1948 Sonora maps, branching west from SR 49 towards the north adit before switch-backing southeast to an unnamed building. By 1973, the access road to the north adit splits, one path going north and the other continuing south past the 1948 location of the unnamed building (not present on the 1973 map or any maps after) parallel with SR 49. Historic maps and aerial images reviewed as part of the present study included the following:

- 1871 Plat of Township 1 North, Range 14 East, Mount Diablo Meridian, California
- 1876 Plat of Township 1 North, Range 14 East, Mount Diablo Meridian, California
- 1889 Diagram of Township 1 North, Range 14 East, Section 1, Mount Diablo Meridian, California
- 1967 Plat of Township 1 North, Range 14 East, Sections 1 and 2, Mount Diablo Meridian, California
- USGS 1:125,000 Sonora, California, Topographic Map, 1893
- USGS 1:125,000 Sonora, California, Topographic Map, 1896
- USGS 1:125,000 Sonora, California, Topographic Map, 1897

- USGS 1:125,000 Sonora, California, Topographic Map, 1898
- USGS 1:24,000 Sonora, California, Topographic Map, 1948
- USGS 1:24,000 Sonora, California, Topographic Map, 1949
- USGS 1:24,000 Sonora, California, Topographic Map, 1973

4 Cultural Setting

Much of the information in this section was derived from the *Contextual History of Tuolumne County* (Davis-King and Marvin 1994) and a cultural resources report in the vicinity of the current Project (Barnes 2008).

4.1 Prehistoric Overview

Current understanding of Tuolumne County's prehistoric history mostly comes from studies in Yosemite National Park, in Stanislaus National Forest, and for water development projects. The evolutions and shifts in styles of projectile points and tools largely mark the transitions of each period.

4.1.1 Early Holocene/Lower Archaic (11,000 to 5500 B.P.)

Widespread habitation and use of the central Sierra likely occurred during this period. Before 8000 B.P. (Before the Present),[2] the central Sierra was represented by stemmed series points.[3] Western Stemmed Series points from the Stanislaus River and a site located a couple miles east of the Project in Alpine County have radiocarbon dates of 11,720 to 6250 B.P and pre-9505 B.P., respectively.

From 8000 to 5500 B.P., sites have an abundance of "backed" scrapers,[4] though tool and debitage[5] density is low. Chert tools[6] were the focus of production, with a paucity of groundstone[7] (Riley and Moratto 1986). The low artifact density and diversity may suggest temporary use of sites.

Beyond the use of tools, little is known about this period in the central Sierra.

4.1.2 Early Period/Middle Archaic (5500 to 2500 B.P.)

Sites from this period are represented by Humboldt[8]- and Pinto[9]-like points. Distinctive chert tools and debitage indicate percussive production. The increased artifact density and diversity indicate a diversification of resource utilization, particularly for vegetation. While some grinding implements have been identified, information about cultural components such as housing, land use, traditional practices, and the ethnic identities of this period continues to be lacking (Moratto et al. 1988).

[2]B.P. is the number of years before the present. Because the present changes every year, archaeologists, by convention, use 1950 A.D. as their reference.
[3]Stemmed series points are a type of projectile point that were used by hunters to tip their weapons. They are made from an elongated flake or blade with a modified bottom, or stem, that connects to a shaft for hafting.
[4]In prehistoric archaeology, scrapers are unifacial tools thought to have been used for hideworking and woodworking. A backed scraper is a scraper with one edge blunted by removal of tiny flakes.
[5]In archaeology, debitage is all the material produced during the process of lithic reduction – the production of stone tools and weapons by knapping stone.
[6]A chert is a rock resembling flint that is very hard that can be fractured to form very sharp edges.
[7]In archaeology, ground stone is a category of stone tool formed by the grinding of a coarse-grained tool stone, either purposely or incidentally.
[8]A small to medium lanceolate point of a projectile with an elliptical to flattened cross section. The blade has an excurvate shape with the blade curving in at the tip and becoming parallel. The base is concaved to notched.
[9]A medium to large triangular stemmed point of a projectile with an elliptical cross section. The blade is primarily straight to excurvate. The base is concaved and bifurcated.

4.1.3 Middle Period/ Upper Archaic (2500 to 900 B.P.)

During this period, populations gradually increased. Non-local obsidian and coastal shells (used mostly for ornamentation) suggest the use of trade networks. Houses, middens,[10] cemeteries, and mortuary cave sites (and an abundance of funerary artifacts) have been identified for this period (Moratto 2002). Tool forms and functions shifted: shaped milling implements changed to unshaped; spears to bows and arrows; and Elko Series[11] and Sierra Concave Base[12] points change to those resembling Gunther Barbed points.[13]

4.1.4 Initial Late Period/Lower Emergent (900 to Contact)

Changes in the archaeological record suggest the precursors of the Me-Wuk moved to the area during this period. Village communities developed along with an acorn-based economy. Bedrock mills were used to process acorns, and steatite[14] was used for both vessels and ornamentation. Anthrosols (cultural soils) indicate more permanent settlements. Projectile points from this period began with those from the Rosegate series but transitioned to Desert Side-notched and Cottonwood in the more recent past.

[10]Middens are an archaeological feature consisting of localized patches of dark-colored earth and concentrated artifacts which resulted from the deliberate discard of refuse, often including food remains and domestic materials such as broken and exhausted tools and crockery.
[11]Elko Series points are blades of a projectile with a slightly concave base with a narrow basal notch. The points have distinctive side notches that are angled upwards.
[12]A subtype of the Desert Side-notched Series, Sierra points are small, delicate, and triangular in form, with straight lateral margins, and flaring straight-sided bases with concave or straight basal margins exhibiting a deep central notch.
[13]Gunther Barbed (Gunther Island Barbed) is a thin small to medium triangular contracting stem point with a flattened cross section. The blade is broad and may vary from excurvate to incurvate. The blade is commonly serrated.
[14]Steatite (soapstone) is a very soft rock composed primarily of the mineral talc and typically has been used for carvings.

4.2 Ethnographic Overview

The Central Sierra Me-Wuk people occupied central California along the western foothills, ranging from Jenny Lind on the Calaveras River to Knights Ferry on the Stanislaus River to La Grange on the Tuolumne River (Barrett 1908). The Central Sierra Me-Wuk language belongs to the Utian family, which itself consists of two sub-families, the Costanoan and Miwokian. The Miwokian has two groups, the Western and Eastern, the latter being the language of the Sierran group of Me-Wuk (Levy 1978).

The Central Sierra Me-Wuk lived in a hospitable environment with an abundance of natural resources. The staple plant of their diet was acorns, preferably from black oaks, which were harvested in the fall and ground into meal using cobblestone pestles and bedrock mortars. Traditional activities included acorn processing, basketry, and dances to thank the Earth Mother (Tuolumne Me-Wuk Tribal Council [TMTC] 2024). The political structure of the Me-Wuk was broken down into tribelets, which acted as a unit in terms of land ownership, major ceremonies, and entertainment (Kroeber 1925). The Central Sierra Me-Wuk tribelets probably consisted of 100 to 300 people (Levy 1978). The villages typically consisted of umachas (cedar bark homes), chakkas (acorn granaries) and a hangi (ceremonial roundhouse) which acted as a place of worship and the center of village life (TMTC 2024). Extensive trade networks also existed between the Me-Wuk and the Costanoans, Yokuts, and Mono.

The arrival of Spanish missionaries in the late 1700s and early 1800s deeply disrupted the native tribes, who often fled, intruding onto Central Sierra Me-Wuk Territory. By the time of the Gold Rush, tribal populations in the valley dropped while those who had fled joined other groups, affecting tribal boundaries (Levy 1978). In the 1850s, Indians were used as wage laborers in the mines. As the settlers made drastic changes to the environment, the Indians were cut off from their traditional food sources and often starved. Starvation, disease, and anti-native sentiments nearly annihilated the Me-Wuk people; the Sierra Me-Wuk population numbered approximately 10,000 before the arrival of settlers, but by 1910, the number had fallen to 679 (TMTC 2024).

In the early 1900s, the government purchased two tracts of land as reservations: the Chicken Ranch and the Tuolumne Me-Wuk rancherias. In this century, the Me-Wuk continue to live in the broad vicinity of their earlier territory. Cultural traditions are still in practice, and events such as the annual Acorn Festival established in 1966 celebrate those local traditions and continue to this day (TMTC 2024).

4.3 Historic Overview

In 1806, Gabriel Moraga and Padre Pedro Muñoz were the first Europeans to visit Tuolumne County in their search for a potential mission site. Gold was discovered in California in 1848, causing a population boom across the state as settlers journeyed west for the opportunity to strike rich. Over the next few years, the infrastructure and local industries of Tuolumne County evolved to keep up with the influx of miners, but by the mid-1860s the placer gold deposits were exhausted, the mines shut down, and local industries suffered and collapsed. In 1860, the county population was just over 16,000, but by 1870 it had dropped to 8,150 (California Department of Finance [CDF] 2021).

Tuolumne County continued to suffer until the second Gold Rush began in the late 1880s, with the invention of dynamite and development of square-set timbering reviving the mining industry (Davis-King and Marvin 1994). The revitalization of mining brought with it the resurgence of its supporting industries. Sawmills, planning, and box mills were established, and agriculture became a major local industry. The railroads, which were

constructed in the late 1890s, allowed for the transportation of timber and local produce, as well as an increase in tourism.

By World War I, the mining industry in Tuolumne County had dried up again, and people left to find work in the factories of the San Francisco Bay Area. The Depression in 1929 eliminated most of the remaining industries including agriculture and timber, with products being imported instead of sourced locally. A small mining boom occurred again in the late 1930s, but did not last long, as all mines were ordered closed in 1942 due to World War II (Davis-King and Marvin 1994).

The City of Sonora was established as one of many Gold Rush towns. County folklore suggests in the summer of 1848, men from Sonora, Mexico moved to the area to mine for placer gold along the present-day Woods Creeks, naming their settlement "Sonoran Camp" after their hometown (Heckendorn and Wilson 1856). Sonora, much like the other cities of Tuolumne County, has been subject to the highs and lows of the mining industry over the years. In the 1850s, Sonora was one of the Gold Rush's boomtowns, but during the late 1860s, the population fell as the placer gold was exhausted. At this time and into the 1870s, Chinese miners arrived to work the abandoned mines, creating Sonora's Chinatown on a block along Stewart Street (Tuolumne County Historical Society [TCHS] 2024).

The second Gold Rush reinvigorated Sonora's economy, not just in the mining industry, but also timber. The Pacific Coast Business Directory for 1876–78 lists four different lumber dealers based out of Sonora (Langley 1875). The Standard Lumber Company was also originally headquartered in Sonora in the late 1880s before they moved to the company town of Standard (TCHS 2024). Agriculture also became a large component of the town's economy with vines, orchards, and mulberry plantations occupying the lands of exhausted placer claims (Langley 1875). Two flour mills emerged in Sonora: Bell's Flour Mill in 1871 and the Star Flouring Mill in 1885. The latter was later repurposed into the Sonora Opera Hall after it was burned down by robbers who thought gold from the prolific Bonanza Mine was being stored there. The Sierra Railway, which came to Sonora in 1899, allowed for the export of products to the national rail network.

Sonora remained a relatively small community throughout most of the 20th century, as captured in various USGS maps. The historic core of the town barely expanded between 1949 and 1973, and the expansion that occurred was largely at the northwestern and eastern outskirts of the city. The 1946 aerial shows Sonora concentrated along SR 49, but by 1984, residential neighborhoods off the east-going Lyons Street were built up significantly. While it took four decades in the mid-20th century for the population to grow by 1,000 (2,257 in 1940 to 3,247 in 1980), it only took a single decade in the 1980s for the population to grow by nearly the same amount (3,247 in 1980 to 4,153 in 1990) (U.S. Census Bureau 2024).

The City of Sonora has remained the Tuolumne County seat since its incorporation in 1851 (CDF 2021). While the mines have been shut down, Sonora now relies on tourism brought in by its past as a Gold Rush era town and its proximity to Yosemite National Park (Tuolumne County Chamber of Commerce 2011). Several historic buildings have survived including the first Tuolumne County Courthouse (erected 1853), the Red Church (erected 1859), and the Sonora Opera Hall (first erected as the flour mill in 1879).

5 Field Methodology

5.1 Inventory Areas and Field Methods

The objective of the field inventory was to locate, describe, and evaluate cultural resources present within the APE. Fieldwork was performed following applicable and accepted Federal and State standards. An intensive survey was conducted of the APE. Ground visibility was consistent across the APE with Brome grass (*Bromus* sp.) and miner's lettuce (*Claytonia perfoliata*) throughout the site (ground visibility 70% – 90%). Ground visibility was sufficiently high to ensure identification efforts.

When a cultural resource was encountered, field personnel thoroughly examined the immediate area to determine the type and extent of cultural material and/or features. Archaeological and architectural components, including diagnostic artifacts, artifact concentrations, and features, were described in field notebooks, photographed using high-quality cameras, and plotted using a mapping-grade GPS unit. Sufficient information was collected to develop resource forms. At least two overview photographs were taken per resource to capture the general surroundings with attention paid to capturing the horizon (if possible) to aid in future relocation. Upon completion of the inventory, field data was downloaded from the GPS and resources were plotted on both USGS 7.5-minute base maps and aerial imagery for resource form maps. No artifacts were collected during the inventory. Survey overview photos are provided in **Appendix C**.

5.2 Professional Qualifications

The pedestrian cultural resources survey was conducted on March 27, 2024, by Genevieve Pennanen, NCE Staff Cultural Resources Specialist. Ms. Pennanen has three years of experience in archaeological surveys and evaluations, cultural resource management, and Section 106 of the NHPA.

Ms. Pennanen's work was performed under the direct supervision of Jeremy Hall, NCE Cultural Resources Project Manager. Mr. Hall meets the Secretary of the Interior Professional Qualification Standards for Archaeology (36 CFR Part 61) and is a Registered Professional Archaeologist. Mr. Hall has over 20 years of experience in historic preservation, archaeological and architectural surveys and evaluations, cultural resource management, Section 106 of the NHPA, National Environmental Policy Act, and PRC Section 21083.2 of the CEQA. Mr. Hall was responsible for the review of the present report.

6 Inventory Results

6.1 General Observations

As a result of this inventory, one previously recorded archaeological resource and one newly identified isolated feature (isolate) were identified within and adjacent to the APE (a Cultural Resources Overview Map is provided in **Appendix D**). No architectural resources were identified within the APE.

Much of the area has experienced some level of previous disturbance in the form of access road construction, mining activities, illegal dumping, and homeless encampment. Various forms of illegal grading, excavating, leveling, and historic mine alteration were also noted for the area in an "Opportunity to Correct" order issued by the Tuolumne County Environmental Health Division (Tuolumne County 2021).

6.2 Previously Recorded Archaeological Resources

See **Appendix D** for resource locations. Site forms are provided in **Appendix E**.

6.2.1 P-55-007863/CA-TUO-005066H/CA-018-TM-333 – Rotelli Burn Dump

This resource is a large historic refuse dump associated with the Rotelli Private Dump Site. The Rotelli Dump (also called the Rotelli Burn Dump, the Sonora Refuse Burn Dump, and the Sonora Refuse Dump) was historically used as a municipal dump site for Sonora area residents where waste was brought to be burned. The initial start of operation is unclear, though multiple local news sources report that Rotelli's grandfather had established the site in the 1920s, and the dump closed its operation in 1965 (McCarthy 2020; James 2020). Since the dump's closure and with permission from the Rotelli family, the area has since been used as a homeless encampment (named "Camp Hope"). The presence of burn ash and other hazardous material from the historic disposal operations, as well as many other health and safety violations, required that the camp be closed, however many transients continue to utilize the area.

