

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION CEQA-24-0012 (Ellis Road Bridge Replacement Project)

Project Title:	Ellis Road Bridge Replacement Project Federal Project Number: BRLO-5916(131)
Lead Agency Name and Address:	03-YUB-County of Yuba Planning Department 915 8 th Street, Suite 123 Marysville, CA 95901
Project Location:	Ellis Road, Community of Hallwood
Applicant/Owner	County of Yuba Public Work's Department 915 8 th Street, Suite 125 Marysville, CA 95901
General Plan Designatio	n (s): Natural Resources
Zoning:	"AE-80" Exclusive Agricultural, 80 Acres Minimum
Contact Person:	Ciara Fisher, Planner III
Phone Number:	530-749-5463
Date Prepared	August 2024

Project Description

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road Bridge over Simmerly Slough (Project) (State Br. No. 56C-0020). Simmerly Slough, a jurisdictional water of the United States (U.S.) and State, is the only surface water feature within the Project area. The Project is located on Ellis Road approximately 2 miles north of Marysville and approximately 0.2 miles east of Highway 70 in an agricultural part of Yuba County, California (Figure 1. Project Vicinity and Figure 2. Project Location). The purpose of this Project is to provide a structure that meets current design standards and improve safety and operation of the facility.

The existing 44-foot-long, 20-foot wide bridge was originally constructed in 1928 and consists of a three-span continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed

comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cubic feet per second of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by Federal Emergency Management Agency (FEMA) to be within the 100-year floodplain (special flood hazard Zone AE).

The Project is anticipated to have approximately 0.04 acres of temporary impacts and approximately 0.02 acres of permanent impacts to Simmerly Slough. In addition, the Project is anticipated to have approximately 0.01 acres of temporary impacts and approximately 0.04 acres of permanent impacts to emergent wetlands, which is considered a water of the U.S. and State. These impacts would be mitigated for via regrading, on-site seeding, and the purchase of mitigation bank credits from an appropriate bank. Mitigation provided by the Project would ensure a no net loss of sensitive habitat within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

Project activities within Simmerly Slough would require a Flood Encroachment Permit from the Central Valley Flood Protection Board, a Section 401 Certification under the Clean Water Act (CWA) from the Central Valley Regional Water Quality Control Board (RWQCB), a Section 1600 Streambed Alteration Agreement from CDFW, and a Section 404 Permit from the U.S. Army Corps of Engineers (USACE). All permits would be obtained prior to construction.

Subject Properties and Site Settings

The Project area includes portions of the parcels listed below in **Table 1- Parcel Identification**. Temporary construction easements are likely needed on a limited basis to accommodate the construction of the proposed improvements. No permanent right of way acquisition would be required for construction of the Project.

APN	Zoning		
006-050-008	Exclusive Agricultural District		
006-050-010	Exclusive Agricultural District		
006-050-011	Exclusive Agricultural District		
006-060-019	Exclusive Agricultural District		
006-060-020	Exclusive Agricultural District		
Source: Yuba County GIS Data Catalog, 2018 – Zoning			

Build Alternative

The existing bridge will be demolished which will include breaking up the concrete deck with a mounted impact hammer and hauling debris off site for proper disposal. Existing abutments, columns, and foundations will also be removed to a minimum depth of 5 feet below ground level and disposed of at a landfill or other suitable offsite location.

The replacement bridge will be built mostly within the footprint of the existing bridge. The bridge replacement will be a single span, cast-in-place slab bridge which will be 51 feet long and 24 feet wide (Figure 3. Project Features). The design will meet current American Association of State Highway and Transportation Officials (AASHTO) standards and Yuba County requirements. The project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will be required to construct the new bridge. Temporary stream diversions may be required during construction if water is present in the channel. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will be required to construct the new bridge. Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

No Build Alternative

Under the no-build alternative, the bridge will not be replaced. The bridge will remain structurally deficient and scour critical and public safety and access will not be improved.

Environmental Setting

The Ellis Road over Simmerly Slough Bridge Replacement Project (Project) in Yuba County, California, is located approximately 2 miles north of Marysville. The existing three-span continuous concrete slab bridge (Bridge No. 16C-0075) crosses Simmerly Slough along Ellis Road. It is located within Sections 31 and 36 of Township 16 North and Range 3 East of the Mount Diablo Baseline and Meridian.

The Biological Study Area (BSA) is approximately 8.13 acres in area (Figure 4). This includes all staging areas, temporary vehicle access, vegetation/tree removal, approach roadway work, bridge replacement, grading activities. The Area of Potential Effects (APE) extends approximately 500 feet along Ellis Road from both sides of the existing bridge and approximately 300 feet east and west of the existing bridge and approximately.

The Project is located in Yuba County, California, within the Sacramento Valley geographic subdivision of the California Floristic Province (Jepson 2022). This region is also part of the Great Valley section of the California Dry Steppe ecological province (USDA 2007). The area experiences hot, dry summers and cool, wet winters, typical of a Mediterranean climate. Average summer highs range from 91-96°F and average winter lows range from 37-42°F. Average annual precipitation is approximately 22 inches in the form of rain (U.S. Climate Data 2022).

Topography within the BSA is relatively flat, with an elevation ranging from approximately 62 to 68 feet above sea level. The area is predominantly used for rice farming and all extant microtopographic features are leveled rice fields and associated irrigation and drainage ditches Figure 5).

The soil types within the BSA include San Joaquin loam, 0 to 1 percent slopes, occasionally flooded (83% of BSA) and trainer loam, 0 to 1 percent slopes, occasionally flooded (17% of BSA) (Natural Resource Conservation Service [NRCS] 2021; NRCS Soil Survey Report).

Surface hydrology within the BSA includes Simmerly slough which is a channelized natural tributary to Jack slough. Water flow within the slough is heavily influenced by rice farming activities and controlled by water pumps and wiers. During irrigation season, the local irrigation district releases water into the slough from the Cordua Canal. The Slough collects drainage water from the rice fields and conveys it south to Jack Slough about 1.3 miles south of the BSA. Agricultural ditches are also present throughout the BSA, which border the rice fields. These ditches are used as both irrigation and drainage channels which transport irrigation and drainage water to and from the surrounding rice fields.







7	5	150	225	300







1 inch = 200				
200	400	600	800	1,000
				⊢eet

0

Figure 4 Biological Study Area BRLF-5916(131) Ellis Road Bridge Replacement Project Yuba County, California



Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages:

Aesthetics	Agriculture & Forestry Resources	\square	Air Quality
Biological Resources	Cultural Resources		Energy
Geology/Soils	Greenhouse Gas Emissions	\bowtie	Hazards & Hazardous Materials
Hydrology/Water Quality	Land Use/Planning		Mineral Resources
Noise	Deputation/Housing		Public Services
Recreation	Transportation/Traffic	\bowtie	Tribal Cultural Resources
Utilities/Service Systems	☐ Wildfire	\boxtimes	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

08/30/2024

Planner's Signature Ciara Fisher, Planner III Date

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Ellis Road Bridge Replacement Project as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

EVALUATION OF ENVIRONMENTAL IMPACTS

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

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, development code). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

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

Discussion/Conclusion/Mitigation:

- a) The project is within the community of Hallwood, which generally consist of farm land and roadways that will not change as a result of the bridge replacement project. The proposed bridgework would not deviate atheistically from what currently exists on Ellis Road. Therefore, there will be *no impacts* to scenic vistas as a result of the project.
- b) The project is not located within a state scenic highway, therefore there would be *no impact*.
- c) As discussed in a) above, the existing visual characteristics of the project site would not be significantly altered by the project. There would be no change in the existing visual character or quality of the site and its surroundings. Therefore, impacts to the existing visual character of the site would be *less than significant*.
- d) The proposed project would be conducted during daytime hours; no nighttime construction is proposed. No temporary or permanent lighting is proposed. There would be no effect on nighttime views. Therefore, there would be *no impact*.

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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

Discussion/Conclusion/Mitigation:

- a) The proposed project is a bridge replacement project. Nearly all project activity is in the existing right-of-way and no farmland conversion would needed for this project. Therefore, no loss or conversion of farmland would result from the proposed project and *no impact* to agricultural lands is anticipated.
- b) The Project Area, consisting predominately of farmland and Ellis Road, is designated Natural Resources by the Yuba County 2030 General Plan. The surrounding project zoning is "AE-80" Exclusive Agricultural, 80 acres minimum District. The proposed project is consistent with the General Plan and zoning. The property is not under a Williamson Act contract, as

Yuba County has not established a Williamson Act program. The project would result in *no impact* to Williamson Act contracts or existing agricultural uses.

- c) The project does not involve any activities that would result in a rezone or loss of a Timberland Preservation Zone. The long-term use of the property will remain as a bridge. The project would result in *no impact*.
- d) The property is not zoned for or used as forestry land. The project would result in *no impact*.
- e) The project will not involve any changes to the existing environment which could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use as the property is not zoned for agricultural or forest land. The project consists of replacing a structurally deficient bridge. Nothing related to the project will lead to the conversion of any type of viable agricultural land. The project would result in *no impact*.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Wo	uld the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		\boxtimes		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e)	Create objectionable odors affecting a substantial number of people?			\boxtimes	

Discussion/Conclusion/Mitigation:

a) In 2021, the Triennial Air Quality Attainment Plan was adopted for the Northern Sacramento Valley Air Basin (NSVAB), which includes Yuba County. The 2021 triennial update of the NSVPA Air Quality Attainment Plan assess the progress made in implementing the previous triennial update and proposes modifications to the strategies necessary to attain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The 2021 Plan includes an assessment of progress towards achieving the control measure commitments in the previous Triennial Plan, a summary of the last three years of ozone data, a comparison of the expected versus actual emissions reductions for each measure committed to in the previous Triennial Plan, updated control measure commitments, and updated growth rates of population, industry, and vehicle related emissions. The NSVPA air districts have adopted several control measures and programs that reduce emissions from new development either through the planning process or through control of specific sources of emissions. New development proposed by the project would be in compliance with the rules and programs of the FRAQMD (Table V-6). The 2021 Triennial Air Quality Attainment Plan is available here: https://bcaqmd.org/wp-content/uploads/2-2021-Triennial-AQAP_BCC-Approved.pdf.

The Triennial Air Quality Attainment Plan also deals with emissions from mobile sources, cars, trucks, and trains, or area sources such as consumer products or wildfires. Data in the

Triennial Plan, which was incorporated in the State Implementation Plan (SIP), are based on the most currently available growth and control data. The project would be consistent with this data. As is stated in the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10. FRAQMD has established a significance threshold of 130 singlefamily homes, which is the number estimated to generate emissions of 25 pounds per day of ROG and 25 pounds per day of NOx (FRAQMD, 2010). The project will include the replacement of an existing bridge which is not anticipated to emit a significant amount of air pollutants. Additionally, the project will not be increasing the capacity of the roadway or promoting an increase in Vehicle Miles Traveled (VMT), therefore operational air quality emissions, beyond the construction phase, would not substantially add to the Air Quality Attainment Plan and FRAQMD thresholds.

In August 2024 a project air quality analysis was performed using the CalEEMod air quality emissions calculator (See Appendix A) to determine project daily impacts to ROG; NOx; PM10; and PM2.5. The CalEEMod analysis was based on a 30-day project construction length, a project construction impact of 2.24 acres, and that twice-daily project watering would occur at the construction site. The resulting analysis determined that the project daily emission levels were: ROG 0.32 lbs/day; NOx 1.86 lbs/day; PM10 0.08 lbs/day; and PM2.5 0.87lbs/day. The CalEEMod emission analysis demonstrates that project related air quality emissions would not substantially add to the Air Quality Attainment Plan and FRAQMD thresholds. Therefore, impacts to air quality plans would be less than significant. Therefore, impacts to air quality plans would be less than significant.

b) The California Air Resources Board provides information on the attainment status of counties regarding ambient air quality standards for certain pollutants, as established by the federal and/or state government. As of 2019, Yuba County was re-designated as non-attainment-transitional status for state and national (one and eight hour) air quality standards for ozone, and state standards for particulate matter less than 10 microns in diameter (PM10). The County is in attainment or maintenance status for all other pollutants for which standards have been established.

Under the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10. FRAQMD recommends the following construction phase Standard Mitigation Measures for projects that do not exceed district operational standards:

<u>AQ-1:</u>

- Implement FRAQMD Fugitive Dust Plan
- Implement FRAQMD standard construction phase mitigation measures. (https://www.fraqmd.org/ceqa-planning)

AQ-2: Fugitive Dust Control for Construction:

- 1. Water inactive construction sites and exposed stockpile sites at least twice daily.
- 2. Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e. minimum vertical distance between top of load and the trailer).
- 3. Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to replacement of soil in the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.
- 4. Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.
- 5. Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

These mitigation measures are to be incorporated as part of the project to reduce dust emissions associated with construction of the project and implementation of these mitigation measures would reduce project impacts on air quality standards would be *less than significant with mitigation*.

- c) Construction associated with future development is expected to generate a limited amount of PM10, mainly dust. Rule 3.16 of FRAQMD Regulations requires the emissions of dust from construction activities from being airborne beyond the property line. Reasonable precautions may include the use of water or chemicals for dust control, the application of specific materials on surfaces that can give rise to airborne dust (e.g., dirt roads, material stockpiles), or other means approved by FRAQMD. Enforcement of this rule would reduce the amount of PM10 that would be generated by residential development on the project site. Additionally with mitigation measure, AQ-1 and AQ-2, prior to the issuance of any grading, a Fugitive Dust Permit will be required to be obtained from FRAQMD. Therefore, construction related impacts to the air would be *less than significant with mitigation*.
- d) A temporary increase in pollutants associated with diesel construction equipment and asphalt repaving will occur during construction of the project. However, these increases will be intermittent and will not expose sensitive receptors to substantial pollutant concentrations. As discussed above, the estimated emissions during construction of the project are anticipated to be far below FRAQMD significance thresholds. Therefore, impacts to sensitive receptors would be *less than significant*.
- e) Roadway reconstruction will occur as part of the proposed project which will involve installing a slab bridge. This process may create an objectionable odor within the vicinity of the project to nearby residences. However, these odors will dissipate within a few days once the paving is complete. Therefore, there would be *a less than significant* impact related to odors.

IV	. BIOLOGICAL RESOURCES		Less Than	T (T)	
W	ould the project:	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes
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?				\boxtimes

Discussion/Conclusion/Mitigation:

a) Dokken Engineering prepared a Natural Environment Study (NES) to review and evaluate the potential impacts to biological resources including special status species and sensitive habitats as a result of the proposed Project. Field surveys were conducted within the Biological Study Area (BSA), which encompasses the Project area, plus a 50-foot buffer. The entirety of the NES can be found in Appendix B of this report. Below is a summary of the NES report prepared:

During a biological survey conducted on February 6, 2023, several habitat types were observed within the BSA, including active rice fields and associated infrastructure (e.g., irrigation canals, drainage ditches, farm roads), ruderal vegetation, Himalayan blackberry,

riparian, emergent wetland, and barren areas. The existing bridge passes over Simmerly Slough, a perennial channel that divides the BSA from east to west.

The Project is anticipated to have approximately 0.04 acres of temporary impacts and approximately 0.02 acres of permanent impacts to Simmerly Slough, a jurisdictional water of the United States (U.S.) and State. In addition, the Project is anticipated to have approximately 0.01 acres of temporary impacts and approximately 0.04 acres of permanent impacts to emergent wetlands, which is considered a water of the U.S. and State. These impacts would be mitigated for via regrading, on-site seeding, and the purchase of mitigation bank credits from an appropriate bank. Mitigation provided by the Project would ensure a no net loss of sensitive habitat within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

For the purposes of this analysis, "special-status species" includes any species that has been afforded special recognition by federal, state or local resources agencies (e.g., U.S. Fish and Wildlife Service [USFWS], CDFW, etc.), and/or resource conservation organizations (e.g., California Native Plant Society [CNPS]). Literature review, habitat assessment, and field surveys determined that eight special status species have the potential to occur within or adjacent to the Project area: Giant garter snake (Thamnophis gigas; GGS), greater sandhill crane (Antigone canadensis tabida), northern harrier (Circus hudsonius), Sanford's arrowhead (Sagittaria sanfordii), song sparrow - "Modesto" population (Melospiza melodia pop. 1), tricolored blackbird (Agelaius tricolor), western pond turtle (Emys marmorata; WPT), and white-tailed kite (Elanus leucurus). Avoidance, minimization, and mitigation measures for these species have been incorporated into this NES. The Project may affect and is likely to adversely affect the federally listed GGS and federally proposed WPT. The County and Caltrans will consult with USFWS through the Section 7 process of FESA for project related impacts to GGS and WPT. The result of this consultation will be a biological opinion (BO) written by USFWS which specifies conservation measures and includes an incidental take statement for the project. The statement will include the amount or extent of the take, and avoidance/minimization measures and compensatory mitigation to minimize the take. If CDFW finds that the incidental take statement in the Federal BO is consistent with CESA, a consistency determination may be issued under section 2080.1 of the Fish and Game Code. If CDFW finds that the BO is not consistent with CESA, a separate Incidental Take Permit (ITP) will be required under section 2081(b) of the Fish and Game Code.

Project activities within Simmerly Slough would require a Flood Encroachment Permit from the Central Valley Flood Protection Board, a Section 401 Certification under the Clean Water Act (CWA) from the Central Valley Regional Water Quality Control Board (RWQCB), a Section 1600 Streambed Alteration Agreement from CDFW, and a Section 404 Permit from the U.S. Army Corps of Engineers (USACE). All permits would be obtained prior to construction.

Studies Required

Literature Search

Prior to fieldwork, literature research was conducted through the following government databases; the USFWS Species List, CDFW California Natural Diversity Database (CNDDB) the CNPS Electronic Inventory of Rare and Endangered Plants, and the NMFS in order to identify habitats and special status species having the potential to occur within the BSA.

Field Reviews

General biological field surveys were completed by Dokken Engineering biological staff to document existing site conditions, identify plant communities, and determine the potential for special status species to be present.

A jurisdictional delineation was completed by GPA Consulting to delineate and map the limits of waters of the U.S. and State.

Survey Methods

Survey methods included recording vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife.

In addition, an aquatic resource delineation of wetland areas was conducted in accordance with the technical methods outlined in the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008).

Personnel and Survey Dates

On February 6, 2023, Dokken biologists Scott Salembier and Katie Jacobson surveyed the Project BSA to document existing biological resources, detect potential jurisdictional waters, and survey for sensitive and protected species and/or their habitats. In addition, Dokken arborist Roberto Ramirez conducted a tree survey throughout the BSA.

On March 23, 2023, a jurisdictional delineation was conducted by JPA Consulting biologists Mario Mayo and Joseph Huang.

Biological Conditions

Natural Communities and Land Cover Types

The BSA is situated within a region that has largely been developed for agricultural use. As such, land use within the BSA is dominated by rice fields that are regularly disturbed. The existing Ellis Road Bridge passes over Simmerly Slough, a perennial channel that divides the BSA from north to south. Vegetation communities along this channel include willow-

dominated riparian habitat, dense patches of Himalayan blackberry (*Rubus armeniacus*), and emergent wetland habitat. In addition to Simmerly Slough, the BSA includes irrigation channels that service the rice fields. The BSA is bisected by Ellis Road, a gravel road devoid of vegetation. Ruderal vegetation occurs along the margins of Ellis Road (**Figure 6. Vegetation Communities**).

Active Rice Fields

Active agricultural within the BSA includes actively farmed fields. These areas are characterized by rice fields with very little or no native vegetation. Within the BSA, rice fields occupy approximately 2.84 acres (35%) of the BSA.

Agricultural Ditches

Within the BSA, irrigation and drainage channels consist of artificial channels built to convey irrigation water to agriculture rice fields or drainage water from agriculture rice fields. Channels are typically at least partially cleared of vegetation and scraped on a regular basis to preserve water capacity. Irrigation channels comprise 0.31 acres (4%) of the BSA

Ruderal Vegetation

Ruderal vegetation communities are characterized by early successional annual vegetation, typically invasive grasses and forbs. The disturbance may be natural, or due to human activity. The habitat is characterized by a lack of vegetation or dominated by non-native plant species. Ruderal vegetation occurs throughout the BSA along roadside and irrigation canals. 1.64 acres (20%) within the BSA consists of ruderal vegetation.

Blackberry

Within the BSA, stands of nearly mono-specific Himalayan blackberry (*Rubus armeniacus*) are found along several of the irrigation and drainage channels. Blackberry vines require large amounts of water but do not survive when soils are completely saturated or anoxic. Streambanks and irrigation infrastructure provide ideal habitat for this rapidly spreading invasive vine. Blackberry is self-fertile and produce crops of fruit for several weeks in late summer and autumn. Seeds are spread primarily by birds which consume the seed laden fruit and excrete the seeds. This habitat type comprises approximately 0.46 acres (6%) of the BSA.

Willow Dominated Riparian

Willow dominated riparian habitat is found within the BSA along the northern bank of Simmerly Slough south of Ellis Road. This riparian corridor is partially vegetated and is dominated by sandbar willows (*Salix exigua*). The understory is composed of mostly native shrubs and herbs. Within the Project impact area, willow dominated riparian habitat makes up approximately 0.08 acres (1%).

Emergent Wetland

Emergent wetlands are most common on level to gently rolling topography, where a basin or depression can be saturated or at least periodically flooded. These wetlands are typically associated with the margins of riverine habitat, lacustrine habitat, or wet meadows, where saturated soils allow for the growth of hydrophytic vegetation. Vegetation generally consists of perennial monocots such as sedges, rushes, bulrushes, and cattails. Emergent wetland makes up approximately 0.41 acres (5%) of the BSA.

Stream Channel – Simmerly Slough

Simmerly Slough enters the BSA from the north. The channel passes beneath Ellis Road, runs parallel to the roadway east for approximately 500 feet, then continues south out of the BSA. The channel is perennial and is tributary to Jack Slough and eventually the Feather River, approximately 3.2 miles southwest of the BSA. Simmerly Slough occupies approximately 0.27 acres (3%) of the BSA.

Barren Areas

Barren habitat is defined by the absence of vegetation and contains rock, gravel, soil, or pavement. Barren areas within the BSA are categorized by a gravel roadway (Ellis Road) and associated pullouts alongside the road. The BSA contains 2.16 acres (27%) of barren areas.



N	1 inch = 100) feet			
	100	200	300	400	500
					⊢eet

Figure 6 Vegetation Communities BRLF-5916(131) Ellis Road Bridge Replacement Project Yuba County, California

Species Observed

During biological surveys, plant and wildlife species observed within the BSA were identified and are listed below by common and scientific name. Approximately 22 plant species and 10 wildlife species were seen within the BSA on February 6, 2023 (Table 2. Species Observed).

Common Name	Scientific Name	Native (N) / Non-Native (X) ¹					
Plant Species							
Bitter lettuce	Lactuca virosa	X					
Black mustard	Brassica nigra	X [Moderate]					
Blessed milkthistle	Silybum marianum	X [Limited]					
Bristly oxtongue	Helminthotheca echioides	X [Limited]					
Broadleaf cattail	Typha latifolia	N					
California Chicory	Rafinesquia californica	N					
California wild rose	Rosa californica	N					
Common bog rush	Juncus effusus	N					
Coyote brush	Baccharis pilularis	N					
Curly dock	Rumex crispus	X [Limited]					
Cutleaf geranium	Geranium dissectum	X					
Domestic rice	Oryza sativa	X [High]					
English plantain	Plantago lanceolata	X [Limited]					
Himalayan blackberry	Rubus armeniacus	X [High]					
Italian thistle	Carduus pycnocephalus	X [Moderate]					
Needle spikerush	Eleocharis acicularis	N					
Red stemmed filaree	Erodium cicutarium	X [Limited]					
Salt grass	Distichlis spicata	N					
Sandbar willow	Salix exigua var. hindsiana	N					
Valley oak	Quercus lobata	N					
White stemmed filaree	Erodium brachycarpum	X					
Wild radish	Raphanus sativus	X [Limited]					
Wildlife Species							
California gull	Larus californicus	N					
Gopher snake	Pituophis catenifer	N					
Greater egret	Ardea alba	N					
House finch	Haemorhous mexicanus	N					
Mallard	Anas platyrhynchos	N					
Mute swan	Cygnus olor	X					
Northern pintail	Anas acuta	N					
Northern shoveler	Anas clypeata	N					
Red-winged blackbird	Agelaius phoeniceus	N					
White-faced ibis	Plegadis chihi	N					

 Table 2 - Species Observed

¹California Invasive Plant Council (Cal-IPC) Rating

Wildlife observed within the BSA consisted of common bird species such as the house finch (*Haemorhous mexicanus*), red-winged blackbird (*Agelaius phoeniceus*), California gull (*Larus californicus*), and mallard (*Anas platyrhynchos*). Uncommon species of wading birds such as the greater egret (*Ardea alba*) and white-faced ibis (*Plegadis chihi*) were observed foraging along in partially flooded ricefields. These species are likely only seasonally present when ricefields are partially flooded before planting. In addition, the surrounding rice fields

likely provide seasonal foraging habitat for migrating species of ducks and geese in the winter and early spring. No mammal burrows were observed within the BSA during the biological survey conducted on February 6, 2023.

Invasive Species

Numerous invasive species that are commonly associated with ruderal areas and riparian habitats were observed within the BSA. These include but are not limited to Himalayan blackberry (*Rubus armeniacus*), Italian thistle (*Carduus pycnocephalus*), and wild radish (*Raphanus sativus*).

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2023a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 3 – Connections with implementation flexibility. This ranking indicates that this area has not been identified as a habitat linkage or species corridor; however, it holds connectivity importance, and its status may change depending on local land use. Implementation of this Project will not permanently fragment any existing natural habitats and therefore will not impact any existing habitat connectivity networks.

Simmerly slough provides poor aquatic connectivity to other water features with multiple culverts and other obstructions that would limit aquatic migration. The slough is not known to be a migratory corridor for anadromous fish and does not connect to suitable spawning habitat.

Regional Species and Habitats and Natural Communities of Concern

Plant and animal species have special status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, CNPS, and NMFS databases to identify regionally sensitive species with potential to occur within the BSA. There were twelve plant species and twenty five wildlife species with the potential to occur in the Project vicinity returned by the database searches. The following special status species were determined to have potential of occurring within the Project area:

- Giant garter snake (*Thamnophis gigas*)
- Greater sandhill crane (*Antigone canadensis tabida*)
- Northern harrier (*Circus hudsonius*)
- Sanford's arrowhead (Sagittaria sanfordii)
- Song sparrow "Modesto" population (*Melospiza melodia pop.* 1)
- Tricolored blackbird (Agelaius tricolor)
- Western Pond Turtle (*Emys marmorata*)
- White-tailed kite (*Elanus leucurus*)

Results: Biological Resources, Discussion of Impacts, and Mitigation

Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on Federal, State, or local laws regulating their development; limited distributions; and/or the habitat requirements of

special-status plants or animals occurring on site. Wetlands and waters of the U.S. are also considered sensitive by both Federal and State agencies. The natural communities of special concern within the BSA were identified as Simmerly Slough, the associated willow riparian corridor, and adjacent emergent wetland habitat. Table 3. Impacts to Sensitive Natural Habitats and Figure 5. Project Impacts outline the impacts of the Project on these communities. Avoidance and minimization, and compensatory mitigation measures concerning Simmerly Slough, the willow riparian corridor, and emergent wetland habitat are discussed in detail in their respective sections.