Three artifact concentrations were identified as part of the present effort. Concentration 1 is the original extent of this site recorded by Barnes (2008), located in and around a small, unnamed drainage. Concentrations 2 and 3 were located along a second drainage to the north. The dump consists of thousands of mostly residential debris, with some commercial/industrial material, including but not limited to: ceramic dishware, ceramic insulators, glass containers (clear, aqua, green, olive, amber, cobalt, and milk), metal containers (sanitary cans, bimetal cans, rectangular oil cans, paint cans, food tins, barrels), metal cables, metal scrap, and vehicle parts. Modern trash from the homeless population and remnants of post-closure illegal dumping is also pervasive throughout the site.[15]

Barnes (2008) also noted "another part of the dump" was observed in a separate drainage to the north but was not visited at the time due to its location on private property. This northern part of the dump is within the current Project's APE and was able to be accessed as part of this Project. The site may still extend further to the north, west and south; however, these areas are located on private property not associated with the present Project, and thus survey of these areas was not attempted.

[15]CalRecycle removed most of the surficial solid waste in 2022 that was generated after the closure of the dump.

The present condition of the site is poor from impacts attributed to erosion, modern dumping, scavenging, and reuse of the area as a homeless encampment.

6.3 Newly Recorded Archaeological Resources

Table 4 below lists the newly identified isolated feature, **Appendix F** contains the UTM location information for the isolate, and **Appendix D** provides the isolate location on an overview map.

Table 4. Newly Recorded Isolates.

Field No.	Age	Description
ISO-01	Historic	Mining adit

7 Eligibility Recommendations

An important component of an intensive inventory is the development of recommendations as to whether identified cultural resources are eligible for listing on the National Register and/or California Register. Eligibility is based on a consideration of two site characteristics: significance and integrity. The significance of a cultural resource is evaluated in accordance with standards set by federal, state, and local entities. Federal standards are defined in the National Register, specifically in 36 CFR 60.4. California standards are prescribed as part of the CEQA under PRC 5024.1. Essentially the same significance criteria apply under both programs. Whereas the National Register defines criteria A through D, the California register defines the same criteria as 1 through 4. Below, only the National Register criteria are described.

7.1 National Register Criteria Overview

The National Register eligibility criteria indicate a property must be at least 50 years old, remain fairly unaltered, and meet one or more of the following National Register significance criteria:

A) **Event:** Property is associated with events that have made a significant contribution to the broad patterns of our history.

B) **Person:** Property is associated with the lives of persons significant in our past.

C) **Design/Construction:** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

D) **Information Potential:** Property has yielded, or is likely to yield, information important in prehistory or history.

To be considered eligible under Criterion A, a property must be associated with events that are important within a defined context. Several distinct cultural periods are described in the cultural overview above. A prehistoric site that exemplifies an adaptive trend associated with a distinctive cultural period might be considered eligible under Criterion A. An ethnographic-period site that is an outstanding example of changing lifeways and Native adaptation might also be considered significant. Likewise, a historic-period site that is considered eligible should represent an important contribution to an event within the associated context.

Criterion B applies to properties associated with individuals whose specific contributions to history can be identified and documented. As such, Criterion B usually applies to ethnohistoric- and historic-period sites because prehistoric sites generally lack associations with known individuals.

Criterion C applies to properties that embody distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic value; or represent a significant and distinguishable entity within a larger "district." Prehistoric site types that meet Criterion C are generally distinctive site types that reflect elements of community design or contribute to larger districts as key elements within a regional land-use context.

Criterion D pertains to the information potential a property may contribute toward our understanding of prehistory or history. Research topics or themes presented in a historic context are the mechanisms by which properties are evaluated against this criterion.

7.1.1 Integrity

For a resource to be listed in the National Register, it must not only demonstrate its significance based on one or more National Register criteria, but it must also have the integrity to convey such significance. Site integrity, or the extent to which potential information is preserved in contexts that are sufficiently intact, represents another consideration for National Register eligibility. The evaluation of integrity must always be grounded in an understanding of a resource's physical features and how they relate to its significance. To retain integrity, a resource will possess at least several aspects of integrity, including location, design, setting, materials, workmanship, feeling, and association.

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

7.2 Eligibility Recommendations

7.2.1 P-55-007863/CA-TUO-005066H/CA-018-TM-333 – Rotelli Burn Dump (Not Eligible)

This site consists of the Rotelli Burn Dump's disassociated collection of refuse deposited, piled, and combined, then burned and mixed with soil. This process of mixing and burning deposited material occurred repeatedly over the course of approximately four decades, from the 1920s to the facility's closure in 1965. Burn dump sites were commonplace in California until the Clean Water Act of 1972. Since its closure, the site has been heavily disturbed due to the illegal dumping of trash and the area's post-closure use as a homeless encampment. The repeated episodes of mixing, burning, and burying as part of the burn dump process have rendered the identification of undisturbed artifacts and features nearly impossible.

The burn dump is best viewed within the Community Planning and Development area of significance. The period of significance would be from 1920 through 1965. The burn dump has the potential to reflect waste disposal patterns of the early to mid-20th century. However, to be eligible under Criterion A, "mere association with historic events or trends is not enough…the property's specific association must be considered important as well" (National Park Service 1997). Very little is known about the use of the Rotelli Burn Dump during the time of its operation. It appears to be a typical example of a common property type, one typically found in many small communities throughout the region. Given that the dump was privately owned and operated, it does not reflect the Community Planning and Development theme in a meaningful or historically important manner. Because there is no documentation to support its significance to the community or larger trends of community

development or waste disposal, the Rotelli Burn Dump is not recommended as significant under Criterion A. It is noted that by their very nature, burn dumps lack integrity of design, material, and workmanship due to the multiple episodes of dumping, mixing, and burning.

While the burn dump is associated with the Rotelli family, they have not made an identifiable significant contribution to local, or regional history nor is the site the primary or sole representation of the Rotelli family. Based on these considerations, it is recommended that the Rotelli Burn Dump is not significant, even at the local level, under Criterion B.

As noted above, the Rotelli Burn Dump is a typical example of a common property type. The site currently consists of a series of randomly located trash scatters (many with artifacts displaced by intentional mixing, burning, and subsequent erosion) and has no constructed features. The site does not embody a distinctive method of construction nor the work of a master. Based on these considerations, it is recommended that the Rotelli Burn Dump is not significant under Criterion C.

The site consists of unassociated trash deposits that have undergone repeated episodes of mixing, burning, and erosion. Few identifiable items remain and those that do remain are not clustered in meaningful assemblages. The quantity and quality of the artifact assemblage does not lend itself to the investigation of archaeological research questions related to the Community Planning and Development theme. Based on these considerations, it is recommended that the Rotelli Burn Dump is not significant under Criterion D.

The Rotelli Burn Dump does not meet the criteria outlined in Section 5024.1 of the California PRC or Title 36 of the Code of Federal Regulations Part 60.4, and it is therefore recommended not eligible for nomination to the National Register or the California Register.

8 Management Summary

8.1 Summary

CalRecycle is proposing the remediation of the Rotelli Private Dump to address several deficiencies related to current California solid waste regulations. The Project must comply with PRC Section 21083.2 of the CEQA and, due to federal involvement of the USACE, Section 106 of the NHPA.

On behalf of Geo-Logic Associates and CalRecycle, NCE conducted an investigation to locate, describe, and evaluate cultural resources present within the APE. One previously recorded resource was identified in the APE. The Rotelli Burn Dump (P-55-007863/CA-TUO-005066H/CA-018-TM-333) is a large refuse dump associated with the nearby City of Sonora. The resource is recommended ineligible for both the National and California Registers. It should be noted the APE has been previously disturbed by erosion, modern dumping, scavenging, and habituation within the area by transients. Various forms of illegal grading, excavating, leveling, and historic mine alteration were also noted in a "Opportunity to Correct" order (Tuolumne County 2021).

8.2 Determination of Effect

It is recommended the Project will not impact historical or prehistoric resources meeting the criteria outlined in Section 5024.1 of the California PRC or Title 36 of the Code of Federal Regulations Part 60.4. Further, it is recommended the Project will not impact historical properties and a finding of "no historic properties present" is applicable, as that phrase is viewed within the context of compliance with the Advisory Council on Historic Preservation regulations (36 CFR Part 800).

8.3 Other Considerations

Every reasonable effort was made to identify cultural resources within or adjacent to the APE. If prehistoric or historic period resources are subsequently discovered that could be adversely affected by Project-related activities, all such activities should cease immediately. CalRecycle and appropriate tribal representatives should be contacted immediately.

Prehistoric burials might be found in the APE (none were apparent based on an examination of the ground surface). In the event human remains are discovered, all work shall cease immediately, and all measures shall be made to secure and protect areas in which human remains and funeral objects are discovered. No photographs of human remains or funeral objects will be permitted by construction workers and/or contract or subcontractors on the job site. In the event human remains are discovered, the County Coroner and local law enforcement shall be notified within 24 hours of the discovery to conduct proper evaluation and treatment of remains. The coroner and law enforcement agency with jurisdiction will evaluate the find to determine whether it is a crime scene or a burial. If human remains are determined to be associated with an archaeological site (burial), the State Historic Preservation Office (SHPO) will be notified. CalRecycle will work with SHPO to determine measures to take. That office will contact the appropriate tribal representatives and consult on the disposition of the remains and any associated artifacts.

NCE prepared this report for use by CalRecycle and Geo-Logic Associates as the intended beneficiaries of this work. Interpretations, conclusions, and recommendations contained within the report are based in part on the information presented in other reports that are cited in the text and listed in the references. This report is subject to limitations and qualifications inherent to the referenced documents.

9 References

Barnes, J.
2008 Cultural Resources Inventory Report for the Sonora encampment trespass cleanup project (Case # CA-018-S-TM-08/02), Tuolumne County, California. BLM, Folsom Field Office, California.

Barrett, Samuel A.
1908 The Geography and Dialects of the Miwok Indians. *University of California Publications in American Archaeology and Ethnology* 6(2):333-368. Berkeley.

California Department of Finance
2021 Historical Census Populations of Counties and Incorporated Cities in California, 1850–2020. Electronic Document, https://dof.ca.gov/reports/demographic-reports/, accessed April 9, 2024.

Davis-King, S., and J. Marvin
1994 *Contextual History of Tuolumne County*. Submitted to County of Tuolumne. Copies available from Columbia College Library, Columbia, California.

Heckendorn and Wilson
1856 *Miners and Business Men's Directory for the Year Commencing January 1st, 1856*. Clipper Office, Columbia. Reprinted by the Donald I. Segerstrom Memorial Fund, 1976.

James, T.
2020 The Mother Lode Mourns Community Leader Larry Rotelli. Electronic Document, https://www.mymotherlode.com/news/local/1052905/the-mother-lode-mourns-community-leader-larry-rotelli.html, accessed April 11, 2024.

Kroeber, A. E.
1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin 78*. Washington, D.C.

Langley, H. G.
1875 *Pacific Coast Business Directory for 1876-1878*. Henry G. Langley, San Francisco, California.

Levy, R.
1978 Eastern Miwok. In *Handbook of North American Indians, Volume 8: California*, edited by R. F. Heizer, pp. 398-413. Smithsonian Institution, Washington, D.C.

McCarthy, G.
2020 Former ‘garbageman supervisor’ Larry Rotelli dies at 83. *The Union Democrat*. 2 May. Sonora, California.

Moratto, Michael J., Judith D. Tordoff, and Laurence H. Shoup
1988 *Culture Change in the Central Sierra Nevada 8000 B.C.-A.D. 1950*. Final Report of the New Melones Archeological Project 9. Submitted to the National Park Service, Washington, D.C.

Moratto, M. J.
2002 Culture history of the New Melones Reservoir area, Calaveras and Tuolumne counties, California. In Wallace, W. J., and Riddell, F. A. (eds.). *Essays in California Archaeology: A Memorial to Franklin Fenenga*, Contributions of the University of California Archaeological Research Facility No. 60, Berkeley, California.

National Park Service
1997 How to Apply the National Register Criteria for Evaluation. Electronic document, https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf, accessed May 2, 2024.

Riley, L. M., and M. J. Moratto
1986 Groundstone Artifacts. In *Archaeological Investigations, 1968-1980, at 65 Indian Activity Sites near the Stanislaus River, Calaveras and Tuolumne Counties, California*, by M. J. Moratto and W. L. Singleton, pp 713-786. Final Report of the New Melones Archaeological Project 6. Submitted to the National Park Service, Washington, D.C.

Tuolumne County
2021 Opportunity to Correct, Environmental Health Division. Electronic Document, https://www.tuolumnecounty.ca.gov/DocumentCenter/View/16689/Environmental-Health-Opportunity-to-Correct, accessed April 2, 2024.

Tuolumne County Chamber of Commerce
2011 Membership benefits. Electronic Document, https://web.archive.org/web/20110605001340/http://www.tcchamber.com/benefits.html, archived from the original on June 5, 2011. Accessed April 9, 2024.

Tuolumne County Historical Society
2024 Sonora: Crossroads of Tuolumne County. Electronic Document, https://tchistory.org/sonora-crossroads-of-tuolumne-county/, accessed April 9, 2024.

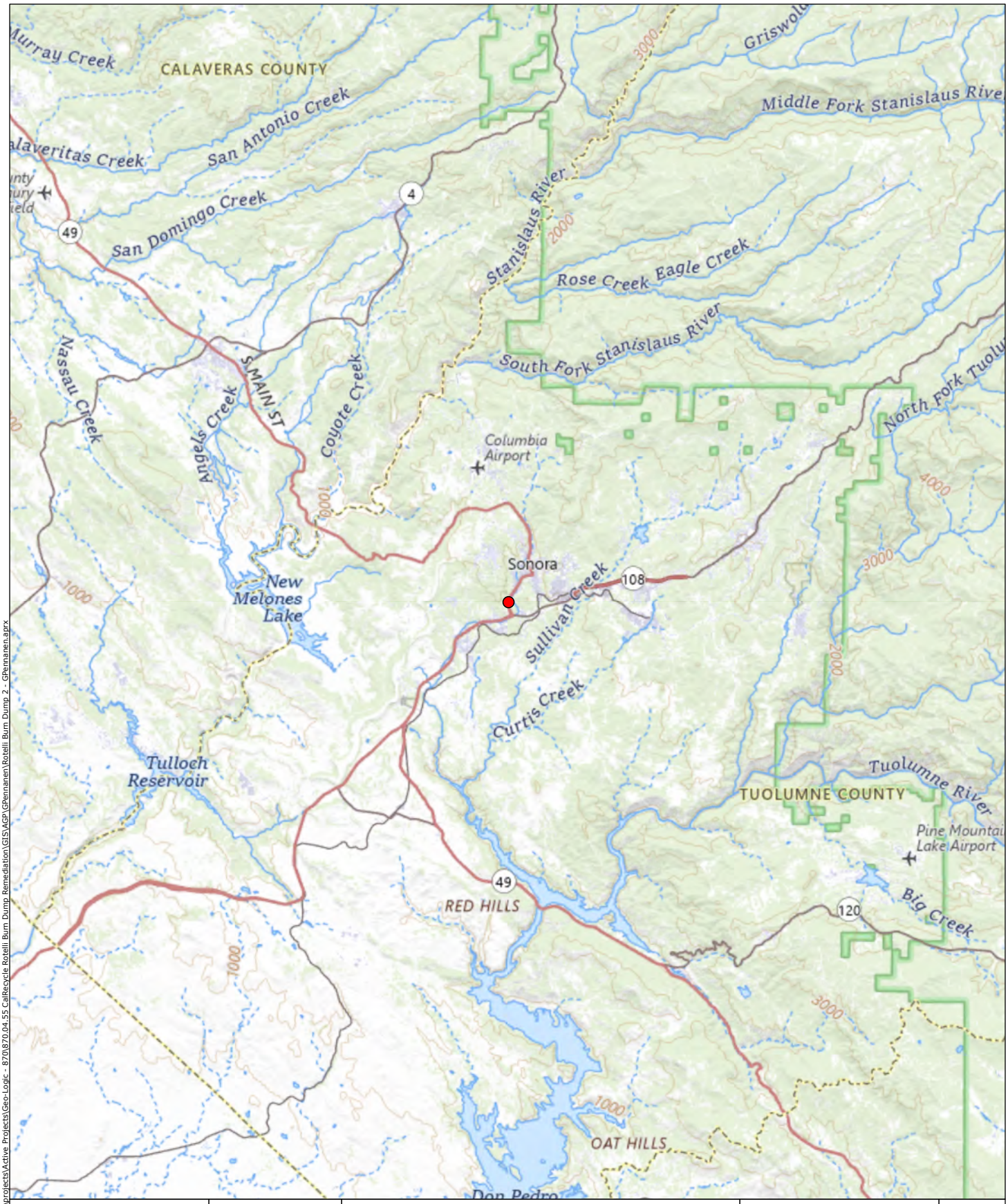
Tuolumne Me-Wuk Tribal Council
2024 History – The Tuolumne Band of Me-Wuk Indians. Electronic Document, https://mewuk.com/cultural/history/, accessed May 2, 2024.