Discussion of Simmerly Slough

Simmerly Slough is an aquatic freshwater channel that flows generally southward from Ramirez, CA. The channel within and around the BSA has been artificially channelized to facilitate the agricultural development of the surrounding area. The channel is perennial but flows are managed to support rice cultivation. Simmerly Slough is a tributary to Jack Slough and eventually the Feather River, approximately 3.2 miles southwest of the BSA.

Survey Results for Simmerly Slough

On March 23, 2023, JPA Consulting biologists Mario Mayo and Joseph Huang conducted a jurisdictional delineation of the aquatic features identified within the BSA, including Simmerly Slough. Simmerly Slough is considered a jurisdictional water of the U.S. (WoUS) and water of the State (WoS). The BSA contains approximately 1,231 linear feet and 0.27 acres of Simmerly Slough, which flows north to south under the existing Ellis Road Bridge. The channel includes dense stands of cattails and is bordered by patches of Himalayan blackberry and sandbar willows (Salix exigua var. hindsiana).

Project Impacts to Simmerly Slough

In total, approximately 0.02 acres of Simmerly Slough would be permanently impacted due to the installation of rock slope protection (RSP). Approximately 0.04 acres of Simmerly Slough would be temporarily impacted during construction due to equipment access and movement needs (Table 3, Figure 7. Habitat Impacts).

	Jurisdictional Feature	
Impact Type (acres)	Simmerly Slough	Emergent Wetland
	(WoUS, WoS)	(WoUS, WoS)
Temporary	0.04	0.01
Permanent	0.02	0.04
Total	0.06	0.05

Table 1. Impacts to Simmerly Slough

Biological Study Area

Permanent Habitat Impacts

///	/

I I
Permanent Ditch Impacts (>0.001 ac)
Permanent Blackberry Impacts (0.01 ac
Permanent Ruderal Impacts (0.01 ac)
Permanent Slough Impacts (0.02 ac)
Permanent Wetland Impacts (0.01 ac)

Temporary Habitat Impacts

Temporary Ditch Impacts (0.10 ac)
Temporary Wetland Impacts (0.06 ac)
Temporary Rice Impacts (0.07 ac)
Temporary Blackberry Impacts (0.12 ac)
Temporary Ruderal Impacts (0.33 ac)
Temporary Slough Impacts (0.04 ac)

Permanent Impacts from RSP







FIGURE 7 Vegetation Community Impacts BRLO-5916(131) Ellis Road Bridge ReplacementProject Yuba County, California

Avoidance and Minimization Efforts for Simmerly Slough

The following avoidance, minimization, and mitigation measures will be incorporated into the Project design and Project construction to reduce potential impacts to Simmerly Slough within the BSA.

BIO-1: Best Management Practices (BMPs):

- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities.
- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.
- All erosion control measures and storm water control measures would be properly maintained until final grading has been completed and permanent erosion control measures are implemented.
- All disturbed areas would be restored to pre-construction contours and revegetated, where applicable, through hydroseeding with a native seed mix specific to the habitat type.
- All construction materials would be hauled off-site after completion of construction.

<u>BIO-2</u>: Prior to the start of construction activities, the Project limits in proximity to Simmerly Slough and emergent wetlands must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or sensitive habitats. A qualified biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

<u>BIO-3:</u> Refueling or maintenance of equipment shall not be permitted to occur within 100 feet of Simmerly Slough. All refueling and maintenance that must occur within 100 feet of the creek must occur over plastic sheeting or other secondary containment to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

<u>BIO-4</u>: Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering Simmerly Slough and the associated riparian area.

<u>BIO-5:</u> Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

<u>BIO-6</u>: A chemical spill kit must be kept onsite and available for use in the event of a spill.

<u>BIO-7</u>: Secondary containment consisting of plastic sheeting or other impermeable sheeting shall be installed underneath all stationary equipment to prevent petroleum products or other chemicals from contaminating the soil or from spilling directly into Simmerly Slough. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

<u>BIO-8</u>: All temporary impact areas within Simmerly Slough and adjacent habitats will be re-graded to pre-construction contours, cleaned of any trash or debris, and seeded with a native seed mix specific to that habitat type. This will allow natural habitats to return to pre-construction conditions.

Compensatory Mitigation for Simmerly Slough

The Project anticipates approximately 0.02 acres of permanent impacts to Simmerly Slough. Permanent impacts to Simmerly Slough would be mitigated for via measure BIO-9, below:

<u>BIO-9</u>: The County will be responsible for purchasing mitigation credits from a mitigation bank, or other approved methods, at a 2:1 ratio. The final mitigation method will satisfy CDFW, RWQCB, and USACE requirements and will be finalized during the permitting phase of the Project.

Cumulative Impacts to Simmerly Slough

The proposed Project has been designed to minimize all temporary and permanent impacts to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, and ESA fencing. Mitigation provided by the Project would ensure a no net loss in emergent wetlands within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

Discussion of Willow Riparian Corridor

Riparian habitats occur alongside sources of surface water and are often centers of biological activity. The general structure of riparian habitats typically involves a canopy, subcanopy, and an understory shrub layer; however, riparian communities can also be dominated by willows (Salix sp.) as a form of climax vegetation (Rosiere 2017).

Survey Results for Willow Riparian Corridor

Within the BSA, willow riparian habitat primarily occurs along the northern bank of Simmerly Slough, directly south of Ellis Road and east of the proposed bridge replacement. This habitat type is comprised of dense stands of sandbar willows that provide nesting opportunities for local bird species. The willow riparian corridor comprises approximately 0.06 acres of the BSA.

Project Impacts to Willow Riparian Corridor

The Project is not anticipated to have impacts to willow riparian corridor habitat. Work within Simmerly Slough and its associated emergent wetland habitat would occur outside of delineated riparian corridor boundaries.

Avoidance and Minimization Efforts for Willow Riparian Corridor

With the incorporation of avoidance and minimization measures BIO-2, impacts to willow riparian corridor would be avoided.

Compensatory Mitigation for Willow Riparian Corridor

The Project will avoid potential impacts to willow riparian corridor; therefore, compensatory mitigation is not proposed.

Cumulative Impacts to Willow Riparian Corridor

The Project will avoid potential impacts to willow riparian corridor. No cumulative impacts to the habitat are anticipated.

Discussion of Emergent Wetland

Emergent wetlands typically occur along the margins of rivers, lakes, or wet meadows, where saturated soils can facilitate the growth of hydrophytic vegetation. Emergent wetlands are most common on level to gently rolling topography, where a basin or depression can be saturated or at least periodically flooded so that it may support suitable wetland species. Vegetation within this community is characterized by perennial monocots such as sedges, rushes, bulrushes, and cattails. This habitat type provides suitable habitat for a large variety of birds, mammals, reptiles, and amphibians, and is considered one of the most productive habitat types in California (CDFW 1988).

Survey Results for Emergent Wetland

On March 23, 2023, JPA Consulting biologists Mario Mayo and Joseph Huang conducted a jurisdictional delineation of the aquatic features identified within the BSA, including the emergent wetlands identified adjacent to Simmerly Slough. Wetland delineations were conducted in accordance with technical methods outlined in the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008). The results of the delineation are included in the attached Aquatic Resources Delineation Report (ARDR). The emergent wetland within the BSA measures approximately 0.62 acres in size.

Project Impacts to Emergent Wetland

The Project is anticipated to temporarily impact approximately 0.06 acres and permanently impact 0.01 acres of emergent wetland habitat (Table 3, Figure 5). Permanent impacts to emergent wetland habitat would result from the placement of roadway fill along Ellis Road. Temporary impacts would result from equipment access and construction activity within the Project footprint.

Avoidance and Minimization Efforts for Emergent Wetland

With the incorporation of avoidance and minimization measures BIO-1 through BIO-8 and BIO-10, impacts to emergent wetland would be minimized to the extent feasible.

Compensatory Mitigation for Emergent Wetland

The Project will result in approximately 0.01 acres of permanent impacts to emergent wetland habitat. Permanent impacts to emergent wetland habitat would be mitigated for via measure BIO-10, below:

<u>BIO-10</u>: The County will be responsible for purchasing wetland mitigation credits from an agency- approved mitigation bank, or other approved methods, to be determined during the permitting phase for the Project. Based on agency agreed upon ratios, permanent impacts to emergent wetland habitat will be mitigated at a 3:1 ratio.

Cumulative Impacts to Emergent Wetland

The proposed Project has been designed to minimize all temporary and permanent impacts to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, and ESA fencing. Mitigation provided by the Project would ensure a no net loss in emergent wetlands within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

Special Status Plant Species

The plants listed are considered to be of special concern based on (1) Federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. One special status plant species, Sanford's arrowhead (*Sagittaria sanfordii*), was determined to have a low potential to occur within the BSA. Survey results, Project impacts, and avoidance, minimization, and mitigation measures for this species are discussed in the following sections.

Discussion of Sanford's Arrowhead

Sanford's arrowhead is a perennial rhizomatous herb that is associated with marsh and swamp habitat types. It can be found in freshwater ponds and ditches. The species is not State or Federally listed but is a CNPS rare plant with a rare plant rank of 1B.2, meaning that it is fairly endangered and California and may be rare or endangered elsewhere. It is known from 126 occurrences in California, 79 of which have been documented in the last 20 years. The species has been extirpated from southern California and portions of the Central Valley and is threatened by development such as road widening and channel alternation, among other stressors (CNPS 2023).

Survey Results for Sanford's Arrowhead

Sanford's arrowhead was not observed during the February 2023 biological survey; however, the survey was conducted outside the species' typical blooming period, reducing the likelihood of detecting the species within the BSA. The BSA contains freshwater stream channel and irrigation ditch habitat that is potentially suitable for the species. Despite the absence of local CNDDB occurrences, Sandford's arrowhead is known to occur sporadically throughout the Sacramento and Central Valleys and the Project area is located within this

anticipated range. As such, Sanford's arrowhead has a low potential to occur within the BSA due to the presence of suitable habitat as well as the species' pattern of occurrence.

Project Impacts to Sanford's Arrowhead

While Sanford's arrowhead was not observed within the BSA at the time of the biological surveys, the species may still occur within Project impact areas and the species has the potential to be directly impacted by Project activities. With implementation of the avoidance and minimization measure described below, the Project's direct impact on Sanford's arrowhead would be negligible, if not non-existent. Indirect impacts are also anticipated due to the loss of suitable wetland habitat the species is known to inhabit.

Avoidance and Minimization Efforts for Sanford's Arrowhead

With the implementation of the following avoidance and minimization measure, BIO-11, direct impacts to Sanford's arrowhead are not anticipated. Additionally, with the implementation of BIO-1 through BIO-8 and BIO-10, indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

<u>BIO-11</u>: Prior to construction, a focused plant survey will occur within the typical blooming season of special status plant species that have potential to occur within the Project area (for Sanford's arrowhead, May through October). The survey will be conducted by a qualified biologist with the purpose of identifying populations of Sanford's arrowhead and other special status plant species within the Project area. If special status plant species are observed within the Project area, the identified plant or population of plants will be protected with ESA fencing and work will be prohibited from occurring within the delineated area. If ESA delineation is not possible due to Project design, then plant relocations may be conducted by a qualified biologist in coordination with the County and CDFW.

Compensatory Mitigation for Sanford's Arrowhead

With the incorporation of avoidance and minimization measure BIO-11, direct impacts to Sanford's arrowhead are not anticipated. Compensatory mitigation is not proposed at this time.

Cumulative Impacts to Sanford's Arrowhead

Due to implementation of BIO-11, The Project is not anticipated to directly impact Sanford's arrowhead; however, impacts to emergent wetland habitat, potentially suitable habitat for Sanford's arrowhead, are expected. The proposed Project has been designed to minimize all temporary and permanent impacts to emergent wetland habitat to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, ESA fencing, and compensatory mitigation. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. No cumulative impacts to this species will result from this Project and the Project is not anticipated to negatively contribute to cumulative impacts to Sanford's arrowhead on a regional scale.

Special Status Animal Species

Animals are considered to be of special concern based on (1) Federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. Based on literature review, habitat assessment, and biological surveys, seven special status species have the potential to occur within the BSA: GGS, greater sandhill crane, northern harrier, song sparrow ("Modesto" population), tricolored blackbird, western pond turtle, and white-tailed kite. Survey results, Project impacts, and avoidance, minimization, and mitigation measures for these species are discussed in the following sections.

Discussion of Giant Garter Snake

GGS is state and federally listed as threatened. This is a highly aquatic reptile species that inhabits mash, swamp, wetland (including agricultural wetland), slough, pond, rice field, as well as stream and canal habitat. During the species active season, from April through November, GGS utilizes adjacent upland habitat for basking or finding shelter and emergent, herbaceous wetland vegetation for cover and foraging habitat. The species also requires adequate flowing water during this time. Outside of the active season, mammal burrows are used for estivation. GGS has been extirpated from a large part of its former range, particularly in the San Joaquin Valley. Habitat loss and introduced predatory fish are cited as substantial causes of decline. However, GGS in the Sacramento Valley have been able to use artificial waterways and agricultural wetlands as an alternative to their natural habitats. Examples of these alternative habitats include irrigation canals, drainage canals and rice fields. According to USFWS, giant garter snakes appear to have the highest populations in rice growing regions, which provide a mix of habitat elements which the snake may utilize throughout the year. Artificial levees also create suitable upland basking habitat since some areas are constantly dry.

Survey Results for Giant Garter Snake

GGS was not observed within the BSA during general biological surveys completed for the project. An analysis of species occurrences on CNDDB indicates that known populations of GGS are concentrated on the west side of the Feather River, predominantly along the Sacramento River and in the Butte Sink region; however, the BSA is within dispersal range of known populations of the species and potentially suitable habitat is present onsite.

Simmerly slough, associated wetlands, and irrigation/drainage ditches within the BSA provide potentially suitable aquatic foraging and dispersal habitat. Blackberry and ruderal areas provide potential upland habitat for the species. Rice fields adjacent of the Project area may also provide suitable basking, foraging, and refuge habitat for individuals of this species. There is a recent (2013) CNDDB occurrence of this species located approximately 5 miles west of the Project area. Due to the presence of potentially suitable habitat features as well as the recent local occurrence, the species is presumed present within the BSA.

Project Impacts to Giant Garter Snake

Installation of rock slope protection and construction of the slightly widened bridge structure would result in permanent modification of 0.02 acres of aquatic GGS habitat and 0.02 acres

of upland habitat. Temporary work areas, access routes, and staging areas would temporarily impact 0.20 acres of aquatic habitat, 0.45 acres of upland habitat, and 0.07 acres of rice field. These impacts are summarized on **Table 4. GGS Habitat Impacts** and shown on **Figure 8. GGS Habitat Impacts**. The project may affect and is likely to adversely affect GGS.

Giant Garter Snake Habitat Type	Temporary Impacts (ac)	Permanent Impacts (ac)
Upland Habitat	0.45	0.02
Rice Field Habitat	0.07	0
Aquatic Habitat	0.20	0.02
Total Habitat	0.72	0.04

Table 2. GGS Habitat Impacts



Source: ESRI Maps Online; Dokken Engineering 9/27/2023; Created By: scotts



FIGURE 8 Giant Garter Snake Habitat Impacts BRLO-5916(131) Ellis Road Bridge ReplacementProject Yuba County, California
Avoidance and Minimization Efforts for Giant Garter Snake

Due to the high potential for the species to occur within the BSA, species specific avoidance and minimization measures will be implemented to minimize the risk of the project resulting in take of the species. The following measures will exclude GGS from the impact area and greatly reduce their potential to be encountered during construction.

<u>BIO-12</u>: Construction personnel must receive environmental awareness training from a USFWS- and CDFW-approved biologist who has experience in the natural history of species that may occur within the Project area. The training will cover protocol for, identification of, and natural history of the special status species that have the potential to occur within the Project area (such as GGS, greater sandhill crane, northern harrier, song sparrow ("Modesto" Population), Sanford's arrowhead, tricolored blackbird, western pond turtle, and white-tailed kite).

<u>BIO-13</u>: Ground disturbance will be limited to the GGS active period of May 1 to October 1. If Project activities within GGS habitat must occur outside of this period, approval will be obtained from CDFW and USFWS and additional protective measures may be required.

<u>BIO-14</u>: Prior to construction, GGS habitat areas outside of the Project limits will be marked as Environmentally Sensitive Areas (ESAs) using temporary high-visibility fencing. In addition, GGS exclusion fencing will be installed at the boundary between GGS habitat and the project area. The exclusion fencing material will consist of a material that snakes cannot get through or become entangled in and must be buried at least six inches below ground to prevent animals from entering work areas from below the fence. Exclusion fencing will be monitored by a qualified biologist or on-site inspector on a weekly basis during construction and maintained to ensure that the fencing is in good working order.

BIO-15: A pre-construction survey of the Project area will be conducted within 24 hours of the start of construction activities within GGS habitat. The survey will be conducted by a CDFW and USFWS-approved biologist. If a GGS is discovered within the Project area, activities within 200 feet of the individual will be paused until CDFW and USFWS have been notified and the appropriate corrective measures have been completed. Appropriate measures may include allowing the individual to leave the work area unharmed or the installation of additional exclusion fencing.

<u>BIO-16</u>: Any dewatered habitat should remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.

<u>BIO-17</u>: If a GGS is observed under or within any construction-related equipment, vehicles, or materials, the individual(s) must be left undisturbed, and the County notified. Work will be paused within 200 feet of any discovered GGS individuals. A qualified biologist will monitor the individual until it leaves the Project site of its own accord, or it is determined, in coordination with CDFW and USFWS, that additional protective measures are needed.

<u>BIO-18</u>: A CDFW and USFWS approved biological monitor will be onsite during vegetation removal and ground disturbing activities within GGS upland habitat (all vegetated areas within

200 feet of Simmerly Slough) and during construction activities within the wetted portion of Simmerly Slough.

<u>BIO-19</u>: Construction personnel will operate vehicles at a speed no greater than 15 mph on unpaved roads within the Project area.

Compensatory Mitigation for Giant Garter Snake

Permanent impacts to GGS habitat will be mitigated at a 3:1 ratio as described in measure BIO-19 below. Temporarily impacted aquatic habitat will be mitigated at a 1:1 ratio to offset temporal loss of habitat. Temporary impacts to upland habitat areas will be mitigated by regrading work areas and access routes to pre-project contours and installing a native seed mix as described in measure **BIO-8**.

<u>BIO-20</u>: Temporary and Permanent impacts to GGS habitat will be mitigated for via the purchase of GGS-specific mitigation credits from a USFWS and CDFW approved mitigation bank. Temporary impacts to aquatic habitat will be mitigated at a 1:1 ratio and permanent impacts to both aquatic and upland habitat will be mitigated at a 3:1 ratio.

Cumulative Impacts to Giant Garter Snake

With the incorporation of the appropriate avoidance and minimization measures, direct impacts to GGS will be avoided to the extent feasible. Additionally, mitigation provided by the Project would result in no net loss of GGS habitat in the region. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative impacts to GGS or its habitat.

Discussion of Greater Sandhill Crane

Greater sandhill cranes are state-threatened and fully protected under CDFW. These large birds are distinguished by their broad, drooping wings, long necks, and the red skin along the crown of their head. This species primarily winters within the Sacramento and San Joaquin Valleys, where it occupies moist croplands, wet meadows, emergent wetlands, and grasslands. Migrating flocks prefer open, treeless habitats where individuals can forage for cereal crops as well as use their long bills to search for roots, tubers, and insects in moist soils; however, they can also eat larger prey. Nesting pairs may nest within scooped out depressions in upland habitat or within large mounds of wetland plants within shallow water. Ideal nesting sites include small islands protected by tall tules, cattails, or shrubs. Large breeding flocks migrate from Washington and Oregon in September/October, wintering in the Central Valley before returning north in March/April. Migration is rapid and direct, and flocks fly both night and day stopping only for short periods to feed and rest.

Survey Results for Greater Sandhill Crane

The BSA includes rice fields, which provide potential foraging and nesting habitat for this species. The Project also falls within the greater sandhill crane's migration corridor between California's Bay Area and southern Washington (Sonoran Joint Venture 2023). Greater Sandhill Crane was not observed within the BSA at the time of the biological surveys; however, there are

numerous documented occurrences of the species near the BSA on CNDDB suggesting that the species has a high potential of occurring within BSA during the overwintering period.

Project Impacts to Greater Sandhill Crane

Greater Sandhill Crane has a high potential to occur seasonally within the BSA during the winter months. Since ground disturbance will be limited to the GGS active period of May 1 to October 1, per **BIO-13**, the species will not be present in the BSA during construction. Therefore, no direct impacts to Greater Sandhill Crane are anticipated. In addition, the project will not impact adjacent rice fields which provide potentially suitable habitat for the species.

Avoidance and Minimization Efforts for Greater Sandhill Crane

Species specific avoidance and minimization measures are not required since all project features are outside of rice field habitat and construction will be timed outside of the overwintering period for the species.

Compensatory Mitigation for Greater Sandhill Crane

No impacts to greater sandhill cranes are anticipated. No compensatory mitigation for this species is proposed at this time.

Cumulative Impacts to Greater Sandhill Crane

The Project will not impact Greater Sandhill Cranes. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Northern Harrier

The northern harrier is not a state or federally listed species but is a CDFW Species of Special Concern (SSC). The northern harrier is a migratory raptor preferring northern latitudes in the summer and southern latitudes in the winter. This species most commonly inhabits areas with marshes, farmland, and grasslands, as these provide the best foraging habitat. Although most of its original habitat has been destroyed or degraded within the California Central Valley, this region still supports the majority of nesting harriers in California. Harriers breed mainly at private or public wetlands or other reserves as well as in some types of agricultural fields and pasturelands. Northern harriers breed and forage in a variety of open (treeless) habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs or fence posts. In California such habitats include freshwater marshes, brackish and saltwater marshes, wet meadows, weedy borders of lakes, rivers and streams, grasslands, and some croplands. Harriers feed on a broad variety of small to medium sized vertebrates, primarily rodents and passerines. Harriers nest on the ground mostly within patches of dense, often tall, vegetation in undisturbed areas (Sibley 2003, CNDDB 2011).

Survey Results for Northern Harrier

The BSA includes large areas of treeless rice fields and ruderal areas along farm roads and irrigation/drainage ditches which provide potentially suitable nesting habitat for the species.

Yuba County Planning Department August 2024 Furthermore, there are numerous recent eBird occurrences of this species within the vicinity of the Project, including one (2015) observation identified within the BSA. While Northern Harrier was not observed at the time of the biological surveys, the species is considered to have a high potential to occur within the BSA.

Project Impacts to Northern Harrier

With implementation of BIO-12 described above and measure 21 below, direct impacts to Northern harrier or their nests are not anticipated.

Avoidance and Minimization Efforts for Northern Harrier

With the implementation of BIO-21, listed below, direct impacts to Northern Harrier are not anticipated. Additionally, with implementation of BIO-1 through BIO-8 and BIO-10. Indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

BIO-21: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a qualified biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by a qualified biologist and approved by CDFW.

Compensatory Mitigation for Northern Harrier

With the implementation of site-specific avoidance and minimization measures, no impacts to Northern Harriers are anticipated. No compensatory mitigation for this species is proposed.

Cumulative Impacts to Northern Harrier

The Project will avoid potential impacts to northern harriers. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Song Sparrow ("Modesto" Population)

The song sparrow is not a state or federally listed species but is a CDFW Species of Special Concern (SSC). The ecological requirements of the species are largely undescribed, but the species is known to have an affinity for emergent freshwater marshes dominated by tules and cattails (Grinnell and Miller 1944). Marshall (1948) described the primary habitat requirements of several subspecies of Song Sparrow in California as being moderately dense vegetation to

supply cover for nest sites, a source of standing or running water, semi-open canopies to allow light, and exposed ground or leaf litter for foraging. Habitat loss, fragmentation, and degradation are the primary threats to the species. Nesting season for the species usually begins in April, and most nesters in California are nonmigratory, with other migrants coming from the north (Shuford and Gardali 2008).

Survey Results for Song Sparrow ("Modesto" Population)

The BSA is situated approximately 15 miles east/southeast of the Butte Sink, which is known to support high densities of this species (CNDDB 2023). Furthermore, the BSA includes a willow-dominated riparian corridor with dense Himalayan blackberry thickets that may provide potentially suitable nesting habitat for this species. In addition, dense stands of cattails occur sporadically throughout Simmerly Slough within the BSA, providing additional potential habitat for the species. While Song Sparrow ("Modesto Population") was not observed within the BSA during biological surveys and there are no recent local occurrences, the species may have a low potential to occur due to the presence of potentially suitable habitat features as well as the Project's proximity to the established population in the Butte Sink.

Project Impacts to Song Sparrow ("Modesto" Population)

The Project has potential to indirectly impact Song Sparrow ("Modesto" Population) due to the loss of Himalayan blackberry thickets and emergent wetland habitats, which are both potentially suitable habitats for the species. Direct impacts to Song Sparrow ("Modesto" Population) will be avoided with implementation of BIO-21 described above.

Avoidance and Minimization Efforts for Song Sparrow ("Modesto" Population)

With the implementation of BIO-21, direct impacts to song sparrow ("Modesto" population) are not anticipated. Additionally, with implementation of BIO-1 through BIO-8 and BIO-10, indirect impacts to the species due to habitat loss would be minimized to the greatest extent.

Compensatory Mitigation for Song Sparrow ("Modesto" Population)

With the implementation of measure BIO-21 direct impacts to song sparrow ("Modesto" population) are not anticipated. The project will also not result in permanent loss of nesting habitat for this species. No compensatory mitigation for this species is proposed.

Cumulative Impacts to Song Sparrow ("Modesto" Population)

The Project will avoid potential effects to song sparrow ("Modesto" population). The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Tricolored Blackbird

The tricolored blackbird is state listed as threatened and is identified by the CDFW as a Species of Special Concern (SSC). This blackbird is prevalent throughout the Central Valley as well as in coastal communities and finds its home in thickets of willow, cattails, blackberry, and tall herbs. The tricolored blackbird feeds on insects, spiders, seeds, and grains, and its foraging habitat include grassland and cropland habitats. This species locates its nest near fresh water,

especially emergent wetlands, and is known to fly up to 4 miles to foraging habitat. Individuals are highly gregarious, and nesting areas often support a minimum of 50 bird pairs. Due to colony density, colonies are vulnerable to significant predation as well as habitat fragmentation.