U.S. Census Bureau
2024 U.S. Decennial Census. Electronic Document, https://www.census.gov/en.html, accessed May 3, 2024.

U.S. Army Corps of Engineers
2012 How to Plan a Water Resources Project with the U/S/ Army Corps of Engineers: A Guide for Tribal Governments. USACE Tribal Nations Community of Practice (2nd Edition). Electronic document, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/4944, accessed 3/23/2023.
2013 Consulting with Tribal Nations: Guidelines for Effective Collaboration with Tribal Partners. Electronic document, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/4946, accessed 3/23/2023.

Appendix A

Figures



Legend

- Project Location

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Project Vicinity Map

N

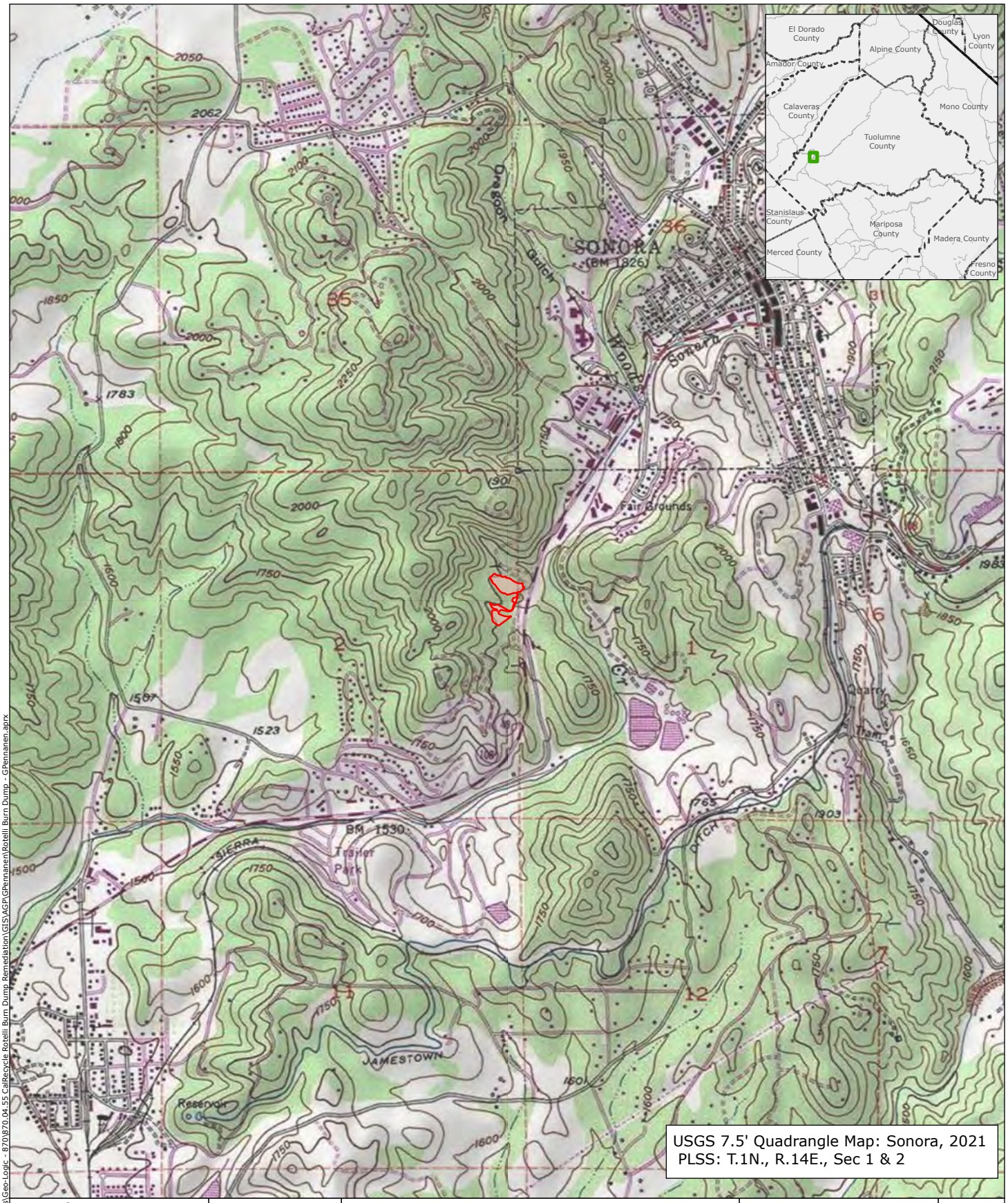
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0 4 Mi.

FIGURE 1

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
USGS National Map Basemap	870.04.55	G. Pennanen	4/2/2024	2/26/2025	J. Hall

Document Path: \\NCE-TAH-PEER\projects\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\GPennanen\Rotelli Burn Dump 2 - GPennanen.aprx



Legend

Area of Potential Effect

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Project Location Map

N

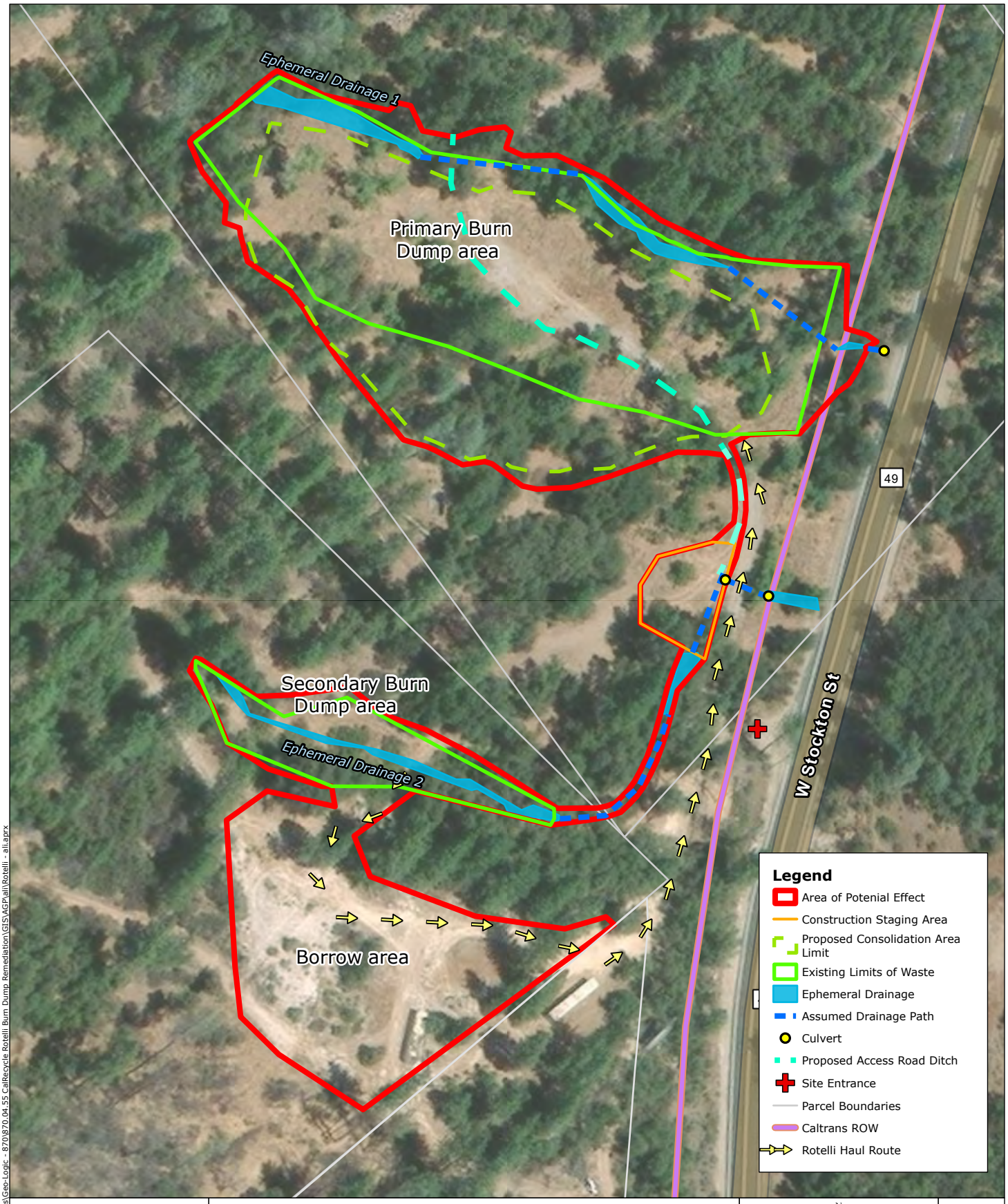
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0 0.1 0.2 0.3 Miles

FIGURE 2

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI USA Topo Basemap	870.04.55	G. Pennanen	4/2/2024	2/26/2025	J.Hall

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NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Area of Potential Effect Map

N

1 in. = 100 ft.

0 50 100 ft.

FIGURE 3

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery with Metadata	870.04.55	R. Rodriguez	3/5/2024	2/26/2025	J. Hall



Legend

- Project Area
- Parcel Boundaries
- Caltrans ROW
- Rotelli Haul Route

NCE
CalRecycle
Geo-Logic
ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Parcel Map

N

1 in. = 150 ft.

0 150 ft.

FIGURE 4

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI World Imagery Basemap w/ Metadata	870.04.55	R. Rodriguez	2/18/2025	4/11/2025	J. Hall

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Appendix B

CCaIC Record Search Results

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 3/20/2021

Records Search File No.: 12865O
Project: CalRecycle Rotelli Burn Dump Remediation Project

Genevieve Pennanen
Nichols Consulting Engineers (NCE)
224 Kingsbury Grade Road, Suite 203
Stateline, NV 89449
775-588-2505 gpennanen@ncenet.com

Invoice address: P.O. Box 1760
Zephyr Cove, NV 89448

Dear Ms. Pennanen:

The Central California Information Center received your **Priority Response** record search request for the project area referenced above, located on the Sonora 7.5' quadrangle in Tuolumne County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☐ custom GIS maps ☒ GIS Data/shape files

Summary Data:

Resources within the project area:	1: P-55-007863
Resources within the 200-meter radius:	2: P-55-007862, 7864
Reports within the project area:	1: TO-06807
Reports within the 200-meter radius:	8: TO-01049, 5498, 5501, 5505, 6032, 8988, 9258, 9802

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed
Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed
Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed
Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed
Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed
Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed
Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed
Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed
OHP Historic Properties Directory: New Excel File: Built Environment Resource Directory (BERD) Dated 9/23/2022
Not all resources listed in the BERD are mapped in GIS, nor do we have records on file for; if you identify additional resources in the BERD that you need copies of, contact the IC. ☐ enclosed ☐ not requested ☒ nothing listed
Archaeological Resource Directory (ARD excerpt): ☐ enclosed ☐ not requested ☒ nothing listed
CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed
Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed
Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed
Historical Maps: ☐ enclosed ☒ not requested ☐ nothing listed
Local Inventories: ☐ enclosed ☒ not requested ☐ nothing listed
GLO and/or Rancho Plat Maps: ☐ enclosed ☒ not requested ☐ nothing listed
Shipwreck Inventory: ☒ not available at CCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp
Soil Survey Maps: ☒ not available at CCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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

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

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

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS). **Note:** Billing will be transmitted separately via email by our Financial Services office* ($452.47), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-55-007862	CA-TUO-005065H	BLM - CA-018-TM-332; Resource Name - Associated with CCC (1930's); CA-018-TM-332	Site	Historic	AH02; AH05; AH06; AH07; AH15	2007 (Barnes, BLM)	TO-06807
P-55-007863	CA-TUO-005066H	BLM - CA-018-TM-333; Resource Name - CA-018-TM-333	Site	Historic	AH04	2008 (Barnes, BLM)	TO-06807
P-55-007864		BLM - CA-108-TM-334; Resource Name - CA-018-TM-334	Structure	Historic	AH06	2007 (Barnes, BLM)	TO-06807

Resource Detail: P-55-007862

Identifying information

Primary No.: P-55-007862

Trinomial: CA-TUO-005065H

Name: Associated with CCC (1930's); CA-018-TM-332

Other IDs:

Type	*Name*
BLM	CA-018-TM-332
Resource Name	Associated with CCC (1930's); CA-018-TM-332

Cross-refs:

Attributes

Resource type: Site

Age: Historic

Information base: Survey

Attribute codes: AH02 (Foundations/structure pads); AH05 (Wells/cisterns); AH06 (Water conveyance system); AH07 (Roads/trails/railroad grades); AH15 (Standing structures)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
12/1/2007	Barnes	BLM	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
TO-06807	2008	Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, case # CA-018-S-TM-08/02	BLM, Folsom Field Office

Location information

County: Tuolumne

USGS quad(s): Sonora

Address:

PLSS: T1N R14E NE¼ of Sec. 2 MDBM

UTMs: Zone 10 728715mE 4205761mN NAD27 (Locus 1)
Zone 10 728705mE 4205834mN NAD27 (Locus 2)
Zone 10 728802mE 4205686mN NAD83 (Locus 3)

Management status

Database record metadata

	Date	*User*	
Entered:	9/30/2013		
Last modified:	3/20/2024	egreathouse	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.
	1/25/2016	EGreathouse	eg

Record status:

Resource Detail: P-55-007863

Identifying information

Primary No.: P-55-007863
Trinomial: CA-TUO-005066H
Name: CA-018-TM-333
Other IDs:

Type	*Name*
BLM	CA-018-TM-333
Resource Name	CA-018-TM-333

Cross-refs:

Attributes

Resource type: Site
Age: Historic
Information base: Survey
Attribute codes: AH04 (Privies/dumps/trash scatters)
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
1/1/2008	Barnes	BLM	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
TO-06807	2008	Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, case # CA-018-S-TM-08/02	BLM, Folsom Field Office

Location information

County: Tuolumne
USGS quad(s): Sonora
Address:
PLSS: T1N R14 NE¼ of Sec. 2 MDBM
UTMs: Zone 10 728715mE 4205761mN NAD27

Management status

Database record metadata

	Date	*User*	
Entered:	9/30/2013		
Last modified:	3/20/2024	egreathouse	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.
	1/25/2016	EGreathouse	eg

Record status:

Resource Detail: P-55-007864

Identifying information

Primary No.: P-55-007864
Trinomial:
Name: CA-018-TM-334
Other IDs:

Type	Name
BLM	CA-108-TM-334
Resource Name	CA-018-TM-334

Cross-refs:

Attributes

Resource type: Structure
Age: Historic
Information base: Survey
Attribute codes: AH06 (Water conveyance system)
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
12/1/2007	Barnes	BLM	

Associated reports

Report No.	Year	Title	Affiliation
TO-06807	2008	Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, case # CA-018-S-TM-08/02	BLM, Folsom Field Office

Location information

County: Tuolumne
USGS quad(s): Sonora
Address:
PLSS: T1N R14E NE¼ of Sec. 2 MDBM
UTMs: Zone 10 720681mE 4205810mN NAD27

Management status

Database record metadata

	Date	User	
Entered:	9/30/2013		
Last modified:	3/20/2024	egreathouse	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.
	1/25/2016	EGreathouse	eg

Record status:

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-01049	NADB-R - 1362165	1990	Cunningham, Judith and Carlo De Ferrari	Sonora Ridge Development Cultural Resources Reconnaissance	Foothill Resources Associates	
TO-05498	NADB-R - 1366181	2004	Leach-Palm, L., P. Mikkelsen, J. King, J. Hatch, and B. Larson	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume l: Summary of Methods and Findings.	Far Western Anthropological Research Group Inc. (and) JRP Historical Consulting Services; prepared for Caltrans District 10	55-000006, 55-000019, 55-000024, 55-000025, 55-000027, 55-000028, 55-000029, 55-000054, 55-000058, 55-000104, 55-000110, 55-000115, 55-000149, 55-000183, 55-000347, 55-000378, 55-000572, 55-000577, 55-000586, 55-000587, 55-000588, 55-000687, 55-000720, 55-000721, 55-000724, 55-000786, 55-000787, 55-000918, 55-000919, 55-000922, 55-000942, 55-000943, 55-000947, 55-001031, 55-001042, 55-001090, 55-001630, 55-001697, 55-001963, 55-002345, 55-002364, 55-002365, 55-002366, 55-002367, 55-002368, 55-002370, 55-002557, 55-002603, 55-002605, 55-002643, 55-002724, 55-002739, 55-002746, 55-003159, 55-003323, 55-003324, 55-003327, 55-003543, 55-003544, 55-003545, 55-003625, 55-003703, 55-003723, 55-003725, 55-003726, 55-003727, 55-003776, 55-003782, 55-004047, 55-004048, 55-004140, 55-004144, 55-004150, 55-004153, 55-004156, 55-004250, 55-004340, 55-004346, 55-004350, 55-004351, 55-004376, 55-004503, 55-004692, 55-004700, 55-004934, 55-005093, 55-005094, 55-005240, 55-005293, 55-005303, 55-005357, 55-005401, 55-005547, 55-006022, 55-006023, 55-006138, 55-006186, 55-006268, 55-006319, 55-006502, 55-006736, 55-006850, 55-006859, 55-006925, 55-006926, 55-006928, 55-006929, 55-006933, 55-006935, 55-006945, 55-006952, 55-006983, 55-006989, 55-009802

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-05501	NADB-R - 1366197	2004	Rosenthal, J. S. and J. Meyer	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.	Far Western Anthropological Research Group, Inc. (and) Sonoma State University; prepared for Caltrans District 10	55-000006, 55-000019, 55-000024, 55-000025, 55-000027, 55-000028, 55-000029, 55-000054, 55-000058, 55-000104, 55-000110, 55-000115, 55-000149, 55-000183, 55-000347, 55-000378, 55-000572, 55-000577, 55-000586, 55-000587, 55-000588, 55-000687, 55-000720, 55-000721, 55-000724, 55-000786, 55-000787, 55-000918, 55-000919, 55-000922, 55-000942, 55-000943, 55-000947, 55-001031, 55-001042, 55-001090, 55-001630, 55-001697, 55-001963, 55-002345, 55-002364, 55-002365, 55-002366, 55-002367, 55-002368, 55-002370, 55-002557, 55-002603, 55-002605, 55-002643, 55-002724, 55-002739, 55-002746, 55-003159, 55-003323, 55-003324, 55-003327, 55-003543, 55-003544, 55-003545, 55-003625, 55-003703, 55-003723, 55-003725, 55-003726, 55-003727, 55-003776, 55-003782, 55-004047, 55-004048, 55-004140, 55-004144, 55-004150, 55-004153, 55-004156, 55-004250, 55-004340, 55-004346, 55-004350, 55-004351, 55-004376, 55-004503, 55-004700, 55-004934, 55-005093, 55-005094, 55-005240, 55-005293, 55-005303, 55-005338, 55-005339, 55-005340, 55-005341, 55-005342, 55-005343, 55-005344, 55-005345, 55-005346, 55-005347, 55-005348, 55-005349, 55-005350, 55-005351, 55-005352, 55-005353, 55-005357, 55-005401, 55-005547, 55-006022, 55-006023, 55-006138, 55-006186, 55-006268, 55-006319, 55-006492, 55-006502, 55-006736, 55-006850, 55-006859, 55-006925, 55-006926, 55-006928, 55-006929, 55-006933, 55-006935, 55-006945, 55-006952, 55-006983, 55-006989, 55-009802

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-05505	NADB-R - 1365431	2004	Leach-Palm, L., J. King, J. Hatch, and B. Larson	Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II H: Tuolumne County.	Far Western Anthropological Research Group, Inc. (and) JRP Historical Consulting Services (and) Foothill Resources, Ltd.; prepared for Caltrans District 10	55-000006, 55-000019, 55-000024, 55-000025, 55-000027, 55-000028, 55-000029, 55-000054, 55-000058, 55-000104, 55-000110, 55-000115, 55-000149, 55-000183, 55-000347, 55-000378, 55-000572, 55-000577, 55-000586, 55-000587, 55-000588, 55-000687, 55-000720, 55-000721, 55-000724, 55-000786, 55-000787, 55-000918, 55-000919, 55-000922, 55-000942, 55-000943, 55-000947, 55-001031, 55-001042, 55-001090, 55-001630, 55-001697, 55-001913, 55-001963, 55-002345, 55-002364, 55-002365, 55-002366, 55-002367, 55-002368, 55-002370, 55-002557, 55-002603, 55-002605, 55-002643, 55-002724, 55-002739, 55-002746, 55-003159, 55-003323, 55-003324, 55-003327, 55-003543, 55-003544, 55-003545, 55-003625, 55-003703, 55-003723, 55-003725, 55-003726, 55-003727, 55-003776, 55-003782, 55-004047, 55-004048, 55-004140, 55-004144, 55-004150, 55-004153, 55-004156, 55-004250, 55-004340, 55-004346, 55-004350, 55-004351, 55-004376, 55-004503, 55-004700, 55-004934, 55-005093, 55-005094, 55-005240, 55-005293, 55-005303, 55-005338, 55-005339, 55-005340, 55-005341, 55-005342, 55-005343, 55-005344, 55-005345, 55-005346, 55-005347, 55-005348, 55-005349, 55-005350, 55-005351, 55-005352, 55-005353, 55-005357, 55-005401, 55-005547, 55-006022, 55-006023, 55-006138, 55-006186, 55-006268, 55-006319, 55-006492, 55-006502, 55-006736, 55-006850, 55-006859, 55-006925, 55-006926, 55-006928, 55-006929, 55-006933, 55-006935, 55-006945, 55-006950, 55-006952, 55-006983, 55-006989, 55-009802

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-06032	NADB-R - 1365813	2006	Leach-Palm, L., J. Costello, and J. Marvin	Cultural Resourses Survey of a 12.69 Acre Parcel, Near Sonora, Tuolumne County, CA (APN #056-03-07)	Foothill Resources Ltd.	
TO-06807	NADB-R - 1367084	2008	Barnes, J.	Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, case # CA-018-S-TM-08/02	BLM, Folsom Field Office	55-007862, 55-007863, 55-007864
TO-08988		2019	Parker, A. and A. Whitaker	Archaeological Survey Report for Director's Orders Hazard Tree Removal in District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, CA	Far Western Anthropological Research Group, Inc. for Caltrans	55-000115, 55-000116, 55-001020, 55-001423, 55-001613, 55-001630, 55-002297, 55-002298, 55-002305, 55-002315, 55-003544, 55-003545, 55-003550, 55-004198, 55-004199, 55-004277, 55-004747, 55-005240, 55-005463, 55-005548, 55-005965, 55-005975, 55-006022, 55-006851, 55-006859, 55-006882, 55-006926, 55-006927, 55-006928, 55-006929, 55-006930, 55-006933, 55-006935, 55-006936, 55-006953, 55-006960, 55-006963, 55-006966, 55-006967, 55-006980, 55-006981, 55-006982, 55-006983, 55-006984, 55-007189, 55-007190, 55-007224, 55-007227, 55-007240, 55-007746, 55-009712, 55-009713, 55-009714, 55-009729, 55-009730, 55-009731, 55-009732, 55-009733, 55-009734, 55-009735, 55-009736, 55-009737, 55-009738, 55-009739, 55-009740, 55-009741, 55-009742, 55-009743, 55-009744, 55-009745, 55-009746, 55-009747, 55-009748, 55-009749, 55-009750, 55-009751, 55-009752, 55-009762
TO-09258		2019	Waechter, S. A.	Historic Property Survey Report for Director's Orders Hazard Tree Removal Project for District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, California, State Routes 4, 5, 12, 26, 49, 88, 108, 120 and 140; E-FIS 10-1600-0133, EA 10-1F6403, Contract 06A2312, Task Order 11	Far Western Anthropological Research Group, Inc.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-09802		2024	Martisius, N. and Melinda Pacheco Patrick	Archaeological Survey Report for the District 10 Middle-Mile Broadband Initiative Project, State Routes 132 and 140, Mariposa and Tuolumne Counties, California; 10-MPA/TUO-132 PM 0.027/R0.460/3.774/R7.636/18.746; 10-MPA-140 PM 22.08/51.803; Project ID 1022000254, EA 10-1Q210	Far Western Anthropological Rsearch Group, Inc. for Caltrans	

Report Detail: TO-01049

Identifiers

Report No.: TO-01049

Other IDs:	*Type*	*Name*
	NADB-R	1362165

Cross-refs:

Citation information

Author(s): Cunningham, Judith and Carlo De Ferrari
Year: 1990 (Jun)
Title: Sonora Ridge Development Cultural Resources Reconnaissance
Affliliation: Foothill Resources Associates
No. pages: 18
No. maps:
Attributes: Architectural/Historical, Field study
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Tuolumne
USGS quad(s): Sonora
Address:
PLSS: T1N R11E Sec. 1 MDBM

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	8/5/2022	lmeyer1

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
	1/12/2018	EGreathouse	eg

Record status:

Report Detail: TO-05498

Identifiers

Report No.: TO-05498

Other IDs:

Type	*Name*
NADB-R	1366181

Cross-refs: Extends into another county as AP-05498
Extends into another county as CA-05498
Extends into another county as MP-05498
Extends into another county as ME-05498
Extends into another county as SJ-05498
Extends into another county as ST-05498
See also TO-05501
See also TO-05505

Citation information

Author(s): Leach-Palm, L., P. Mikkelsen, J. King, J. Hatch, and B. Larson

Year: 2004 (Jun)

Title: Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume l: Summary of Methods and Findings.

Affliliation: Far Western Anthropological Research Group Inc. (and) JRP Historical Consulting Services; prepared for Caltrans District 10

No. pages: 73

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size: 500 miles

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-000006	CA-TUO-001456H	Sugar Pine Railroad, FS 05-16-5
P-55-000019		1-19-3 "The Fort"
P-55-000024		2-12-2 Water Works
P-55-000025		2-12-3 Rodeogrounds
P-55-000027		2-13-2 Slaughterhouse
P-55-000028		Chinese Camp; 2-13-3 Chinatow
P-55-000029		Chinese Camp White Business
P-55-000054	CA-TUO-001629H	Sonora-Mono Road; Sonora-Mon
P-55-000058	CA-TUO-002012H	Kanaka Ditch; FS 05-16-54-0488
P-55-000104	CA-TUO-003865H	Nelson Logging Company Sheds
P-55-000110	CA-TUO-002007H	FS 05-16-54-0490; Hetch Hetchy
P-55-000115		Swerer's Store, Tuttletown; TCH-
P-55-000149		TUO-I-14H; T.D. I.F. 8
P-55-000183		Meadow Insect Salvage Timber
P-55-000347	CA-TUO-002774H	Sierra Railroad / Sierra Railway
P-55-000378		FS 05-16-54-0913; PAR-1
P-55-000572		Groveland Forest Fire Station
P-55-000577		Isolate 05-16-559/25
P-55-000586	CA-TUO-003741	
P-55-000587	CA-TUO-003742	
P-55-000588	CA-TUO-003743	
P-55-000687	CA-TUO-003798	
P-55-000720	CA-TUO-003815H	GCSD Historic Site No. 4
P-55-000721	CA-TUO-003816H	GCSD Historic Site No. 5
P-55-000724		FS 05-16-53-0338; Miner's Ditch;
P-55-000786	CA-TUO-003863H	Lower Ditch
P-55-000787	CA-TUO-003864	PA-94-54

P-55-000918	CA-TUO-003903H	FS 05-16-54-1355
P-55-000919	CA-TUO-003904H	FS 05-16-54-1360
P-55-000922	CA-TUO-003907H	FS 05-16-54-1383; AA-01H
P-55-000942	CA-TUO-001565H	05-16-54-0651
P-55-000943	CA-TUO-003172	05-16-54-1243
P-55-000947	CA-TUO-003913H	FS 05-16-54-1425
P-55-001031		Raleys 1
P-55-001042	CA-TUO-000012/H	
P-55-001090	CA-TUO-000060	TUO-X-16
P-55-001630	CA-TUO-000608H	Sierra Railway, Angels Branch
P-55-001697	CA-TUO-000676H	
P-55-001963	CA-TUO-000954	Cascade Creek; FS 05-16-53-18
P-55-002345	CA-TUO-001349	RED HILLS 2; Red Hills Site 2
P-55-002364	CA-TUO-001368H	
P-55-002365	CA-TUO-001369H	Temporary Site No. 10
P-55-002366	CA-TUO-001370H	Temporary Site No. 11
P-55-002367	CA-TUO-001371H	Caltrans temp. #13 for the Grove
P-55-002368	CA-TUO-001372H	Caltrans temp. #14 for the Grove
P-55-002370	CA-TUO-001374H	"16" (Caltrans temp. #)
P-55-002557	CA-TUO-001566	
P-55-002603	CA-TUO-001614	FS 05-16-53-0429
P-55-002605	CA-TUO-001616	
P-55-002643	CA-TUO-001656/H	FS 05-16-54-0323
P-55-002724	CA-TUO-001736	
P-55-002739	CA-TUO-001751H	Golden Rock Ditch / Golden Roc
P-55-002746	CA-TUO-001758	VIS
P-55-003159	CA-TUO-002185/H	SMC 38
P-55-003323	CA-TUO-002349	TUO-108-8
P-55-003324	CA-TUO-002350H	05-16-53-0513; SUMMIT RANG
P-55-003327	CA-TUO-002353H	FS 05-16-54-1093; Groveland R
P-55-003543		A-1
P-55-003544		G-1 and G-2; FT-20
P-55-003545		
P-55-003625	CA-TUO-002639	
P-55-003703	CA-TUO-002717	05-16-54-0769
P-55-003723	CA-TUO-002737H	FS 05-16-54-1143
P-55-003725	CA-TUO-002739H	FS 05-16-54-1196
P-55-003726	CA-TUO-002740H	FS 05-16-54-1197
P-55-003727	CA-TUO-002741	FS 05-16-54-1198
P-55-003776	CA-TUO-002791	FS 05-16-53-0561
P-55-003782	CA-TUO-002797/H	SEGERSTOM 1
P-55-004047	CA-TUO-003064	
P-55-004048	CA-TUO-003065	
P-55-004140	CA-TUO-003164H	The Big Oak Flat Road; FS 05-1
P-55-004144	CA-TUO-003168	FS 05-16-51-0715
P-55-004150	CA-TUO-003175H	FS 05-16-54-1248; Rush Creek
P-55-004153	CA-TUO-003178H	FS 05-16-54-1261 & 1262
P-55-004156	CA-TUO-003182H	FS 05-16-54-1305
P-55-004250	CA-TUO-003277	Mi-wok 213
P-55-004340	CA-TUO-003372/H	
P-55-004346	CA-TUO-003378	
P-55-004350	CA-TUO-003382	
P-55-004351	CA-TUO-003383H	
P-55-004376	CA-TUO-003409H	FS 05-16-51-0943
P-55-004503	CA-TUO-003962H	Confidence East Dump and Scat
P-55-004692		Questo Ditch
P-55-004700		
P-55-004934	CA-TUO-004178H	Mt. Jefferson Mine [and] Mt. Jeff
P-55-005093		Big Oak Flat; CHL #406
P-55-005094		Groveland; CHL #446