Survey Results for Tricolored Blackbird

The BSA includes dense stands of Himalayan blackberry and sandbar willows, rice fields, and emergent vegetation within Simmerly Slough which all may provide nesting habitat for the species. There is a recent (2015) eBird observation of this species within the BSA. While tricolored blackbird was not observed at the time of the biological surveys, the species has a high potential to occur within the Project area and may be directly impacted by Project activities.

Project Impacts to Tricolored Blackbird

The Project will remove potentially suitable tricolored blackbird habitat as part of the clearing and grubbing process at the start of construction. These activities not only will temporarily remove these potentially suitable habitats but also may directly impact individuals of the species if initial clearing and grubbing are completed during the species' nesting season.

Avoidance and Minimization Efforts for Tricolored Blackbird

With the inclusion of BIO-21, direct impacts to tricolored blackbird and their nests will be minimized to the greatest extent feasible. No additional species-specific avoidance measures are proposed.

Compensatory Mitigation for Tricolored Blackbird

With the implementation of BIO-8, temporarily impacted potential tricolored blackbird nesting habitat will be regraded, cleaned, and seeded with a native seed mix to accelerate natural regeneration of the plant community. The project will not result in permanent loss of potential nesting habitat and no compensatory mitigation is proposed.

Cumulative Impacts to Tricolored Blackbird

The Project will avoid potential effects to tricolored blackbirds. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Western Pond Turtle

The western pond turtle (WPT) is not a State listed species but is a CDFW Species of Special Concern and is Federally proposed for listing. WPTs are native to the west coast and are found from Baja California, Mexico north through Klickitat County, Washington. The WPT is a fully aquatic turtle, inhabiting ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. The species requires suitable basking sites such as logs, rocks, mats of floating vegetation as well as exposed mud banks and associated upland habitat consisting of sandy banks or grassy open fields for reproduction. The species is omnivorous, consuming aquatic wildlife such as fish, insects and frogs as well as aquatic vegetation. The WPT is known to hibernate underwater beneath a muddy bottom in colder climates and reproduces from March to

August (Zeiner 1990). Nests are generally found in flat areas with low vegetation and dry, hard soil.

Current threats to WPTs are numerous and include fire, flooding, drought, upper respiratory disease, habitat destruction, habitat alterations, predation, and lack of genetic variation. Introduction of predators such as the bullfrog and bass also threaten the species as they prey on small juvenile turtles. The lack of genetic variation is due to the isolation of individual populations over ranges too large to be covered by migration. Habitat destruction is the result of intense urbanization. Additionally, humans pose a great threat via off-road vehicles, chemical spills, and incidental catch by fishermen.

Survey Results for Western Pond Turtle

Simmerly Slough provides potentially suitable aquatic habitat for WPT and ruderal vegetation, farm roads, and blackberry patches provide potentially suitable upland habitat for the species. The nearest CNDDB occurrence of the species is approximately 5 miles southeast of the BSA and was recorded in 1998. WPT was not observed within the BSA at the time of biological surveys; however, this species has a high potential to occur within the BSA due to multiple occurrences within the vicinity of the Project and the presence of suitable aquatic and upland habitat.

Project Impacts to Western Pond Turtle

The Project may directly impact individuals of the species during initial vegetation clearing and grubbing of the work areas as well as dewatering of the Simmerly Slough. The Project may also temporarily and permanently impact WPT habitat. Habitat may be temporarily impacted during the installation of the temporary water diversion within Simmerly Slough as well as during construction staging in upland habitat areas. Habitat may be permanently impacted through the installation of RSP within the OHWM of Simmerly Slough. The project may affect and is likely to adversely affect WPT.

With the inclusion of BIO-22 through BIO-23, and BIO-19, WPT would be excluded from the impact area and no adverse impacts to the species is anticipated.

Avoidance and Minimization Efforts for Western Pond Turtle

With the implementation of the following avoidance and minimization measures, BIO-22 through BIO-23, along with BIO-19, direct impacts to WPT are not anticipated. Additionally, with the implementation of BIO-1 through BIO-9, indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

BIO-22: To avoid impacts to western pond turtles, an agency-approved biologist will conduct a pre-construction survey of Simmerly Slough, and adjacent banks and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a WPT is located within the construction area, a qualified biologist will capture the turtle and relocate it to an appropriate habitat a safe distance from the construction site.

BIO-23: If water pumps are used to dewater the Project area, pump intakes will be screened and equipped with an energy dissipater to protect aquatic species. The energy dissipater should be large enough to reduce approach velocity to 0.33 feet per second or less and be enclosed with

 $\frac{1}{2}$ inch metal screen. The surface area of the energy dissipater shall be determined by dividing the maximum diverted flow, by the allowable approach velocity (example: 1.0 ft3 per second/ 0.33 feet per second = 3.0 ft2 surface area).

Compensatory Mitigation for Western Pond Turtle

With the implementation of BIO-22 through BIO-23, along with BIO-19, direct impacts to WPT are not anticipated. No additional compensatory mitigation for this species is proposed.

Cumulative Impacts to Western Pond Turtle

Direct impacts to WPT are not anticipated. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of White-Tailed Kite

The white-tailed kite is a fully protected species under CFG Code Section 3511. The species has a restricted distribution in the U.S., occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley margins with scattered oaks and river bottomlands. White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. They use nearby treetops for perching and nesting sites. Voles and mice are common prey species.

Survey Results for White-Tailed Kite

The BSA is situated within open agricultural fields with isolated trees along their margins that may serve as suitable nesting habitat for white-tailed kite. In addition, there are numerous eBird observations of this species within the vicinity of the Project, including a 2020 occurrence within 0.5 miles east of the Project. White-tailed kite was not observed within the BSA at the time of biological surveys; however, due to the presence of suitable habitat features and with recent local occurrences, the species has a high potential to occur within the BSA.

Project Impacts to White-Tailed Kite

Project activities will not encroach onto the adjacent rice fields or trees, which are suitable habitats for white-tailed kite. Additionally, the adjacent rice fields are seasonally flooded and would not provide suitable foraging habitat during the nesting season for this species. The small number of medium sized trees within the project area do provide potentially suitable nesting habitat but the limited foraging habitat provided by the flooded rice fields reduce the likelihood of a pair electing to nest within the BSA. With the inclusion of pre-construction nesting bird surveys as described in measure BIO-21, direct impacts to the species are not anticipated.

Avoidance and Minimization Efforts for White-Tailed Kite

With the implementation of pre-construction nesting bird surveys and protective buffers as described in measure BIO-21, direct impacts to white-tailed kite are not anticipated. No additional species specific avoidance and minimization measures are proposed.

Compensatory Mitigation for White-Tailed Kite

No compensatory mitigation for this species is proposed.

Cumulative Impacts to White-Tailed Kite

The Project is not expected to directly impact white-tailed kites. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Conclusions and Regulatory Determinations

Federal Endangered Species Act Consultation Summary

Table 5. Federally Listed Species Determinations lists the 10 federally listed species that were returned via database searches and the effect determinations made for each species. Based on literature review, habitat assessment, and biological surveys, the federally-threatened GGS, and the federally-proposed WPT have potential to occur within the BSA.

Species specific avoidance and minimization measures are being proposed to minimize impacts to GGS; however, the potential impacts to the species during construction cannot completely be eliminated. The Project therefore may affect and is likely to adversely affect this species. Formal Section 7 consultation with the USFWS regarding impacts to GGS is required.

Species specific avoidance and minimization measures are being proposed to minimize potential impacts on the WPT. However, the potential for impacts to the species and its habitat during construction cannot be completely eliminated. Therefore, the Project may affect and is likely to adversely affect WPT. Therefore, conferencing with the USFWS for this species is required.

Species Name	Federal Status	Potential	Determination
Delta smelt (Hypomesus transpacificus)	Threatened	Absent	No Effect
Conservancy fairy shrimp (Branchinecta conservatio)	Endangered	Absent	No Effect
Giant gartersnake (<i>Thamnophis gigas</i>)	Threatened	Presumed Present	May Affect, Likely to Adversely Affect
Western yellow-billed cuckoo (<i>Coccyzus americanus</i>)	Threatened	Absent	No Effect
Monarch butterfly (Danaus plexippus)	Candidate	Absent	No Effect
Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	Threatened	Absent	No Effect
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	Threatened	Absent	No Effect
Vernal pool tadpole shrimp (<i>Lepidurus packardi</i>)	Endangered	Absent	No Effect
Western pond turtle (<i>Emys marmorata</i>)	Proposed Threatened	High Potential	May Affect, Likely to Adversely Effect
Hartweg's golden sunburst	Endangered	Absent	No Effect

Table 3. Federally Listed Species Determinations

Yuba County Planning Department August 2024

Essential Fish Habitat Consultation Summary

Database research indicated that the BSA is within Essential Fish Habitat (EFH) for Chinook salmon (Oncorhynchus tshawytscha). However, Simmerly Slough within the BSA does not meet the criteria to be considered a Habitat Area of Particular Concern (HAPC), due to the anthropogenic modification of the channel and the lack of key habitat features, including connectivity to potential spawning habitat, that indicate high ecological function characteristic of HAPCs. No adverse effect to EFH is anticipated.

California Endangered Species Act Consultation Summary

Database searches returned eleven animal species protected under the CESA that may occur in the vicinity of the BSA. Literature review, habitat assessment, and biological surveys determined that three state-listed species have the potential to occur within the BSA: GGS, greater sandhill crane, and tricolored blackbird. With summer construction timing and the incorporation of the appropriate avoidance and minimization measures outlined in Chapter 4, direct impacts to the two avian species is not anticipated and further coordination with CDFW regarding these species is not required.

Since GGS is presumed present within the BSA and the project will temporary and permanent impacts to the habitat for the species, the project may result in direct "take" of the species as defined in §2080 of the California Fish and Game Code and consultation under CESA will be necessary.

Caltrans will consult with USFWS through the Section 7 process of FESA for Project related impacts to GGS. The result of this consultation will be a biological opinion (BO) written by USFWS which specifies conservation measures and includes an incidental take statement for the Project. The statement will include the amount or extent of the take, and avoidance/minimization measures and compensatory mitigation to minimize the take. If CDFW finds that the incidental take statement in the Federal BO is consistent with CESA, a consistency determination may be issued under section 2080.1 of the Fish and Game Code. If CDFW finds that the BO is not consistent with CESA, a separate Incidental Take Permit (ITP) may be required under section 2081(b) of the Fish and Game Code.

Therefore, impacts to sensitive natural communities within the Project Area will be *less than significant with mitigation incorporated.*

b) & c) An Aquatic Resources Delineation Report was prepared by GPA Consulting in April 2023 (Appendix C). The Biological Study Area (BSA) includes areas that could be directly or indirectly impacted by the project, either temporarily or permanently. The BSA includes the roadway, bridge, Slimmerly Slough and adjacent drainages, staging area, and adjacent areas within the project footprint. Delineated areas include Slimmerly Slough, Unnamed Drainage 1, Unnamed Drainage 2, and Unnamed Drainage 3 within the BSA. Within the BSA there is approximately 0.63 acre of wetland waters and 0.64 acre of non-wetland waters under the potential jurisdiction of the Regional Water Quality Control Board (RWQCB) and United States Army Corps of Engineers (USACE). There is approximately 2.24 acres of waters potentially under the jurisdiction of California Department of Fish and Wildlife (CDFW). Aquatic resources within the BSA were classified as Riverine and Palustrine based on the *Classification*

of Wetlands and Deepwater Habitats of the United States (Cowardin, Carter, Golet, & LaRoe, 1979).

Field Delineation

The BSA was visually surveyed by GPA biologists Mario Mayo, and Joseph Huang on March 23, 2023 and March 30, 2023. The OHWM was delineated in accordance with *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, 2008b).

Ordinary High Water Mark

A transect was selected to delineate the OHWM within Simmerly Slough and the three unnamed drainages in the BSA. Points were identified along the transect, recorded using global positioning system, and cross-sections were labeled to denote the limits of the OHWM. Information on slope, sediment texture, staining on the bridge, vegetation, and any drift or ripples was recorded on the OHWM Datasheets.

Wetland Delineation

Six sampling points (three pairs) were selected within the BSA that appeared to exhibit wetland indicators, or where conditions were uncertain, to confirm whether these locations meet the wetland parameters for USACE, and to determine the boundary of wetlands. At each sampling point, information on vegetation, soils, and hydrology was recorded on a Wetland Determination Data Form (Arid West Region). A soil test pit was excavated at each sampling location, to a depth necessary to determine wetland parameters, and the soil was evaluated for hydric indicators. Plots were delineated around each soil test pit, and plant species composition, cover, and dominance were recorded. Geographical coordinates were recorded.

Hydrology

The BSA is within the Lower Feather watershed (HUC 18020106) (United States Geologic Survey, 2021). The Lower Feather watershed is part of the Lower Sacramento Basin and drains into the Sacramento-San Joaquin Delta.

Simmerly Slough

Simmerly Slough is a natural, earthen bottom waterway and appears to have natural flows that go under the Ellis Road bridge. It appears that water from Simmerly Slough is used for irrigation for the surrounding rice fields and agricultural purposes. Simmerly Slough is a tributary to Jack Slough, where it confluences approximately one mile south of the BSA. Jack Slough ultimately connects to the Feather River approximately two miles southwest of the BSA. Based on aerial imagery and field surveys, there appears to be surface water year round (both during and outside of the irrigation season). Simmerly Slough is expected to be affected by natural hydrology.

Unnamed Drainage 1

Unnamed Drainage 1 is an earthen bottom feature that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 1 appears to receive water from the surrounding agricultural fields and roadside drainage. There is an earthen

berm between Simmerly Slough and Unnamed Drainage 1 that disconnects water flow between the two features. Unnamed Drainage 1 does not appear to have connectivity to surface waters.

Unnamed Drainage 2

Unnamed Drainage 2 is an earthen bottom waterway that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 2 appears to receive water from surface waters outside the BSA and agricultural fields. Unnamed Drainage 2 appears to drain directly into Simmerly Slough via a concrete culvert pipe.

Unnamed Drainage 3

Unnamed Drainage 3 is an earthen bottom feature that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 3 appears to receive water from the surrounding agricultural fields and roadside drainage. Unnamed Drainage 3 appeared to have once had connectivity and flows into Simmerly Slough to the east. However, an earthen berm associated with a dirt access road appears to isolate Unnamed Drainage 3 from flowing into Simmerly Slough. Unnamed Drainage 3 does not appear to have connectivity to surface waters.

Aquatic Resource Types

Aquatic resources within the BSA were classified based on the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979) (see **Table 6 and Figure 10**). **Table 6** includes the location, size, and length of each aquatic resource in the BSA.

Aquatic Resource Name	Aquatic Reso	ources Classification	Aquatic	Aquatic
1	Cowardin	Location (Lat/Long)	Resource Size (acre)	Resource Size (linear feet)
Simmerly Slough Non-Wetland Waters	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	39.198528, -121.577944	0.47	1,231
Simmerly Slough Wetlands	Palustrine, Persistent Emergent Wetland, Permanently Flooded	39.198341, -121.577966	0.51	1,582
Unnamed Drainage 1	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated	39.198162, -121.576716	0.06	573
Unnamed Drainage 1 Wetlands	Palustrine, Persistent Emergent Wetland, Artificially Flooded	39.198162, -121.576716	0.08	412
Unnamed Drainage 2 Non-Wetland Waters	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated	39.197896, -121.578647	0.17	939
Unnamed Drainage 2 Wetlands	Riverine, Artificially Flooded, Persistent Emergent Wetland, Artificial, Excavated	39.197896, -121.578647	0.07	1,422
Unnamed Drainage 3	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated	39.198104, -121.578690	0.07	532
Total			1.43	6,691

Ta	abl	e 6	5. A	Aqua	ntics	Reso	urces	within	the	Biol	ogical	Study	Area
											0	•	





FIGURE 9. Aquatic Resources Location Ellis Road Bridge Replacement Project

Survey Results

Ordinary High Water Mark

Two transects were used to evaluate and delineate the OHWM of Simmerly Slough and Unnamed Drainage 2 within the BSA. The transects are each representative of their respective channels. At the time of the surveys, there was flowing water within Simmerly Slough that appeared to flow southeast through the BSA. There was water present in Unnamed Drainage 2; however, it appears this water was due to rain and not from conveyance. The OHWM was determined by the change in slope, vegetation, and change in the sediment texture.

Transect #1

Transect #1 was taken within Unnamed Drainage 2. The location of the OHWM was determined by the change in slope and vegetation type and coverage. Vegetation below the OHWM consists of *Juncus* and herbaceous species. The vegetation above the OHWM consists of blackberry and herbaceous species. The vegetation coverage was more dense above the OHWM than below. Unnamed Drainage 2 is approximately 18 feet wide at the OHWM within Transect #1.

Transect #2

Transect #2 was taken within Simmerly Slough. The location of the OHWM was determined by the change in slope, sediment texture, and vegetation type and coverage. The sediment texture below the OHWM is mostly clay, and the sediment texture above the OHWM is mostly sandy clay. Vegetation below the OHWM consists predominantly of dense cattail coverage and *Eleocharis*. The vegetation above the OHWM consists of blackberry and herbaceous species. The vegetation coverage was more dense above the OHWM than below. Simmerly Slough is approximately 55 feet wide at the OHWM within Transect #2.

Wetland Delineation

Sampling Points #1 and #2

A soil test pit for Sampling Point #1 was excavated at the bottom of the Unnamed Drainage 2, west of the bridge. The soil test pit was approximately 12 inches deep. Vegetation was comprised of iris leaved rush (*Juncus xiphioides*), slender cudweed (*Gnaphalium exilifoloum*), and valley redstem (*Ammannia coccinea*), herbaceous plants that meet the hydrophytic vegetation indicator. The soil was clay with redox features and meets the hydric soil indicator requirement. At the time of surveys, there was surface water within Unnamed Drainage 2, but outside of the sampling point. However, water marks were observed, meeting the hydrology indicator requirement. Therefore, Sampling Point #1 exhibited all three wetland indicators.

A soil test pit for Sampling Point #2 was excavated at the top of the bank at Unnamed Drainage 2, south of Sampling Point #1. The soil test pit was approximately 11 inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #2 exhibited none of the wetland indicators.

Sampling Points #3 and #4

A soil test pit for Sampling Point #3 was excavated at the bottom of Unnamed Drainage 1. The soil test pit was approximately 12 inches deep. Vegetation was comprised predominantly of broadleaf cattail (Typha latifoloa), an herbaceous plant that meets the hydrophytic vegetation indicator. The soil was silty clay and a depleted matrix was observed, which meets the hydric soil indicator requirement. At the time of surveys, surface water was present, meeting the hydrology indicator requirement. Therefore, Sampling Point #3 exhibited all three wetland indicators.

A soil test pit for Sampling Point #4 was excavated at the top of the Unnamed Drainage 1 bank, east of the bridge. The soil test pit was approximately eight inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #4 exhibited none of the wetland indicators.

Sampling Points #5 and #6

A soil test pit for Sampling Point #5 was excavated below the OHWM within Slimmerly Slough, south of the bridge. The soil test pit was approximately 16 inches deep. Vegetation was comprised of broadleaf cattail, curly dock (*Rumex crispus*), and common knotweed (*Polygonum plebeium*), herbaceous plants that meet the hydrophytic vegetation indicator. The soil was clay loam and clay with redox dark surface meeting the hydric soil indicator requirement. At the time of surveys, water saturation was present below six inches, meeting the hydrology indicator requirement. Therefore, Sampling Point #5 exhibited all three wetland indicators.

A soil test pit for Sampling Point #6 was excavated at the top of the Simmerly Slough bank, east of the bridge. The soil test pit was approximately 11 inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #6 exhibited none of the wetland indicators.

Conclusion

The Project is anticipated to have approximately 0.04 acres of temporary impacts and approximately 0.02 acres of permanent impacts to Simmerly Slough, a jurisdictional water of the U.S. and State. In addition, the Project is anticipated to have approximately 0.01 acres of temporary impacts and approximately 0.04 acres of permanent impacts to emergent wetlands, which is considered a water of the U.S. and State. The following permits, relating to waters, will be obtained for the Project: A Flood Encroachment Permit from the Central Valley Flood Protection Board, a §401 Water Quality Certification from the Central Valley RWQCB, a §404 permit from the USACE, and a §1602 Streambed Alteration Agreement from CDFW. These permits would be obtained prior to construction. As such, there will be *less than significant impact* on federally protected wetlands as defined by Section 404 of the Clean Water Act.

d) Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. Measure BIO-24 will be incorporated into the Project to ensure that invasive species are not introduced or spread.

<u>BIO-24</u>: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures BIO-25 through BIO-27 have been incorporated into the Project design.

<u>BIO-25</u>: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

<u>BIO-26</u>: The contractor must not apply rodenticide or herbicide within the Project area during construction.

<u>BIO-27</u>: If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. The implementation of measure BIO-21 would avoid all potential impacts to migratory birds.

Impacts to native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors will be *less than significant with the aforementioned mitigation measures*.

- e) There would be no conflicts with General Plan policies regarding Mitigation of biological resources. The County has no ordinances explicitly protecting biological resources. Therefore, there is *no impact*.
- f) No habitat conservation plans, or similar plans currently apply to the project site. Both Yuba and Sutter Counties recently ended participation in a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The project site is located within the proposed boundaries of the former plan; however, no conservation strategies have been proposed to date which would be in conflict with the project. Therefore, there is *no impact*.

V.	CULTURAL RESOURCES ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?		\boxtimes		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?			\boxtimes	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			\boxtimes	
d)	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

Discussion/Conclusion/Mitigation:

 a) – d) A Cultural Resource Study, including a pedestrian field survey, was conducted for the project on January 27, 2023 (Appendix D), and a Historic Property Survey Report was completed on July 3, 2023 (Appendix E). Both were prepared by Michelle Campbell, M.A., from Dokken Engineering. Here is a summary of the studies and proposed mitigation measures:

ENVIROMENTAL SETTING AND BACKGROUND

Since the project will involve physical disturbance to ground surface and sub-surface components, it has the potential to impact cultural resources that may be located within the Area of Potential Effects (APE). The Area of Potential Effects (APE) for the Project includes all design elements and activities sufficiently buffered to provide for adequate construction workspaces, access, and an equipment and/or material staging area (Figure 4. Biological Study Area).

The horizontal APE was established as the area of direct and indirect and consists of an approximately 12-acre area. This includes all staging areas, temporary vehicle access, vegetation/tree removal, approach roadway work, bridge replacement, grading activities. The APE extends approximately 500 feet along Ellis Road from both sides of the existing bridge and approximately 300 feet east and west of the existing bridge and approximately.

The vertical APE consists of a maximum of 8 feet of depth from the existing ground surface to below ground surface (bgs) to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment work, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities.

Sources Consulted

Several types of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the Project Area. The information evaluated prior to conducting the pedestrian survey includes data maintained by the North Central Information Center, and available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Records at North Central Information Center

Dokken Engineering obtained a record search (File #YUB-22-27) for the APE and a one-mile radius surrounding the APE from the North Central Information Center (NCIC), California State University, Sacramento on October 3, 2022. The record search was conducted by personnel from the NCIC. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and the California Inventory of Historical Resources.

The record search disclosed two NCIC resources within the one-mile record search boundary, none are located within the APE (Table 7 and Appendix E).

Primary/Site Number	Description	Distance from APE
P-58-001284	Western Pacific Railroad Spur	>0.5 mi W
P-58-001372	UPRR Segment over 5th Street along the Marysville Ring Levee	>0.5 mi E

Table 7: Previously Recorded Resources within One-Mile Radius

A total of three surveys have taken place within the one-mile radius and one within the APE, which resulted in an approximate 25 percent previous survey coverage (**Table 8**). Document citations returned by the records search can be found under **Appendix E**.

Report# YU-	Title	Author	Within APE	Year
000927	Negative Archaeological Survey Report for a Project Study Report for Four Intersection Turn Lanes and Two Passing Lanes on State Route 70 in Yuba County, 03-YUB-70, PM 17.41/25.49.	Janis K. Offerman	No	1989
008370	Positive Archaeological Survey Report, Marysville to Oroville Freeway Project, Yuba and Butte Counties & Historic Properties Survey Report For The Marysville to Oroville Freeway Project, Yuba and Butte Counties, California.	Scott Williams, Amy Huberland, Lissa Westwood, Jarith Kraft, Denise Thomas, Erin Dwyer, and Andrew Hope	Yes	2002
008370B	Historic Properties Survey Report for the Marysville to Oroville Freeway Project, Yuba and Buttte Counties, California	Scott A. Williams and Andrew Hope	Yes	2002
008370C	Historic Architecture Survey Report for the Marysville- Oroville Freeway Project (Marysville Bypass) in Yuba and Butte Counties		Yes	2002

Table 8. Previous Investigations within the APE

Report# YU-	Title	Author	Within APE	Year
012418	Yuba County PTC Sites	Mark Salopek and Mary Cargill	No	2015
012551	Final Archaeological Survey Report, Yub-70 Road Widening Project, Yuba County, California	Kim Tremaine and Elizabeth Fernandez	No	2017

A review of historic General Land Office (GLO) maps (1960 and 1867), USGS topographic maps (1888, 1891, 1894, and 1895 30-minute Marysville quadrangle, 1911, 1952, 1973, 2012, 2015, and 2018 7.5-minute Yuba City quadrangle), and aerials (1937, 1947,1952, 1962, 1973, 1977, 1984, 1999, 2006, 2009, 2012, and 2016) was conducted. The GLO maps depict the Project within the Honcut Rancho, a designation which remains through the 1983 topo map. Features shown in the historic topographic maps include the Southern and Western Pacific Railroad, Ellis Road, and Simmerly Slough. The Southern Pacific Railroad, located east of the APE, is present in the 1888 topographic map and is last shown in 1973 topographic map. Current records indicate that the Southern Pacific Railroad track is abandoned. Rails and ties associated with this track have been removed. The Western Pacific Railroad, located west of the APE, is present in the 1911 map and is present in the most recent 2018 topographic map. Ellis Road is present in the 1952 map and its alignment has not been altered. Simmerly Slough is present in all topographic maps and its alignment in the Project vicinity has been altered beginning in the 1940s.

A review of the readily available historical aerial photographs indicates that land use within the APE, and that of surrounding properties, has been rural and used for agricultural purposes for multiple decades. In general, development in the area is minimal up through the current day.