Report Detail: TO-05498

P-55-005240		Harvard Mine Road / Old State H
P-55-005293	CA-TUO-004260H	HR Crocker's Arrastra
P-55-005303		Mount Carmel Catholic Church
P-55-005357		Morgan House, Dr. Richli House,
P-55-005401		Reboul's Trading Post, Tiano's M
P-55-005547		Town of Sonora; Campo de Son
P-55-006022		CA-018-TM-204
P-55-006023		CA-018-TM-205
P-55-006138		V-5
P-55-006186	CA-TUO-004408	FS 05-16-53-0722
P-55-006268		FS 05-16-53-0012; Cow Creek R
P-55-006319		Cassinelli House; Cassinelli/Scia
P-55-006502		Deer Flat Road
P-55-006736	CA-TUO-004603H	V-4; FT-31
P-55-006850	CA-TUO-004688H	YG-2; Beckwith Ranch Residenc
P-55-006859	CA-TUO-004714H	PL-3 (Price and Smith); YG-11 (
P-55-006925		Rock Alignment J; FT -101
P-55-006926		FT-102
P-55-006928		FT-104
P-55-006929		FT-105
P-55-006933		FT-112
P-55-006935		Stockton-Sonora Road
P-55-006945		H120FB #2; FT-32
P-55-006952		FT-1
P-55-006983		Moccasin Diversion Dam; JT-5
P-55-006989		Confidence Inn & Café; demolish
P-55-009802		Town of Cold Springs

No. resources: 114

Has informals: No

Location information

County(ies): Tuolumne

USGS quad(s): Ackerson Mountain, Angels Camp, Arena, Ascension Mountain, Atwater, Bear Valley, Bliss Ranch, Caples Lake, Carson Pass, Catheys Valley, Chinese Camp, Clements, Columbia, Columbia SE, Cooperstown, Coulterville, Delta Ranch, Donnell Lake, Dorrington, Dos Palos, Ebbetts Pass, El Nido, Farmington , Feliciana Mountain, Fish Camp, Freel Peak, Groveland, Gustine, Heenan Lake, Holt, Hornitos, Howard Ranch, Indian Gulch, Isleton, Jackson, Jawbone Ridge, Keystone, Knights Ferry, La Grange, Lockeford, Lodi North, Lodi South, Mariposa, Markleeville, Melones Dam, Merced, Moccasin, Mokelumne Hill, Murphys, Newman, Oakdale, Pacific Valley, Patterson, Paulsell, Penon Blanco Peak, Peters, Pinecrest, Rail Road Flat, Riverbank, Salida, Salt Spring Valley, San Andreas, San Luis Ranch, Santa Rita Bridge, Snelling, Solyo, Sonora, Sonora Pass, Spicer Meadow Res, Standard, Stanislaus, Stevinson, Stockton East, Stockton West, Strawberry, Stumpfield Mountain, Tamarack, Terminous , Topaz Lake, Tracy , Turlock, Twain Harte, Valley Springs, Vernalis, Volta , Waterford, Waterloo, West Point, Westley, Winton, Wolf Creek, Woodfords , Woodward Island , Yosemite Lake

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	12/13/2019	swilliams29

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: TO-05501

Identifiers

Report No.: TO-05501

Other IDs:

Type	*Name*
NADB-R	1366197

Cross-refs: Extends into another county as AP-05501
Extends into another county as CA-05501
Extends into another county as MP-05501
Extends into another county as ME-05501
Extends into another county as SJ-05501
Extends into another county as ST-05501
See also TO-05498
See also TO-05505

Citation information

Author(s): Rosenthal, J. S. and J. Meyer

Year: 2004 (Jun)

Title: Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume III: Geoarchaeological Study.

Affliliation: Far Western Anthropological Research Group, Inc. (and) Sonoma State University; prepared for Caltrans District 10

No. pages: 205

No. maps:

Attributes: Archaeological, Other research

Inventory size:

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-000006	CA-TUO-001456H	Sugar Pine Railroad, FS 05-16-5
P-55-000019		1-19-3 "The Fort"
P-55-000024		2-12-2 Water Works
P-55-000025		2-12-3 Rodeogrounds
P-55-000027		2-13-2 Slaughterhouse
P-55-000028		Chinese Camp; 2-13-3 Chinatow
P-55-000029		Chinese Camp White Business
P-55-000054	CA-TUO-001629H	Sonora-Mono Road; Sonora-Mon
P-55-000058	CA-TUO-002012H	Kanaka Ditch; FS 05-16-54-0488
P-55-000104	CA-TUO-003865H	Nelson Logging Company Sheds
P-55-000110	CA-TUO-002007H	FS 05-16-54-0490; Hetch Hetchy
P-55-000115		Swerer's Store, Tuttletown; TCH-
P-55-000149		TUO-I-14H; T.D. I.F. 8
P-55-000183		Meadow Insect Salvage Timber
P-55-000347	CA-TUO-002774H	Sierra Railroad / Sierra Railway
P-55-000378		FS 05-16-54-0913; PAR-1
P-55-000572		Groveland Forest Fire Station
P-55-000577		Isolate 05-16-559/25
P-55-000586	CA-TUO-003741	
P-55-000587	CA-TUO-003742	
P-55-000588	CA-TUO-003743	
P-55-000687	CA-TUO-003798	
P-55-000720	CA-TUO-003815H	GCSD Historic Site No. 4
P-55-000721	CA-TUO-003816H	GCSD Historic Site No. 5
P-55-000724		FS 05-16-53-0338; Miner's Ditch;
P-55-000786	CA-TUO-003863H	Lower Ditch
P-55-000787	CA-TUO-003864	PA-94-54
P-55-000918	CA-TUO-003903H	FS 05-16-54-1355

P-55-000919	CA-TUO-003904H	FS 05-16-54-1360
P-55-000922	CA-TUO-003907H	FS 05-16-54-1383; AA-01H
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P-55-000943	CA-TUO-003172	05-16-54-1243
P-55-000947	CA-TUO-003913H	FS 05-16-54-1425
P-55-001031		Raleys 1
P-55-001042	CA-TUO-000012/H	
P-55-001090	CA-TUO-000060	TUO-X-16
P-55-001630	CA-TUO-000608H	Sierra Railway, Angels Branch
P-55-001697	CA-TUO-000676H	
P-55-001963	CA-TUO-000954	Cascade Creek; FS 05-16-53-18
P-55-002345	CA-TUO-001349	RED HILLS 2; Red Hills Site 2
P-55-002364	CA-TUO-001368H	
P-55-002365	CA-TUO-001369H	Temporary Site No. 10
P-55-002366	CA-TUO-001370H	Temporary Site No. 11
P-55-002367	CA-TUO-001371H	Caltrans temp. #13 for the Grove
P-55-002368	CA-TUO-001372H	Caltrans temp. #14 for the Grove
P-55-002370	CA-TUO-001374H	"16" (Caltrans temp. #)
P-55-002557	CA-TUO-001566	
P-55-002603	CA-TUO-001614	FS 05-16-53-0429
P-55-002605	CA-TUO-001616	
P-55-002643	CA-TUO-001656/H	FS 05-16-54-0323
P-55-002724	CA-TUO-001736	
P-55-002739	CA-TUO-001751H	Golden Rock Ditch / Golden Roc
P-55-002746	CA-TUO-001758	VIS
P-55-003159	CA-TUO-002185/H	SMC 38
P-55-003323	CA-TUO-002349	TUO-108-8
P-55-003324	CA-TUO-002350H	05-16-53-0513; SUMMIT RANG
P-55-003327	CA-TUO-002353H	FS 05-16-54-1093; Groveland R
P-55-003543		A-1
P-55-003544		G-1 and G-2; FT-20
P-55-003545		
P-55-003625	CA-TUO-002639	
P-55-003703	CA-TUO-002717	05-16-54-0769
P-55-003723	CA-TUO-002737H	FS 05-16-54-1143
P-55-003725	CA-TUO-002739H	FS 05-16-54-1196
P-55-003726	CA-TUO-002740H	FS 05-16-54-1197
P-55-003727	CA-TUO-002741	FS 05-16-54-1198
P-55-003776	CA-TUO-002791	FS 05-16-53-0561
P-55-003782	CA-TUO-002797/H	SEGERSTOM 1
P-55-004047	CA-TUO-003064	
P-55-004048	CA-TUO-003065	
P-55-004140	CA-TUO-003164H	The Big Oak Flat Road; FS 05-1
P-55-004144	CA-TUO-003168	FS 05-16-51-0715
P-55-004150	CA-TUO-003175H	FS 05-16-54-1248; Rush Creek
P-55-004153	CA-TUO-003178H	FS 05-16-54-1261 & 1262
P-55-004156	CA-TUO-003182H	FS 05-16-54-1305
P-55-004250	CA-TUO-003277	Mi-wok 213
P-55-004340	CA-TUO-003372/H	
P-55-004346	CA-TUO-003378	
P-55-004350	CA-TUO-003382	
P-55-004351	CA-TUO-003383H	
P-55-004376	CA-TUO-003409H	FS 05-16-51-0943
P-55-004503	CA-TUO-003962H	Confidence East Dump and Scat
P-55-004700		
P-55-004934	CA-TUO-004178H	Mt. Jefferson Mine [and] Mt. Jeff
P-55-005093		Big Oak Flat; CHL #406
P-55-005094		Groveland; CHL #446
P-55-005240		Harvard Mine Road / Old State H
P-55-005293	CA-TUO-004260H	HR Crocker's Arrastra

Report Detail: TO-05501

P-55-005303		Mount Carmel Catholic Church
P-55-005338		A. Gross Saloon; Wheelock Hou
P-55-005339		
P-55-005340		Myer's Saloon/ Kempston's Boot
P-55-005341		Robert Orford Store; Fandango
P-55-005342		Tin Garage
P-55-005343		New York Store; Rosenbloom St
P-55-005344		Barn
P-55-005345		Mrs. Elizabeth Fox Boarding Hou
P-55-005346		Tin Garage
P-55-005347		Bath House
P-55-005348		Cohn-Morris Store; Wells fargo;
P-55-005349		Stone Outbuilding
P-55-005350		Mountain Brow Lodge #82, I.O.O
P-55-005351		
P-55-005352		Charles B. Cutting House
P-55-005353		Water tank and Windmill
P-55-005357		Morgan House, Dr. Richli House,
P-55-005401		Reboul's Trading Post, Tiano's M
P-55-005547		Town of Sonora; Campo de Son
P-55-006022		CA-018-TM-204
P-55-006023		CA-018-TM-205
P-55-006138		V-5
P-55-006186	CA-TUO-004408	FS 05-16-53-0722
P-55-006268		FS 05-16-53-0012; Cow Creek R
P-55-006319		Cassinelli House; Cassinelli/Scia
P-55-006492		Big Oak Flat No. 1 Lode, FT-33
P-55-006502		Deer Flat Road
P-55-006736	CA-TUO-004603H	V-4; FT-31
P-55-006850	CA-TUO-004688H	YG-2; Beckwith Ranch Residenc
P-55-006859	CA-TUO-004714H	PL-3 (Price and Smith); YG-11 (
P-55-006925		Rock Alignment J; FT -101
P-55-006926		FT-102
P-55-006928		FT-104
P-55-006929		FT-105
P-55-006933		FT-112
P-55-006935		Stockton-Sonora Road
P-55-006945		H120FB #2; FT-32
P-55-006952		FT-1
P-55-006983		Moccasin Diversion Dam; JT-5
P-55-006989		Confidence Inn & Café; demolish
P-55-009802		Town of Cold Springs

No. resources: 130

Has informals: No

Location information

County(ies): Tuolumne

USGS quad(s): Ackerson Mountain, Angels Camp, Arena, Ascension Mountain, Atwater, Bear Valley, Bliss Ranch, Caples Lake, Carson Pass, Catheys Valley, Chinese Camp, Clements, Columbia, Columbia SE, Cooperstown, Coulterville, Delta Ranch, Donnell Lake, Dorrington, Dos Palos, Ebbetts Pass, El Nido, Farmington , Feliciana Mountain, Fish Camp, Freel Peak, Gustine, Heenan Lake, Holt, Hornitos, Howard Ranch, Indian Gulch, Isleton, Jackson, Jawbone Ridge, Keystone, Knights Ferry, La Grange, Lockeford, Lodi North, Lodi South, Mariposa, Markleeville, Melones Dam, Merced, Moccasin, Mokelumne Hill, Murphys, Newman, Oakdale, Pacific Valley, Patterson, Paulsell, Penon Blanco Peak, Peters, Pinecrest, Rail Road Flat, Riverbank, Salida, Salt Spring Valley, San Andreas, San Luis Dam, Santa Rita Bridge, Snelling, Solyo, Sonora, Sonora Pass, Spicer Meadow Res, Standard, Stanislaus, Stevinson, Stockton East, Stockton West, Strawberry, Stumpfield Mountain, Tamarack, Terminous , Topaz Lake, Tracy , Turlock, Twain Harte, Valley Springs, Vernalis, Volta , Waterford, Waterloo, Westley, Winton, Wolf Creek, Woodfords , Woodward Island , Yosemite Lake

Address:

PLSS:

Report Detail: TO-05501

Database record metadata

	Date	User	
Entered:	10/2/2013	jay	
Last modified:	1/12/2016	rhards	
IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database
Record status:			

Report Detail: TO-05505

Identifiers

Report No.: TO-05505

Other IDs:

Type	*Name*
NADB-R	1365431

Cross-refs: See also TO-05498
See also TO-05501

Citation information

Author(s): Leach-Palm, L., J. King, J. Hatch, and B. Larson

Year: 2004 (Jun)

Title: Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways; Volume II H: Tuolumne County.