Native American Coordination

Native American Heritage Commission Coordination

On November 2, 2022, Dokken Engineering sent a letter and a map depicting the Project vicinity to the NAHC in West Sacramento, asking the commission to review the Sacred Land Files (SLF) for any Native American cultural resources that might be affected by the Project. The request to the NAHC seeks to identify any Native American cultural resources within or adjacent to the APE. A list of Native American individuals who might have information or concerns about the Project was also requested. On December 8, 2022, Pricilla Torres-Fuentes, Cultural Resource Analyst, informed Dokken Engineering via email that a review of the SLF failed to indicate the presence of Native American cultural resources in the Project vicinity.

State-Level Native American Consultation

On February 3, 2023, initial AB-52 consultation letters were sent to the Native American individuals on the list provided by the NAHC. The letters provided a summary of the Project and requested information regarding comments or concerns the Native American community might have about the Project. For those individuals that did not reply to the letter, follow-up emails (or phone calls when no email was available) were sent on March 30, 2023 and May 9, 2023. The following summarizes the consultation efforts:

- *Butte Tribal Council, Dennis Ramirez.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Glenda Nelson, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. On May 15, 2023, a response was received from Nelson Smith, THPO, stating that although the project is within the aboriginal territory of the Tribe, the Tribe's files did not locate any known resources within the project boundary. The Tribe also requested to be consulted in case of late discovery.
- *Maidu Nation*. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Mooretown Rancheria of Maidu Indians, Gary Archuleta.* On February 21, 2023 a letter from Matthew Hatcher, THPO, was received stating that the Tribe did not have any knowledge of resources within the project and requested notification in case of project change or late discovery.
- *Nevada City Rancheria Nisenan Tribe, Shelly Covert, Tribal Secretary.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Nevada City Rancheria Nisenan Tribe, Richard Johnson, Chairman.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Nevada City Rancheria Nisenan Tribe, Saxon Thomas.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Pakan'yani Maidu of Strawberry Valley Rancheria, Tina Goodwin, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Strawberry Valley Rancheria, Cathy Bishop, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Grayson Cooney, Cultural Director.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Don Ryberg, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- United Auburn Indian Community of the Auburn Rancheria, Gene Whitehouse, Chairperson. No response to initial letter submitted via the UAIC website consultation page. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Wilton Rancheria, Jesus Tarango, Chairperson.* No response to initial letter. A follow- up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Wilton Rancheria, Steven Hutchason, THPO.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.

• *Wilton Rancheria, Dahlton Brown, Director of Administration.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.

FIELD METHODS AND RESULTS

Methodology

On January 27, 2023, the entire APE was subjected to an intensive pedestrian survey under the guidance of the *Secretary of the Interiors Standard's for the Identification of Historic Properties* by Michelle Campbell. The pedestrian survey was conducted at roughly 5-meter transect intervals paralleling the roadway where conditions allowed. All APE field conditions were fully recorded in the field notes. Coverage varied in areas with vegetation coverage.

During the survey, exposed subsurface cuts, such as those within the slough, roadway cuts, and bank cuts were examined for indications of surface or subsurface cultural resources, soil color change, and/or staining that could indicate past human activity or buried deposits.

Results

The pedestrian survey did not identify any cultural resources with the APE. Inspection of open surfaces, visible cut slopes, and drainage cut banks during the field survey revealed no evidence of subsurface artifacts, features, or other indicators of past human use (such as soil change). While surface visibility varied in areas depending on density of vegetation, overall visibility was approximately 70 percent.

STUDY FINDINGS AND CONCLUSIONS

In an effort to identify archaeological resources that might be affected by the undertaking, a pedestrian survey, background research, and consultation with individuals and organizations were conducted. A record search conducted at the NCIC indicated that there were no previously recorded resources within the APE. No archaeological resources were identified within or adjacent to the APE. The existing Ellis Road over Simmerly Slough Bridge (Bridge No. 16C-0075) is a Category 5 bridge and is as not eligible for the National Register of Historic Places (Appendix A).

Additionally, the subsurface sensitivity was assessed through landform analysis and opportunistic visual inspection of exposed subsurface soils within the APE during the pedestrian survey. Although the APE location is within and adjacent to the Simmerly Slough and there is the presence of Holocene aged soils, the APE has been significantly altered from agricultural practices, channel realignment, and bridge construction. As Project activities will occur primarily within the previously disturbed bridge and roadway construction areas, the potential for the Project to impact intact buried cultural resource deposits in the APE is *low*.

At this time, no further archaeological study is required unless project plans change to include areas not previously included in the surveyed area or if additional information is received from other sources or special interest groups.

With any Project requiring ground disturbance, there is always the possibility that unmarked burials or cultural materials may be unearthed during construction. This impact is considered potentially significant. Implementation of **Mitigation Measures CR-1** and **CR-2** would reduce this impact to a **Less than Significant with Mitigation** level.

<u>CR-1</u> Inadvertent Discovery of Human Remains

If human remains are encountered, State Health and Safety Code Section 7050.5 dictates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

<u>CR-2</u> Inadvertent Discovery of Cultural Material

If previously unidentified cultural materials are unearthed during geotechnical or construction activities, work shall be halted within 100 ft. of the area until the archaeological monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Should the archaeological discovery include Native American resources, the MLD shall be contacted, to assist in the significance assessment and treatment recommendations.

VI. ENERGY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				\boxtimes
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

- a) The proposed project will have no impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation nor will it conflict with or obstruct a state or local plan for renewable energy or energy efficiency. There are no unusual project characteristics or construction processes that will require the use of equipment that will be more energy intensive than is used for comparable activities or use of equipment that will not conform to current emissions standards and related fuel efficiencies. Compliance with Yuba County 2030 General Plan will ensure that all project energy efficiency requirements are net resulting in *no impact*.
- b) The proposed project is a bridge replacement project, which will give residents a safer route to get to important local destinations. This project is consistent with the Yuba County 2030 General Plan, Natural Resources Element for goals and policies addressing energy conservation and energy efficiency (Yuba County 2011). Specifically, this project will provide transportation infrastructure. Therefore, this project is consistent with local plans for energy efficiency and there will be *no impact*.

VI	I. GEOLOGY AND SOILS	Detentiall	Less Than	Less The	
W	ould the project:	Significant Impact	With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
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?			\boxtimes	
d)	Be located on expansive soil, as defined in Section 1803.5.3 to 1808.6 of the 2010 California Building Code, creating substantial risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				\boxtimes

Discussion/Conclusion/Mitigation:

a) i-iii) Yuba County is located within an area of relatively low seismic activity and is not located within a highly active fault zone. According to the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, Division of Mines and Geology Special Publication 42, Yuba County is not one of the cities or counties affected by Earthquake Fault Zones, as of August 16, 2007. Therefore, strong seismic ground shaking and seismic-related ground failure, including liquefaction is not an anticipated side effect of development in the area. The bridge replacement will be constructed to meet all applicable State of California seismic building codes and design as applicable to the project. A *less than significant impact* from earthquakes is anticipated.

iv) In Yuba County, landslides would likely be limited to foothill and mountain areas, outside of the Project Area, where slopes are greater. The Yuba County 2030 General Plan identifies the area as one that has a low risk for landslides, and states that grading ordinances, adopted by Yuba County and based on Appendix J of the 2013 California Building Code, serve as effective measures for dealing with landslide exposure (Yuba County 2011). Hazards associated with potential seismic, and landslide result in a *less than significant impact*.

b) c) and d) According to Exhibit 4.6-4 Soil Erosion Hazard, of the 2030 General Plan EIR, the project site has a slight potential for soil erosion hazards. Exhibit 4.6-5 Shrink/Swell Potential indicates that the project site also contains expansive soils with a low shrink/swell potential.

Appendix C contains a Soils Survey which outlines the specific soil types within the project. The soil types within the BSA include San Joaquin loam, 0 to 1 percent slopes, occasionally flooded and trainer loam, 0 to 1 percent slopes, occasionally flooded (Natural Resource Conservation Service, 2022). These soil units are described below:

San Joaquin Loam, 0 to 1 Percent Slopes, Occasionally Flooded

San Joaquin Loam, 0 to 1 Percent Slopes, Occasionally Flooded is found below elevations of 130 feet and typically receive 20 inches of rain. This soil unit has a very low capacity to transmit water with a water table depth of over 80 inches. This unit is comprised of sandy loam for the first 16 inches, clay from 16 to 25 inches, and duripan from 25 to 35 inches. This soil unit is not considered hydric.

Trainer Loam, 0 to 1 Percent Slopes, Occasionally Flooded

Trainer Loam, 0 to 1 Percent Slopes, Occasionally Flooded is comprised of mixed fine-loamy alluvium. This soil unit has a moderate to high capacity to transmit water with a water table depth of about 36 to 60 inches. This unit is comprised of loam for the first 36 inches and sandy clay loam below 36 inches. This soil unit is not considered hydric.

There are no structures associated with the proposed project, therefore, the project will result in a *less than significant impact*.

e) No septic tanks or alternative wastewater disposal system will be installed as part of the proposed project. There are a number of septic systems and wells in the project vicinity that are used for agricultural and residential uses. These will continue to be used in the future. However, the project would not result in an increased demand for water. Water usage associated with the proposed project would not significantly draw down aquifers in the area to a level that would cause subsidence. Therefore, there will be *no impact*.

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

Discussion/Conclusion/Mitigation:

a) Climate change is a public health and environmental concern around the world. As global concentrations of atmospheric greenhouse gases increase, global temperatures increase, weather extremes increase, and air pollution concentrations increase. The predominant opinion within the scientific community is that global warming is currently occurring, and that it is being caused and/or accelerated by human activities, primarily the generation of "greenhouse gases" (GHG).

In 2006, the California State Legislature adopted AB32, the California Global Warming Solutions Act of 2006, which aims to reduce greenhouse gas emissions in California. Greenhouse gases, as defined under AB 32, include carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulfur hexafluoride. AB 32 requires the California Air Resources Board (ARB), the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan for AB32. The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020 and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current" emissions to be achieved by 2020 (per Scoping Plan current is a point in time between 2005 and 2008). The Scoping Plan also recognized that Senate Bill 375 Sustainable Communities and Climate Protection Act of 2008 (SB 375) is the main action required to obtain the necessary reductions from the land use and transportation sectors in order to achieve the 2020 emissions reduction goals of AB 32.

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

The Sacramento Area Council of Governments (SACOG), the MPO for Yuba County, adopted an SCS for the entire SACOG region as part of the 2035 Metropolitan Transportation Plan (MTP) on April 19, 2012. The GHG reduction target for the SACOG area is 7 percent per capita by 2020 and 16 percent per capita by 2035 using 2055 levels as the baseline. Further information regarding SACOG's MTP/SCS and climate change can be found at http://www.sacog.org/2035/.

While AB32 and SB375 target specific types of emissions from specific sectors, and ARBs Scoping Plan outlines a set of actions designed to reduce overall GHG emissions, it does not provide a GHG significance threshold for individual projects. Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which a project may have the potential to conflict with statewide efforts to reduce GHG emissions (establish thresholds). To date, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project generated emissions from plans or development projects or a methodology for analyzing impacts. Rather FRAQMD recommends that local agencies utilize information from the California Air Pollution Control Officers Association (CAPCOA), Attorney General's Office, Cool California, or the California Natural Resource Agency websites when developing GHG evaluations through CEQA.

GHGs are emitted as a result of activities in residential/commercial buildings when electricity and natural gas are used as energy sources. New California buildings must be designed to meet the building energy efficiency standards of Title 24, also known as the California Building Standards Code. Title 24 Part 6 regulates energy uses including space heating and cooling, hot water heating, ventilation, and hard-wired lighting that are intended to help reduce energy consumption and therefore GHG emissions. Replacing an existing bridge will not create any new sources of GHG outside of the small emission that would take place during project construction that are within the limits allowed in the Yuba County 2030 General Plan.

Therefore a bridge replacement project on an existing road would likely not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts. Therefore, impacts related to greenhouse gas emissions would be *less than significant*.

b) The project is consistent with the Air Quality & Climate Change policies within the Public Health & Safety Section of the 2030 General Plan therefore, the project has *no impact* in regard to any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

IX M.	. HAZARDS AND HAZARDOUS ATERIALS	Potentially Significant	Less Than Significant With	Less Than Significant	No Impact	
W	ould the project:	Impact	Mitigation Incorporated	Impact	mpaci	
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				\square	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				\square	
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes	
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes	
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			\boxtimes		

Discussion/Conclusion/Mitigation:

a) The project consists of a bridge replacement along a section of Ellis Road. Given that the surrounding land use is designated as Cropland and rice fields surround the Project limits, as observed on the February 2023 site visit, pesticide/herbicide usage may occur or may have historically occurred on privately owned lands adjacent to the Project. However, no significant disturbance is anticipated in these areas where pesticides/herbicides are applied since construction will only occur within the existing Ellis Road and bridge alignment. The

primary concern with pesticide/herbicides usage is residual arsenical (copper arsenate) pesticides, which are not contained in current used applications.

b) Based on the Hazardous Waste Initial Site Assessment (ISA) prepared by Dokken Engineering (Appendix F), no evidence of Recognized Environmental Conditions (RECs) or Activity and Use Limitations (AULs) on the Subject Properties, except as described in Table 9. RECs are defined in ASTM Designation E 1527-21 as "the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

	Location	Description of REC Evidence Found	Description of Associated AUL
1	Ellis Road Bridge (No. 16C-0075)	The structural elements of the bridge, including concrete, was potentially formed with asbestos containing material (ACMs), if it was constructed before 1989. As the structure within the Project area predates 1989, any structural concrete to be disturbed by the Project would require testing for ACMs.	None Found
2	Ellis Road Bridge (No. 16C-0075)	The bridge to be disturbed may have been built using lead- containing paint. Any paint to be disturbed would require testing for hazardous levels of lead.	None Found

Table 9 - REC or AUL Evidence

The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review and visual site survey, the following actions are recommended to verify the presence/extent of RECs and evaluate the potential for remediation during the Plans, Specifications & Estimate (PS&E) phase of the Project:

HAZ-1: A preliminary site investigation is recommended to conduct testing for asbestos containing material ACMs and lead- based paints in the bridge that have been disturbed before construction or will be disturbed during construction. This investigation should be implemented before construction.