Affliliation: Far Western Anthropological Research Group, Inc. (and) JRP Historical Consulting Services (and) Foothill Resources, Ltd.; prepared for Caltrans District 10

No. pages: 244

No. maps:

Attributes: Archaeological, Architectural/Historical, Field study

Inventory size: 96.07 Miles x 50 Feet

Disclosure: Not for publication

Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-000006	CA-TUO-001456H	Sugar Pine Railroad, FS 05-16-5
P-55-000019		1-19-3 "The Fort"
P-55-000024		2-12-2 Water Works
P-55-000025		2-12-3 Rodeogrounds
P-55-000027		2-13-2 Slaughterhouse
P-55-000028		Chinese Camp; 2-13-3 Chinatow
P-55-000029		Chinese Camp White Business
P-55-000054	CA-TUO-001629H	Sonora-Mono Road; Sonora-Mon
P-55-000058	CA-TUO-002012H	Kanaka Ditch; FS 05-16-54-0488
P-55-000104	CA-TUO-003865H	Nelson Logging Company Sheds
P-55-000110	CA-TUO-002007H	FS 05-16-54-0490; Hetch Hetchy
P-55-000115		Swerer's Store, Tuttletown; TCH-
P-55-000149		TUO-I-14H; T.D. I.F. 8
P-55-000183		Meadow Insect Salvage Timber
P-55-000347	CA-TUO-002774H	Sierra Railroad / Sierra Railway
P-55-000378		FS 05-16-54-0913; PAR-1
P-55-000572		Groveland Forest Fire Station
P-55-000577		Isolate 05-16-559/25
P-55-000586	CA-TUO-003741	
P-55-000587	CA-TUO-003742	
P-55-000588	CA-TUO-003743	
P-55-000687	CA-TUO-003798	
P-55-000720	CA-TUO-003815H	GCSD Historic Site No. 4
P-55-000721	CA-TUO-003816H	GCSD Historic Site No. 5
P-55-000724		FS 05-16-53-0338; Miner's Ditch;
P-55-000786	CA-TUO-003863H	Lower Ditch
P-55-000787	CA-TUO-003864	PA-94-54
P-55-000918	CA-TUO-003903H	FS 05-16-54-1355
P-55-000919	CA-TUO-003904H	FS 05-16-54-1360
P-55-000922	CA-TUO-003907H	FS 05-16-54-1383; AA-01H
P-55-000942	CA-TUO-001565H	05-16-54-0651
P-55-000943	CA-TUO-003172	05-16-54-1243
P-55-000947	CA-TUO-003913H	FS 05-16-54-1425
P-55-001031		Raleys 1

P-55-001042	CA-TUO-000012/H	
P-55-001090	CA-TUO-000060	TUO-X-16
P-55-001630	CA-TUO-000608H	Sierra Railway, Angels Branch
P-55-001697	CA-TUO-000676H	
P-55-001913	CA-TUO-000903H	Ferretti Shrine and Homestead;
P-55-001963	CA-TUO-000954	Cascade Creek; FS 05-16-53-18
P-55-002345	CA-TUO-001349	RED HILLS 2; Red Hills Site 2
P-55-002364	CA-TUO-001368H	
P-55-002365	CA-TUO-001369H	Temporary Site No. 10
P-55-002366	CA-TUO-001370H	Temporary Site No. 11
P-55-002367	CA-TUO-001371H	Caltrans temp. #13 for the Grove
P-55-002368	CA-TUO-001372H	Caltrans temp. #14 for the Grove
P-55-002370	CA-TUO-001374H	"16" (Caltrans temp. #)
P-55-002557	CA-TUO-001566	
P-55-002603	CA-TUO-001614	FS 05-16-53-0429
P-55-002605	CA-TUO-001616	
P-55-002643	CA-TUO-001656/H	FS 05-16-54-0323
P-55-002724	CA-TUO-001736	
P-55-002739	CA-TUO-001751H	Golden Rock Ditch / Golden Roc
P-55-002746	CA-TUO-001758	VIS
P-55-003159	CA-TUO-002185/H	SMC 38
P-55-003323	CA-TUO-002349	TUO-108-8
P-55-003324	CA-TUO-002350H	05-16-53-0513; SUMMIT RANG
P-55-003327	CA-TUO-002353H	FS 05-16-54-1093; Groveland R
P-55-003543		A-1
P-55-003544		G-1 and G-2; FT-20
P-55-003545		
P-55-003625	CA-TUO-002639	
P-55-003703	CA-TUO-002717	05-16-54-0769
P-55-003723	CA-TUO-002737H	FS 05-16-54-1143
P-55-003725	CA-TUO-002739H	FS 05-16-54-1196
P-55-003726	CA-TUO-002740H	FS 05-16-54-1197
P-55-003727	CA-TUO-002741	FS 05-16-54-1198
P-55-003776	CA-TUO-002791	FS 05-16-53-0561
P-55-003782	CA-TUO-002797/H	SEGERSTOM 1
P-55-004047	CA-TUO-003064	
P-55-004048	CA-TUO-003065	
P-55-004140	CA-TUO-003164H	The Big Oak Flat Road; FS 05-1
P-55-004144	CA-TUO-003168	FS 05-16-51-0715
P-55-004150	CA-TUO-003175H	FS 05-16-54-1248; Rush Creek
P-55-004153	CA-TUO-003178H	FS 05-16-54-1261 & 1262
P-55-004156	CA-TUO-003182H	FS 05-16-54-1305
P-55-004250	CA-TUO-003277	Mi-wok 213
P-55-004340	CA-TUO-003372/H	
P-55-004346	CA-TUO-003378	
P-55-004350	CA-TUO-003382	
P-55-004351	CA-TUO-003383H	
P-55-004376	CA-TUO-003409H	FS 05-16-51-0943
P-55-004503	CA-TUO-003962H	Confidence East Dump and Scat
P-55-004700		
P-55-004934	CA-TUO-004178H	Mt. Jefferson Mine [and] Mt. Jeff
P-55-005093		Big Oak Flat; CHL #406
P-55-005094		Groveland; CHL #446
P-55-005240		Harvard Mine Road / Old State H
P-55-005293	CA-TUO-004260H	HR Crocker's Arrastra
P-55-005303		Mount Carmel Catholic Church
P-55-005338		A. Gross Saloon; Wheelock Hou
P-55-005339		
P-55-005340		Myer's Saloon/ Kempston's Boot
P-55-005341		Robert Orford Store; Fandango

Report Detail: TO-05505

P-55-005342		Tin Garage
P-55-005343		New York Store; Rosenbloom St
P-55-005344		Barn
P-55-005345		Mrs. Elizabeth Fox Boarding Hou
P-55-005346		Tin Garage
P-55-005347		Bath House
P-55-005348		Cohn-Morris Store; Wells fargo;
P-55-005349		Stone Outbuilding
P-55-005350		Mountain Brow Lodge #82, I.O.O
P-55-005351		
P-55-005352		Charles B. Cutting House
P-55-005353		Water tank and Windmill
P-55-005357		Morgan House, Dr. Richli House,
P-55-005401		Reboul's Trading Post, Tiano's M
P-55-005547		Town of Sonora; Campo de Son
P-55-006022		CA-018-TM-204
P-55-006023		CA-018-TM-205
P-55-006138		V-5
P-55-006186	CA-TUO-004408	FS 05-16-53-0722
P-55-006268		FS 05-16-53-0012; Cow Creek R
P-55-006319		Cassinelli House; Cassinelli/Scia
P-55-006492		Big Oak Flat No. 1 Lode, FT-33
P-55-006502		Deer Flat Road
P-55-006736	CA-TUO-004603H	V-4; FT-31
P-55-006850	CA-TUO-004688H	YG-2; Beckwith Ranch Residenc
P-55-006859	CA-TUO-004714H	PL-3 (Price and Smith); YG-11 (
P-55-006925		Rock Alignment J; FT -101
P-55-006926		FT-102
P-55-006928		FT-104
P-55-006929		FT-105
P-55-006933		FT-112
P-55-006935		Stockton-Sonora Road
P-55-006945		H120FB #2; FT-32
P-55-006950		FT-121
P-55-006952		FT-1
P-55-006983		Moccasin Diversion Dam; JT-5
P-55-006989		Confidence Inn & Café; demolish
P-55-009802		Town of Cold Springs

No. resources: 132

Has informals: No

Location information

County(ies): Tuolumne

USGS quad(s): Ackerson Mountain, Ascension Mountain, Chinese Camp, Columbia, Columbia SE, Donnell Lake, Groveland, Jawbone Ridge, Keystone, Knights Ferry, La Grange, Melones Dam, Moccasin, Penon Blanco Peak, Pinecrest, Sonora, Sonora Pass, Standard, Strawberry, Twain Harte

Address:

PLSS:

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	12/5/2017	rhards

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: TO-06032

Identifiers

Report No.: TO-06032

Other IDs:	*Type*	*Name*
	NADB-R	1365813

Cross-refs:

Citation information

Author(s): Leach-Palm, L., J. Costello, and J. Marvin
Year: 2006 (Mar)
Title: Cultural Resourses Survey of a 12.69 Acre Parcel, Near Sonora, Tuolumne County, CA (APN #056-03-07)
Affliliation: Foothill Resources Ltd.
No. pages: 18
No. maps:
Attributes: Field study
Inventory size: 12.69 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Tuolumne
USGS quad(s): Sonora
Address:
PLSS: T1N R14E Sec. 1 MDBM

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	8/11/2022	lmeyer1

IC actions:	*Date*	*User*	*Action taken*
	10/2/2013	jay	Appended records from CCIC NADB database

Record status:

Report Detail: TO-06807

Identifiers

Report No.: TO-06807

Other IDs:

Type	*Name*
NADB-R	1367084

Cross-refs:

Citation information

Author(s): Barnes, J.
Year: 2008 (Feb)
Title: Cultural Resource Inventory Report, Sonora Encampment Trespass Cleanup, case # CA-018-S-TM-08/02
Affliliation: BLM, Folsom Field Office
No. pages: 14
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 1 acre
Disclosure: Not for publication
Collections: No

General notes

See also linear survey plot

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-007862	CA-TUO-005065H	Associated with CCC (1930's)
P-55-007863	CA-TUO-005066H	
P-55-007864		

No. resources: 3
Has informals: No

Location information

County(ies): Tuolumne
USGS quad(s): Sonora
Address:
PLSS: T1N R14E Sec. 2 MDBM

Database record metadata

	Date	*User*
Entered:	10/2/2013	jay
Last modified:	3/20/2024	egreathouse

IC actions:

Date	*User*	*Action taken*
10/2/2013	jay	Appended records from CCIC NADB database
1/25/2016	EGreathouse	EG

Record status:

Report Detail: TO-08988

Identifiers

Report No.: TO-08988
Other IDs:
Cross-refs: Extends into another county as CA-08988
Extends into another county as MP-08988
Extends into another county as ME-08988
Extends into another county as SJ-08988
Extends into another county as ST-08988
See also CA-09258
See also MP-09258
See also TO-09258

Citation information

Author(s): Parker, A. and A. Whitaker
Year: 2019 (Mar)
Title: Archaeological Survey Report for Director's Orders Hazard Tree Removal in District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, CA
Affliliation: Far Western Anthropological Research Group, Inc. for Caltrans
No. pages: 775
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study, Monitoring
Inventory size: 3782 acres; 455.25 miles
Disclosure: Not for publication
Collections: No

General notes

See also TO-09258

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-000115		Swerer's Store, Tuttletown; TCH-
P-55-000116		Mullins Cabin, Jackass Hill
P-55-001020	CA-TUO-003956H	Site 1; ISO-TUO-49-08
P-55-001423	CA-TUO-000400/H	4-Tuo-S400 (temp. no.)
P-55-001613	CA-TUO-000591H	TUO-S-591; NMP-248
P-55-001630	CA-TUO-000608H	Sierra Railway, Angels Branch
P-55-002297	CA-TUO-001301H	Bell Quartz Mine; TUO-G-34; TU
P-55-002298	CA-TUO-001302H	TUO-G-21
P-55-002305	CA-TUO-001309H	TUO-G-18; Angels Branch Sierra
P-55-002315	CA-TUO-001319H	GANDA-709-58H/1209-66H; Rey
P-55-003544		G-1 and G-2; FT-20
P-55-003545		
P-55-003550		Bridge 32C-44
P-55-004198	CA-TUO-003224H	Oak Park 1
P-55-004199	CA-TUO-003225H	Oak Park 2
P-55-004277	CA-TUO-003306H	CUSDE #2; Dugout
P-55-004747		Columbia National Historic Land
P-55-005240		Harvard Mine Road / Old State H
P-55-005463	CA-TUO-006116H	St. James Masonic Cemetery; J
P-55-005548		Bridge #32-6
P-55-005965		Pedro Ranch, Barns and Outbuil
P-55-005975		Eaton 2; Miller House
P-55-006022		CA-018-TM-204
P-55-006851	CA-TUO-004689	YG-3
P-55-006859	CA-TUO-004714H	PL-3 (Price and Smith); YG-11 (
P-55-006882	CA-TUO-005562H	Old Highway 49; HDR-DP-83
P-55-006926		FT-102
P-55-006927		FT-103
P-55-006928		FT-104

Report Detail: TO-08988

P-55-006929		FT-105
P-55-006930	CA-TUO-006131H	FT-106
P-55-006933		FT-112
P-55-006935		Stockton-Sonora Road
P-55-006936	CA-TUO-006124H	Old Highway 120 segment and r
P-55-006953		FT-2
P-55-006960		FT-9
P-55-006963		FT-12; wall
P-55-006966		JT-20
P-55-006967		JT-21
P-55-006980		JT-2
P-55-006981		JT-3
P-55-006982		JT-4
P-55-006983		Moccasin Diversion Dam; JT-5
P-55-006984		JT-6
P-55-007189		P-1
P-55-007190		P-2
P-55-007224	CA-TUO-004718	Jamestown BRM site
P-55-007227		Lot 34 Rock Wall
P-55-007240	CA-TUO-004730H	Brown's Flat Lot 34 and 37
P-55-007746		SJ-1; Placer Mining Area
P-55-009712		CA-018-TM-235
P-55-009713	CA-TUO-006115H	TUO-49-01
P-55-009714		TUO-49-03
P-55-009729		TUO-49-06
P-55-009730		TUO-49-07
P-55-009731		TUO-49-10
P-55-009732	CA-TUO-006123H	TUO-49-11
P-55-009733		TUO-120-03
P-55-009734		ISO-TUO-49-01
P-55-009735		ISO-TUO-49-02
P-55-009736		ISO-TUO-49-03
P-55-009737		ISO-TUO-49-05
P-55-009738		ISO-TUO-49-06
P-55-009739		ISO-TUO-49-07
P-55-009740		ISO-TUO-49-09
P-55-009741		ISO-TUO-49-10
P-55-009742		ISO-TUO-49-11
P-55-009743		ISO-TUO-49-12
P-55-009744		ISO-TUO-49-13
P-55-009745		ISO-TUO-49-15
P-55-009746		ISO-TUO-49-16
P-55-009747		ISO-TUO-49-17
P-55-009748		ISO-TUO-49-18
P-55-009749		ISO-TUO-49-19
P-55-009750		ISO-TUO-120-01
P-55-009751		ISO-TUO-120-02
P-55-009752		ISO-TUO-120-03
P-55-009762		TUO-49-05

No. resources: 78

Has informals: No

Location information

County(ies): Tuolumne

USGS quad(s): Chinese Camp, Columbia, Keystone, Melones Dam, Moccasin, Sonora

Address:

PLSS:

Report Detail: TO-08988

Database record metadata

	Date	*User*
Entered:	4/9/2019	EGreathouse
Last modified:	7/9/2021	egreathouse
IC actions:		
Record status:		

Report Detail: TO-09258

Identifiers

Report No.: TO-09258
Other IDs:
Cross-refs: Extends into another county as CA-09258
Extends into another county as MP-09258
Extends into another county as ME-09258
Extends into another county as SJ-09258
Extends into another county as ST-09258
See also CA-08988
See also MP-08988
See also ME-08988
See also SJ-08988
See also ST-08988
See also TO-08988

Citation information

Author(s): Waechter, S. A.
Year: 2019 (Nov)
Title: Historic Property Survey Report for Director's Orders Hazard Tree Removal Project for District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, California, State Routes 4, 5, 12, 26, 49, 88, 108, 120 and 140; E-FIS 10-1600-0133, EA 10-1F6403, Contract 06A2312, Task Order 11
Affliliation: Far Western Anthropological Research Group, Inc.
No. pages: 28
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 3782 acres; 455.25 miles
Disclosure: Not for publication
Collections: No

General notes

See also TO-08988

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Tuolumne
USGS quad(s): Chinese Camp, Columbia, Keystone, Melones Dam, Moccasin, Sonora
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	7/7/2021	egreathouse
Last modified:	7/9/2021	egreathouse

IC actions:	*Date*	*User*	*Action taken*
	7/9/2021	egreathouse	eg

Record status:

Report Detail: TO-09802

Identifiers

Report No.: TO-09802
Other IDs:
Cross-refs: Extends into another county as MP-09802

Citation information

Author(s): Martisius, N. and Melinda Pacheco Patrick
Year: 2024 (Feb)
Title: Archaeological Survey Report for the District 10 Middle-Mile Broadband Initiative Project, State Routes 132 and 140, Mariposa and Tuolumne Counties, California; 10-MPA/TUO-132 PM 0.027/R0.460/3.774/R7.636/18.746; 10-MPA-140 PM 22.08/51.803; Project ID 1022000254, EA 10-1Q210
Affliliation: Far Western Anthropological Rsearch Group, Inc. for Caltrans
No. pages: 273
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 1005.62 acres; 46.2 linear miles
Disclosure: Not for publication
Collections: No

General notes

Inventory size not delineated by county

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Tuolumne
USGS quad(s): La Grange, Penon Blanco Peak
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	3/6/2024	egreathouse
Last modified:	3/6/2024	egreathouse

IC actions:	*Date*	*User*	*Action taken*
	3/6/2024	egreathouse	eg

Record status:

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/4/2024

Records Search File No.: 12880/O
Project: CalRecycle Rotelli Burn Dump Remediation Project; Update to ¼-mile radius

Genevieve Pennanen
Nichols Consulting Engineers (NCE)
224 Kingsbury Grade Road, Suite 203
Stateline, NV 89449
775-588-2505 gpennanen@ncenet.com

Invoice address: P.O. Box 1760
Zephyr Cove, NV 89448

Dear Ms. Pennanen:

The Central California Information Center received your **Priority Response update** record search request for the project area referenced above, located on the Sonora 7.5' quadrangle in Tuolumne County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CcaIC, the locations of resources/reports are provided in the following format: ☐ custom GIS maps ☒ GIS Data/shape files

Summary Data:

Resources within the project area:	1: P-55-007863 (no new data)
Resources within the ¼-mile radius:	2: P-55-007862, 7864 (no new data)
Reports within the project area:	1: TO-06807 (no new data)
Reports within the ¼-mile radius:	8: TO-01049, 5498, 5501, 5505, 6032, 8988, 9258, 9802 **1 new report data: TO-08634**

Resource Database Printout (list): ☐ enclosed ☐ not requested ☒ nothing listed
Resource Database Printout (details): ☐ enclosed ☐ not requested ☒ nothing listed
Resource Digital Database Records: ☐ enclosed ☐ not requested ☒ nothing listed
Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed
Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed
Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed
Resource Record Copies: ☐ enclosed ☐ not requested ☒ nothing listed
Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Historic Properties Directory: New Excel File: Built Environment Resource Directory (BERD)
Dated 9/23/2022
Not all resources listed in the BERD are mapped in GIS, nor do we have records on file for; if you identify additional resources in the BERD that you need copies of, contact the IC. ☐ enclosed ☐ not requested ☒ nothing listed
Archaeological Resource Directory (ARD excerpt): ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: ☐ enclosed ☒ not requested ☐ nothing listed

Local Inventories: ☐ enclosed ☒ not requested ☐ nothing listed

GLO and/or Rancho Plat Maps: ☐ enclosed ☒ not requested ☐ nothing listed

Shipwreck Inventory: ☒ not available at CCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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

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

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

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS). **Note:** Billing will be transmitted separately via email by our Financial Services office* ($243.82), payable within 60 days of receipt of the invoice.

If you wish to include payment by Credit Card, you must wait to receive the official invoice from Financial Services so that you can reference the CMP # (Invoice Number), and then contact the link below:

https://commerce.cashnet.com/ANTHROPOLOGY

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: ARBilling@csustan.edu, CSU Stanislaus Financial Services

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TO-08634		1982	Scientific Resource Surveys, Inc.	Cultural Resources Survey Report, City of Sonora (Sewer Line Repair and Replacement Project).	Scientific Resource Surveys, Inc., for the Tuolumne County Water District No. 2 and the SWRCB	55-002316, 55-002317, 55-002318, 55-002319

Report Detail: TO-08634

Identifiers

Report No.: TO-08634
Other IDs:
Cross-refs:

Citation information

Author(s): Scientific Resource Surveys, Inc.
Year: 1982 (Nov)
Title: Cultural Resources Survey Report, City of Sonora (Sewer Line Repair and Replacement Project).
Affliliation: Scientific Resource Surveys, Inc., for the Tuolumne County Water District No. 2 and the SWRCB
No. pages: 136
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: Linear: no acreage given
Disclosure: Not for publication
Collections: No

General notes

See pages 135-141 for list of historic buildings along the streets in Sonora involved in the project

Associated resources

Primary No.	*Trinomial*	*Name*
P-55-002316	CA-TUO-001320/H	
P-55-002317	CA-TUO-001321/H	(none) Former route of an "India
P-55-002318	CA-TUO-001322/H	VCE #1
P-55-002319	CA-TUO-001323/H	

No. resources: 4
Has informals: Yes

Location information

County(ies): Tuolumne
USGS quad(s): Sonora

Address: *Address*	*City*	*Assessor's parcel no.*	*Zip code*
	Sonora		

PLSS: T2N R14E Sec. 25, 36 MDBM
T1N R14E Sec. 1 MDBM

Database record metadata

	Date	*User*
Entered:	8/18/2017	EGreathouse
Last modified:	3/29/2019	rhards

IC actions:	*Date*	*User*	*Action taken*
	8/18/2017	EGreathouse	eg

Record status:

Appendix C

Survey Overview Photos

CULTURAL RESOURCES PHOTOGRAPH RECORD

Project Name: CalRecycle Rotelli Burn Dump Remediation (870.04.55)

Date	Filename	Description	View
3/27/2024	IMG_6115.HEIC	Overview of southern project area ("Borrow Area") located on private property.	S
3/27/2024	IMG_6116.HEIC	Overview of middle project area ("BLM Wedge"), west end. Vegetation grows densely along unnamed drainage.	E
3/27/2024	IMG_6117.HEIC	Overview of middle project area ("BLM Wedge"), east end.	W
3/27/2024	IMG_6123.HEIC	Overview of northern project area ("Rotelli Area"), overlooking unnamed drainage.	E
3/27/2024	IMG_6138.HEIC	Overview of northern project area ("Rotelli Area").	NE
3/27/2024	IMG_6139.HEIC	Ground visibility at middle project area ("BLM Wedge").	Down
3/27/2024	IMG_6140.jpg	Ground visibility at northern project area ("Rotelli Area").	Down



IMG_6115.HEIC



IMG_6116.HEIC



IMG_6117.HEIC



IMG_6123.HEIC



IMG_6138.HEIC



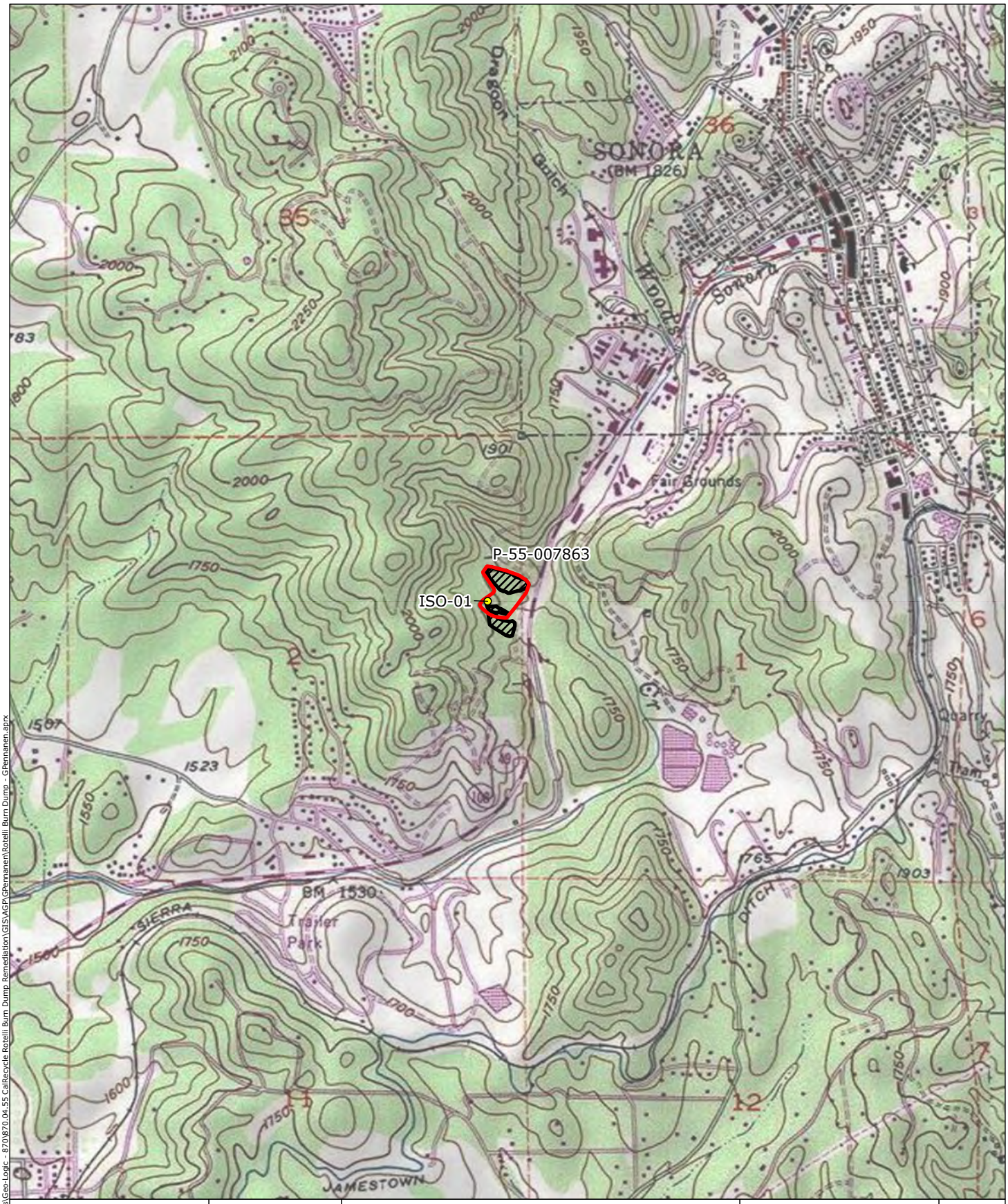
IMG_6139.HEIC



IMG_6140.jpg

Appendix D

Cultural Resources Overview Map



Legend

- Isolate
- Site Boundary
- APE

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Cultural Resources Overview Map

N

1:24,000

0 1,000 2,000 ft.

Appendix D

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI USA Topo Basemap	870.04.55	G. Pennanen	4/4/2024	-	J. Hall

Document Path: P:\Active Projects\Geo-Logic - 870\870.04.55 CalRecycle Rotelli Burn Dump Remediation\GIS\AGP\GPennanen\Rotelli Burn Dump - GPennanen.aprx

Appendix E

DPR Site Form

State of California — The Resources Agency	**Primary #:** P-55-007863
DEPARTMENT OF PARKS AND RECREATION	**HRI #:**
PRIMARY RECORD	**Trinomial #:** CA-Tuo-005066H
	NRHP Status Code:
Other Listings	
Review Code	**Reviewer** **Date**

***Resource Name or #:** CA-018-TM-333

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted**

***a. County:** Tuolumne

***b. USGS 7.5' Quad:** Sonora, CA **Date:** 2021 **T** 1 N.; **R** 14 E.; SE **¼ of** NE **¼ of Sec** 2; M.D. **B.M.**

c. Address: N/A Zip: N/A

d. UTM: Zone: 10; 728726 mE; 4205889 mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Located off Highway 49, approximately 0.10 miles north of Mill Villa Court, outside Sonora, California.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This resource is a large historic refuse dump associated with the Rotelli Burn Dump located on a generally east facing slope with two unnamed drainages that flow from west to east, approximately 500 feet west of Woods Creek. The site measures 550 feet north-south by 400 feet east-west. The surrounding vegetation consists of a mixed ponderosa pine-oak forest with an understory of manzanita, toyon, and poison oak.

See Continuation.

***P3b. Resource Attributes:** AH4. dumps

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (Isolates)

P5a. Photo or Drawing



P5b. Description of Photo: 3/27/34; Facing northwest; overview of artifacts in drainage.

***P6. Date Constructed/Age:**
☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Bureau of Land Mangement (BLM),
63 Natoma Street, Folsom, CA 95630,
and private property

***P8. Recorded by:**
Genevieve Pennanen | NCE
200 E. 2nd Street, Suite 1210
Reno, NV 89501

***P9. Date Recorded:** 4/2/2024

***P10. Survey Type:** Intensive

***P11. Report Citation:**
NCE 2024
Rotelli Burn Dump Remediation Project Cultural Resources Inventory Report. Submitted to the USACE, San Francisco office, on behalf of Geo-Logic. Report on file at NCE, Reno.

***Attachments:** ☐NONE ☒Location Map ☒Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record
☒Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☒Photograph Record ☐Other (List):

P3a. Description (continued):
The Rotelli Dump (also called the Rotelli Private Dump, the Sonora Refuse Burn Dump, and the Sonora Refuse Dump) was historically used as a municipal dump site for Sonora area residents where waste was brought to be burned. The Solid Waste Information System database identifies the dump as Site 55-CR-0037, the "Rotelli Private Dump" (CalRecycle 2024). The initial start of operation is unclear, though multiple local news sources report that Rotelli's grandfather had established the site in the 1920s. Historic aerials from 1945 and 1946 depict heavy disturbance of the area, followed by revegetation from 1984 to present (Historic Aerials 2024). This is consistent with the timeline presented by the Tuolumne County Environmental Health Division in their 2021 "Opportunity to Correct" (OTC) order, which stated that their records indicate the dump closed its operation in 1965 and the facility filed paperwork to close as a Closed, Illegal, and Abandoned (CIA) site in 1994 (Tuolumne County 2021b). Since the dump's closure and with permission from the Rotelli family, the area has since been used as a homeless encampment (named "Camp Hope"). Due to the burn ash and other hazardous material from its historic use, as well as many other health and safety violations, the camp was closed, however many transients continue to utilize the area.

The dump consists of thousands of mostly residential debris, with some commercial/industrial material, including but not limited to: ceramic dishware, ceramic insulators, glass containers (clear, aqua, green, olive, amber, cobalt, and milk), metal containers (sanitary cans, bimetal cans, rectangular oil cans, paint cans, food tins, barrels), metal cables, metal scrap, and vehicle parts. Modern trash from the homeless population and illegal dumping post-facility closure is also pervasive throughout the site.

Three artifact concentrations were identified as part of the present effort. Concentration 1 is the original extent of this site recorded in 2008, located in and around a small, unnamed drainage. This record also notes "another part of the dump" was observed in a separate drainage to the north but was not visited due to its location on private land. This land is now the active project area for this report (see P11. Report Citation) and was able to be accessed. Concentrations 2 and 3 were located along the aforementioned northern drainage.

Highway 49 is approximately 100 feet east of the site. The site may also extend further to the north, west and south; however, these areas are located on private property and thus survey of these areas was not attempted. The site is located behind an access road swing gate and a chain-link and barbed wire security fence installed in 2022 to deter pedestrian and vehicular access. Multiple dirt access roads and a graveled parking lot are located in and around the site.

The present condition of the site is poor. Impacting agents include erosion, modern dumping, looting, and reuse of the area as a homeless encampment. Various forms of illegal grading, excavating, leveling, and historic mine alteration were also noted in the OTC order (Tuolumne County 2021b).

***Resource Name or #:** CA-018-TM-333

***A1. Dimensions: a. Length:** 550 feet (N-S) × **b. Width:** 400 feet (E-W)
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other: GIS
Method of Determination:
☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation
☒ Property boundary ☐ Other (Explain):

Reliability of Determination: ☐ High ☒ Medium ☐ Low | Explain:

Limitations: ☒ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ☐ Disturbances ☐ Vegetation
☐ Other (Explain):

A2. Depth: ☐ None ☒ Unknown | Method of Determination:

***A3. Human Remains:** ☐ Present ☐ Absent ☐ Possible ☒ Unknown (Explain): No subsurface investigation conducted.

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.):
Concentration 1 is a 275 feet (E-W) by 200 feet (N-S) refuse scatter. This concentration is the original extent of the site as recorded in 2008, however the boundary has been expanded to include artifacts that have displaced since then. A meandering dirt access road encloses the concentration on all sides. An unnamed drainage flowing west to east runs through the center of the concentration. The majority of the artifacts were found in and along this drainage. Cultural constituents include glass containers (screw top bottles, milk bottles, soda bottles, mason jars), glass fragments (clear, amber, cobalt, and milk), ceramic dishware, insulators, brick, a metal button, and bimetal pull top cans. Modern trash is scattered throughout the area. A large, abandoned trailer with modern trash was also noted on the west side of the concentration.

Concentration 2 is a 200 feet (N-S) by 160 feet (E-W) refuse scatter located in and along an unnamed drainage, on a flat above and west of the drainage, and on the east facing slope between them. The flat has thousands of small glass fragments in its open area, and metal food tins were found in the tall grass on the flat's edge. On the slope leading down from the flat to the creek and inside the creek, artifacts include metal food tins, metal cans (sanitary, bimetal pull top, paint cans), metal posts, metal sheets, metal fencing, metal cables, metal barrels, car parts, tires, bench springs, glass fragments (milk, green, amber, cobalt, clear, and aqua), and ceramic dishware fragments. A rotting deer carcass was also noted in the drainage. Modern trash is scattered throughout the area.

Concentration 3 is a 20 feet (E-W) by 12 feet (N-S) refuse scatter located on the south side of an unnamed drainage. Artifacts include glass fragments (clear, amber, green, olive, and milk), metal framing, metal cable, a metal pipe, metal fragments, bimetal pull top cans, a fire extinguisher, and rubber tires. Modern trash was noted in and around the concentration.

***A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
Thousands of artifacts are found throughout the site as the area had previously operated as a burn dump. Items not associated with the above features include: ceramic dishware fragments, ceramic insulators, bricks, buttons, glass containers and fragments (clear, aqua, cobalt, amber, green, olive, and milk), rubber tires, metal vehicle parts, metal scrap, metal cans of various sizes (sanitary and bi-metal). Modern trash is scattered throughout the area.

***A6. Were Specimens Collected?** ☒ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ☐ Good ☐ Fair ☒ Poor | Describe disturbances:
This site is a refuse scatter with multiple episodes of dumping, mixing, burning, and erosion. As noted in multiple LEA inspections, the site has been disturbed by active looting. Additionally, the majority of artifacts have been found downslope, in and along the unnamed drainages in the area, suggesting that artifacts may have been displaced from their original dumped positions.

***A8. Nearest Water** (Type, distance, and direction.): Woods Creek, 500 feet east

***A9. Elevation:** 1750 feet

A10. Environmental Setting **(**Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.)**:**
The site is located on an east facing slope of 0-15 degrees with two unnamed drainages that flow from west to east. The elevation ranges from 1,700 feet to 1,750 feet Vegetation consists of a mixed ponderosa pine-oak forest with an understory of manzanita, toyon, and poison oak.

A11. Historical Information:
This resource is a large refuse dump associated with the Rotelli Burn Dump (also called the Rotelli Private Dump, the Sonora Refuse Burn Dump, and the Sonora Refuse Dump). The Rotelli Dump was historically used as a municipal dump site for Sonora area residents where waste was brought to be burned. The Solid Waste Information System database identifies the dump as Site 55-CR-0037, the "Rotelli Private Dump" (CalRecycle 2024). The initial start of operation is unclear, though multiple local news sources report that Rotelli's grandfather had established the site in the 1920s. Historic aerials from 1945 and 1946 depict heavy disturbance of the area, followed by revegetation from 1984 to present (Historic Aerials 2024). This is consistent with the timeline presented by the Tuolumne County Environmental Health Division in their 2021 "Opportunity to Correct" (OTC) order, which stated that their records indicate the dump closed its operation in 1965 and the facility filed paperwork to close as a Closed, Illegal, and Abandoned (CIA) site in 1994 (Tuolumne County 2021b). Since the dump's closure and with permission from the Rotelli family, the area has since been used as a homeless encampment (named "Camp Hope"). Due to the burn ash and other hazardous material from its historic use, as well as many other health and safety violations, the camp was closed, however many transients continue to utilize the area.

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☒ 1914-1945 ☒ Post 1945 ☐ Undetermined | **Describe position in regional prehistoric chronology or factual historic dates if known:** Determined from aerial imagery and newspaper articles.

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations):
This site contains very little data potential due to its poor integrity and overall site condition. Further investigation would not improve our understanding of the site beyond what is already known -- it is a historic dump which operated approximately from approximately the 1920s to 1965, with refuse originating from the city of Sonora and its surrounding area. The site has been heavily disturbed with modern trash from illegal dumping and the homeless encampment, and the repeated episodes of mixing, burning, and burying as part of the burn dump process have rendered the identification of undisturbed artifacts and features nearly impossible.

A14. Remarks:

A15. References (Documents, informants, maps, and other references):

Barnes, J.
2008a CA-018-TM-333 Primary Record, *Section 106 compliance for the Sonora encampment trespass cleanup project*, Tuolumne County, CA.
2008b CA-018-TM-333 Archaeological Site Record, *Section 106 compliance for the Sonora encampment trespass cleanup project*, Tuolumne County, CA.

CalRecycle
2024 Rotelli Private Dump (55-CR-0037). Solid Waste Information System Database, https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/3940, accessed April 2, 2024.

CEQAnet Web Portal
2022 Rotelli Burn Dump Site Security Fencing. Electronic Document, https://ceqanet.opr.ca.gov/2022040010, accessed April 3, 2024.

Historic Aerials
2024 Historic Aerials: Viewer. Electronic Document, https://historicaerials.com/viewer, accessed April 3, 2024.

Tuolumne County
2021a Press Release, Community Development Department. Electronic Document, https://www.tuolumnecounty.ca.gov/DocumentCenter/View/16626/Press-Release, accessed April 2, 2024.

2021b Opportunity to Correct, Environmental Health Division. Electronic Document, https://www.tuolumnecounty.ca.gov/DocumentCenter/View/16689/Environmental-Health-Opportunity-to-Correct, accessed April 2, 2024.

A16. Photographs: See the attached photo sheet.

***A17. Form Prepared by:** Genevieve Pennanen **Date:** 4/2/2024
Affiliation and Address: NCE, 200 E. 2nd Street, Suite 1210, Reno, NV 89501

CULTURAL RESOURCES PHOTOGRAPH RECORD

Project Name: CalRecycle Rotelli Burn Dump Remediation Project (870.04.55)

Date	Filename	Site/Iso #	Feature #	Description	View
3/27/2024	IMG_6105.HEIC	P-55-007863		Site overview.	E
3/27/2024	IMG_6123.HEIC	P-55-007863		Site overview with northern drainage.	E
3/27/2024	IMG_6109.HEIC	P-55-007863		Site overview with southern drainage.	W
3/27/2024	IMG_6111.HEIC	P-55-007863	C1	Concentration 1 overview.	NE
3/27/2024	IMG_6107.HEIC	P-55-007863	C1	Trailer and refuse within C1.	E
3/27/2024	IMG_6132.HEIC	P-55-007863	C2	Concentration 2 overview.	NW
3/27/2024	IMG_6121.HEIC	P-55-007863	C2	Concentration 2, on flat.	N
3/27/2024	IMG_6125.HEIC	P-55-007863	C2	Concentration 2, artifacts on slope.	NW
3/27/2024	IMG_6127.HEIC	P-55-007863	C2	Concentration 2, artifacts fallen down slope into drainage.	S
3/27/2024	IMG_6129.HEIC	P-55-007863	C2	Concentration 2, artifacts in drainage.	E
3/27/2024	IMG_6135.HEIC	P-55-007863	C3	Concentration 3 overview.	W



IMG_6105.HEIC



IMG_6123.HEIC



IMG_6109.HEIC



IMG_6111.HEIC



IMG_6107.HEIC



IMG_6132.HEIC



IMG_6121.HEIC



IMG_6125.HEIC



IMG_6127.HEIC

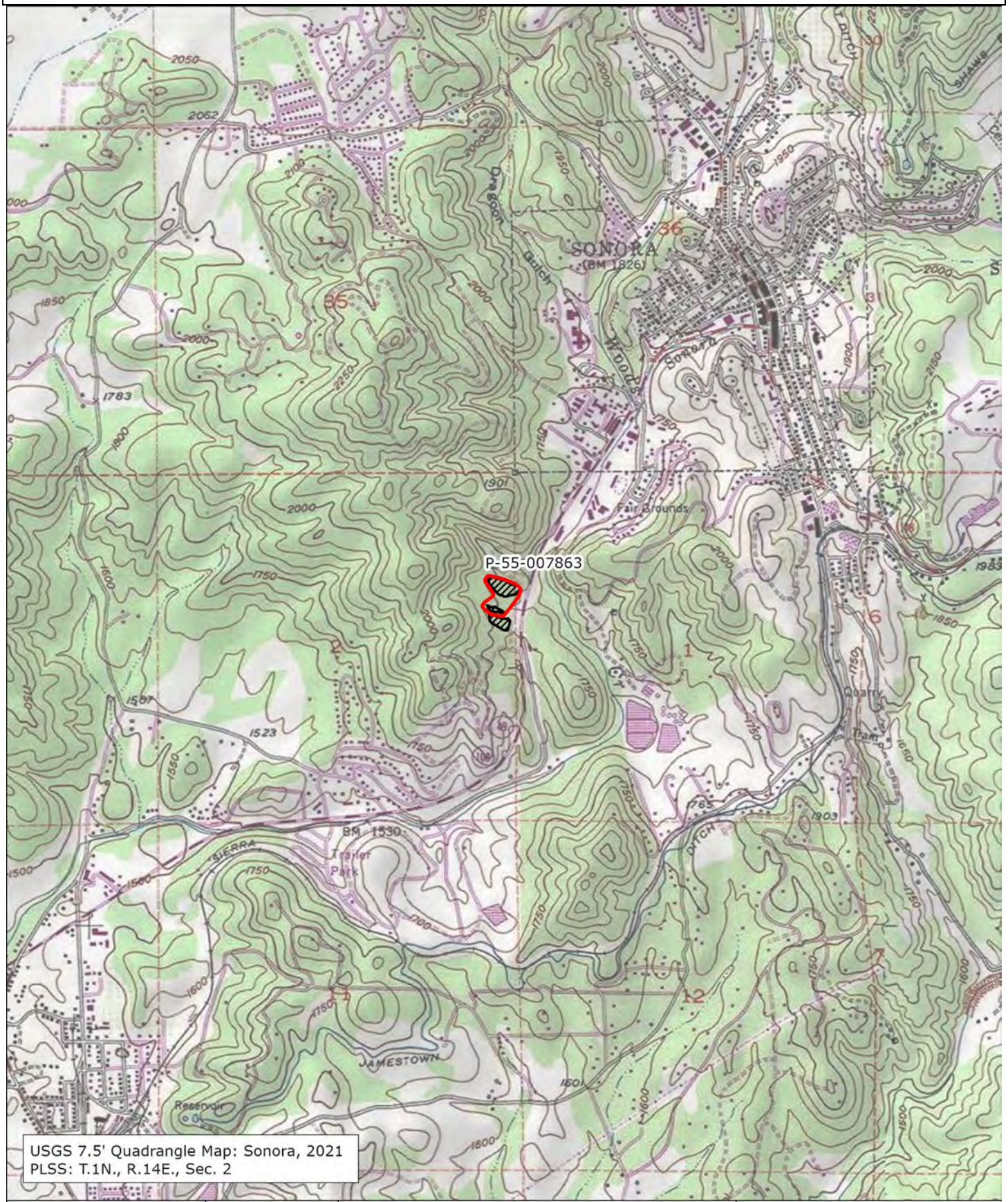


IMG_6129.HEIC



IMG_6135.HEIC

State of California — The Resources Agency	Primary #: P-55-007863	HRI #:
DEPARTMENT OF PARKS AND RECREATION – LOCATION MAP	Trinomial #: CA-Tuo-005066H	



Legend
- Site Boundary
- APE

NCE
CalRecycle
Geo-Logic ASSOCIATES

CalRecycle Rotelli Burn Dump Remediation Project

Site Location Map

N

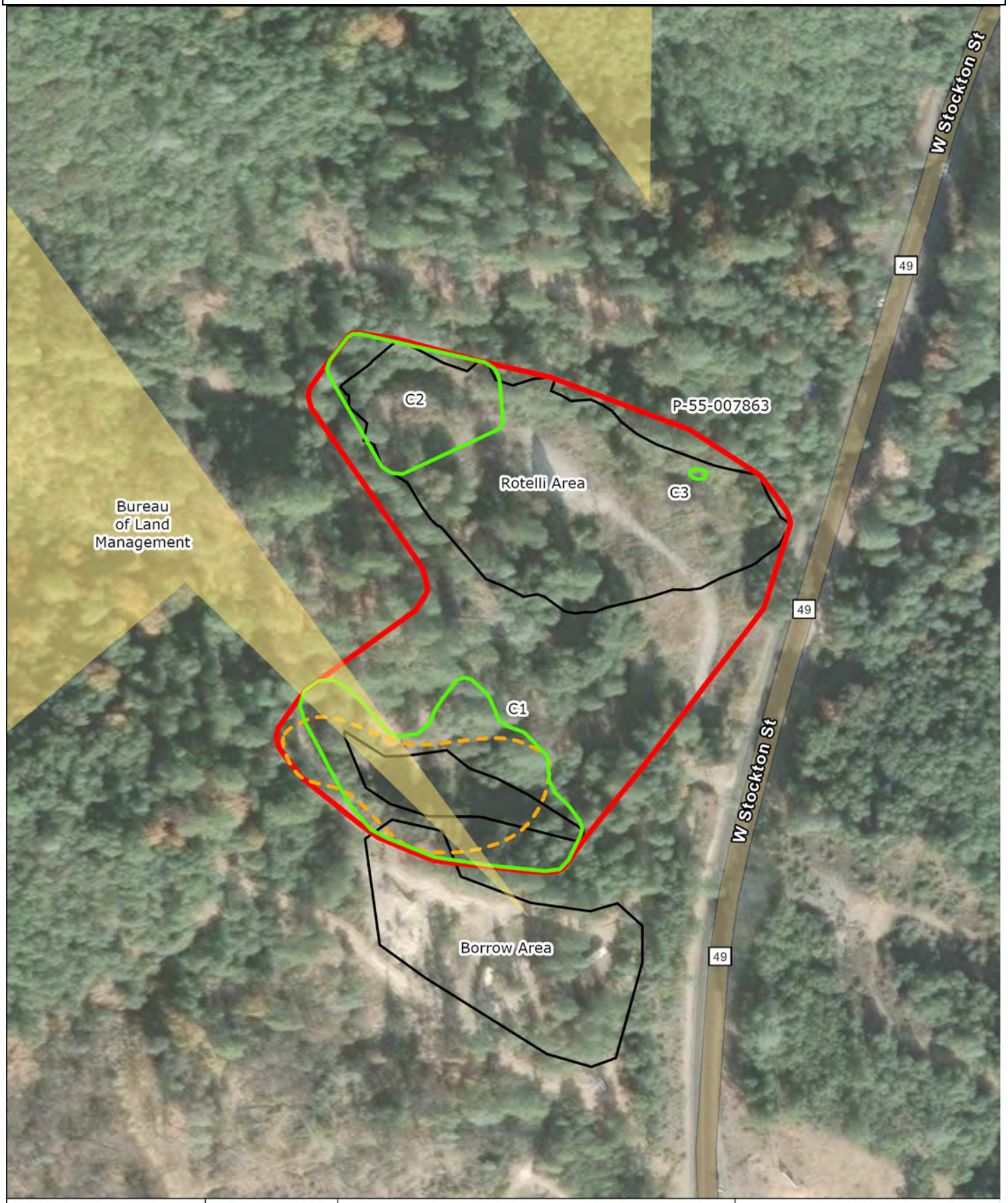
1:24,000

0 1,000 2,000 ft.

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI USA Topo Basemap	870.04.55	G. Pennanen	4/3/2024	4/5/2024	J. Hall

*Required information

State of California — The Resources Agency	Primary #: P-55-007863	HRI #:
DEPARTMENT OF PARKS AND RECREATION – SKETCH MAP	Trinomial #: CA-Tuo-005066H	



Legend

- Concentration
- Previous Site Boundary
- Site Boundary
- APE
- Federal Land Ownership (BLM)

NCE
CalRecycle
Geo-Logic Associates

CalRecycle Rotelli Burn Dump Remediation Project

Site Sketch Map

N

1 in. = 150 ft.

0 150 ft.

SOURCE	JOB NUMBER	DRAWN	DATE	REVISED	APPROVED
ESRI Imagery with Metadata Basemap	870.04.55	G. Pennanen	4/3/2024	4/5/2024	J. Hall

*Required information

Appendix F

Isolate Table

Newly Recorded Isolate Locations.

Field No.	Age	Description	UTMs
ISO-01	Historic	Mining adit	Zone 10; 728669 mE; 4205854 mN