HAZ-2: As is the case for any Project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. Contaminated soils can be encountered at any depth of excavation. If soils contaminated by hazardous waste are discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed. The specific methods and protocol for determining if a soil is contaminated are contained in the Caltrans Hazardous Procedures for Construction.

If the Project Area is anticipated to change (due to a change in the proposed Project or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised Project limits. The potential release of hazardous

materials into the environment are *less than significant with mitigation* measures HAZ-1 and HAZ-2.

- c) Construction equipment typically uses only a minor amount of hazardous materials, primarily motor vehicle fuels and oils. Because of their limited quantity, these materials would present a minor hazard, and only if spillage occurs. Standard spill prevention and control measures will be maintained by the contractor. Use of these materials would cease once project construction is completed. Therefore, there would be a *less than significant impact* to the public or environment related to hazardous materials.
- d) Construction equipment for a bridge replacement project typically uses only a minor amount of hazardous materials, primarily motor vehicle fuels and oils. Because of their limited quantity, these materials would present a minor hazard, and only if spillage occurs. Standard spill prevention and control measures will be maintained by the contractor. Use of these materials would cease once project construction is completed. This project would not produce or create significant hazardous materials with the following measure:

HAZ-3: Construction specifications shall include the following measures to reduce potential impacts in the Project Area associated with accidental spills of pollutants (e.g., fuel, oil, grease):

A site-specific prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.

Equipment and hazardous materials shall be stored a minimum of 50 feet away from surface water features.

Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted within an adequate fueling containment area.

Therefore, impacts would be *less than significant with mitigation incorporated*.

- c) The closest school site is Cordua Elementary School, which is approximately 3 miles west from Ellis Road. With implementation of measure HAZ-1, impacts to the nearby school would be considered *less than significant with mitigation incorporated*.
- d) The project site is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The site has historically been used as a bridge and is currently zoned for agriculture. Therefore, the project would not create a significant hazard to the public or the environment and there would be *no impact* to the environment from hazardous materials.

- e) and f) There are no private airstrips located near the project site. Therefore, the project would have *no impact* on public or private airstrips, or safety of residents and/or workers in the project vicinity.
- g) The County of Yuba Office of Emergency Services adopted an Emergency Operations Plan in August 2015 (Yuba County 2015). The project is consistent with the policies and procedures within the Emergency Operations plan and will not interfere with implementation of the plan. There may be temporary physical interference to the existing road system within the community of Olivehurst during construction, however emergency evacuation routes will remain open throughout project implementation. Therefore, there will be *no impact* on the County's adopted emergency response plan.
- h) The project is not located in a high wildlife fire hazard severity zone as reported by the Cal Fire 2008 Fire Hazard Severity Zones map. The property is within the jurisdiction of the Marysville Fire Protection Department, who will respond to fire emergencies within the project site. For this reason, the impact would be *less than significant*.

			T (D)		
X. Wo	HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
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:				
	 Result in a substantial erosion or siltation on- or off- site; 		\boxtimes		
	 Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 		\boxtimes		
	iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) Impede or redirect flood flows?		\boxtimes		
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

Discussion/Conclusion/Mitigation:

a) The project may result in ground disturbance equal to or greater than one acre in size and would then be within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB), which develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Prior to construction of a project greater than one acre, the RWQCB requires a project applicant to file for a National Pollution Discharge Elimination System (NPDES) General Permit. The General Permit process requires the project applicant to 1) notify the State, 2) prepare and implement a Storm Water Pollution Plan (SWPPP), and 3) to monitor the effectiveness of the plan.

The project's construction activities and stormwater runoff design to offset the potential for siltation (erosion) and other potential water quality impacts will be *less than significant with the following Mitigation*:

HYD-1 National Pollution Discharge Elimination (NPDES) Permit:

Prior to the County's approval of a grading plan or site improvement plans, the project applicant shall obtain from the Central Valley Regional Water Quality Control Board a National Pollution Discharge Elimination (NPDES) Permit for the disturbance of over one acre. Further, approval of a General Construction Storm Water Permit (Order No. 99-08-DWQ) is required along with a Small Construction Storm Water Permit. The permitting process also requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP is used to identify potential construction pollutants that may be generated at the site including sediment, earthen material, chemicals, and building materials. The SWPPP also describes best management practices that will be employed to eliminate or reduce such pollutants from entering surface waters.

- b) The project will not affect groundwater supplies or interfere with any groundwater recharge. There is not a development component to the project. Therefore, there will be *no impacts*.
- c) i) The project site is very flat which will reduce the potential for erosion during construction. Mitigation Measure HYD-2 shall be incorporated to further reduce siltation or erosion during construction of the proposed project.

HYD-2 Best Management Practices (BMPs):

BMPs will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g., oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures, and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction.

Therefore, there would be a *less than significant impact with mitigation incorporated*.

- ii-iv) Mitigation Measure **HYD-1** will be incorporated into the project to ensure that sources of polluted runoff will not flow into jurisdictional drainages. Therefore, there would be a *less than significant impact with mitigation incorporated*.
- d) According to the Federal Emergency Management Agency (FEMA) maps, the proposed project location is within an area designated as Zone AE. (Figure 10) Zone AE indicates a high-risk area. High risk areas have at least a 1% annual chance of flooding. No future development such as the construction or structures or houses are proposed; however a small increase in impervious surfaces would occur. Therefore, flooding is unlikely to be generated by the additional impervious surfaces. Furthermore, Yuba County is within an inland area not subject to seiche or tsunami, and mudflow is not an identified issue at this location. Therefore, there would be *no impact* from flooding, mudflow, seiche, or tsunami.
- e) The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan because Yuba County has not adopted a water quality control plan or sustainable groundwater management plan. There would be a *less than significant impact*.


XI. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
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?				\boxtimes

- a) The project site consists of a bridge replacements and is located in a rural area and there would be no change in land use. The project would not physically divide an established community. Therefore, the development would result in *no impact* or division of an established community.
- b) The Yuba County General Plan designates the project site as Natural Resources. The Project Area is zoned as "EA-40" Exclusive Agricultural, 40 acres minimum and (Yuba County 2011) and meets all the requirements and intents for this zone. No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations. Land use impacts are anticipated to have *no impact* on habitat or conservation plans.

XII. MINERAL RESOURCES	Potentially	Less Than Significant With	Less Than	No
Would the project:	Impact	Mitigation Incorporated	Impact	Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\boxtimes

 a) and b) The Project Area is not known to contain any mineral resources that would be of value to the region or residents. Additionally, according to the Yuba County 2030 General Plan, the project site is not delineated in an area identified to have surface mining activities or contain mineral resources (Yuba County 2011). The project is expected to have *no impact* on mineral resources.

XIII. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
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?				

a) The project would create temporary or periodic increases in ambient noise levels in the vicinity during construction. However, Article 3 of Chapter 8.20 of the Yuba County Code of Ordinances governs construction related noise. It states, "It shall be unlawful for any person within a residential zone, or within the radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless a permit has been duly obtained beforehand from the Director of the Community Development Department as set forth in Section 8.20.710 of this chapter. No permit shall be required to perform emergency work as defined in article 1 of this chapter."

Construction activities associated with the project will cause a temporary increase in noise levels in the vicinity. However, these noise levels would be temporary, conform to the hours required by County Ordinance, and would cease once construction activities end. With the incorporated standard requirements, impacts related to construction noise shall be *less than significant*.

b) Temporary increases in ground borne vibrations and noise may occur during construction of the project due to the mobilization of heavy construction equipment on the roadways within the Project Area, as well as ground disturbance required to install the new bridge. However, increases in noise and vibrations in the project vicinity would be temporary and return to normal conditions once construction is complete. Furthermore, construction activities would conform to the ambient base noise levels set forth in the Yuba County Code of Ordinances Section 8.20.140. Therefore, the project would not generate excessive ground borne vibrations or noise levels, and there would be a *less than significant impact*.

c) As mentioned previously, the project site is not located near any airports. Therefore, impacts would be a *less than significant*.

XIV. POPULATION AND HOUSING	Potentially Significant	Less Than Significant With	Less Than Significant	No
Would the project:	Impact	Mitigation Incorporated	Impact	Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes

- a) The project does not include the construction of homes or extensions of roads or other infrastructure that would be required to foster population growth near the Project Area; therefore, there would be no increase in population as a result of the proposed project and impacts would be *less than significant*.
- b) The proposed project does not involve the removal of housing and therefore would cause *no impact* to housing.

XV. Would	PUBLIC SERVICES the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Substar provisio facilitie facilitie environ service objectiv	ntial adverse physical impacts associated with the on of new or physically altered governmental es, need for new or physically altered governmental es, the construction of which could cause significant immental impacts, in order to maintain acceptable ratios, response times or other performance wes for any of the public services:				
a)	Fire protection?				\boxtimes
b)	Police protection?				\boxtimes
c)	Schools?				\boxtimes
d)	Parks?				\boxtimes
e)	Other public facilities?				\boxtimes

- a) The proposed project does not include the construction of any housing or land uses that would require a change or increase in fire protection. With adherence to the requirements from the Yuba County Ordinance Code and Fire Codes, there would be *no impact* on fire protection services.
- b) The Yuba County Sheriff's Department would continue to provide law enforcement services to the project site and the California Highway Patrol will respond in the event of a vehicle accident. The proposed project does not include the construction of any housing or land uses that would result in a change or increase in the demand for law enforcement. Therefore, there would be *no impact* related to police protection.
- c) The proposed project does not include the construction of any housing and would not generate any students. The project would not increase the demand on school districts. Therefore, there would be *no impact* related to school services.
- d) The proposed project does not include the construction of housing and would not generate an increased demand for parks. Therefore, there would be *no impact* to parks.
- e) Other public facilities that are typically affected by development projects include the Yuba County Library and County roads. However, since there is no development proposed by the project, there would be no increased demand for these services. The temporary traffic generated by construction activities would not generate any additional roadway maintenance. Therefore, there would be *no impact* to other public facilities.

XV. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				\boxtimes
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

 a) and b) The proposed project does not include construction of new housing developments, and therefore would not increase the demand for parks and/or recreational facilities. The Project Area lacks recreational facilities and construction, or expansion of recreational facilities will not be required due to project activities which include the replacement of an existing bridge. Therefore, there would be *no impact* to parks or recreational facilities.

XV We	/II. TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\boxtimes	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
d)	Result in inadequate emergency access?			\boxtimes	

- a) As part of the Yuba County 2030 General Plan, the Circulation Framework section of the Community Development Element describes the transportation services and facilities within the Plan area and provides transportation objectives to accommodate the County's development. Although the proposed project is not explicitly identified within the General Plan, the need to replace a structurally deficient bridge has been identified by the Public Work's Department. Improvements are needed to meet current design standards and to provide improved safety and operations of the facility. Therefore, the project is consistent with County policies addressing transportation circulation and there will be *no impact*.
- b) The proposed project will improve the existing bridge and existing roadway in the Project Area and will not introduce any new vehicular trips to the area other than what is existing. Ellis Road is an existing road that currently provides access to the project site and will continue to do so after the project is completed. For these reasons, impacts to VMT would be *less than significant*.
- c) The proposed bridge replacement would not increase hazards due to geometric design or incompatible uses. The design will meet current American Association of State Highway and Transportation Officials (AASHTO) standards and Yuba County requirements. The Project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments. Hazards due to a design feature of the project would not be substantially increased as a result of this project and there would be *no impact*.
- d) Emergency access to the project site would be via HWY 70 and Jack Slough Road. Only the portion of Ellis Road where construction of the bridge will be closed during construction. This has the potential to impact Jack Slough Road to HWY 70, however, the surrounding roads and alternate access points will remain for open emergency access as a result of the project. Therefore, the project will have *a less than significant effect* on emergency services.

XVIII. TRIBAL CULTURAL RESOURCES

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

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	\boxtimes		

Discussion:

Tribal groups of the area hold a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. Tribal groups seek to ensure the preservation and continuance of their cultural heritage for current and future generations.

Conclusion/Mitigation:

a-b) Per Assembly Bill 52 (AB-52, Gatto 2014), as of July 1, 2015 Public Resources Code Sections 21080.3.1 and 21080.3 require public agencies to consult with the Native American Heritage Commission (NAHC) and Native American tribes for the purpose of mitigating impacts to tribal cultural resources; that consultation process is described in part below:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section (Public Resources Code Section 21080.1 (d))

Consistent with Public Resources Code (PRC) Section 21080.3.1 (d), Yuba County provided formal notification of the project and the opportunity to consult on it to the designated contacts of the Estom Yumeka Maidu Tribe, Pakan'yani Maidu, Tsi Akim Maidu, United Auburn Indian Community, Wilton Rancheria, Enterprise Rancheria, and Nevada City Rancheria Nisenan Tribe in a letter mailed to those organizations on February 3, 2023.

On May 15, 2023, the Estom Yumeka Maidu Tribe of the Enterprise Rancheria, responded to the AB-52 request for consultation. Specifically, a letter from, Nelson Smith, THPO, stated that although the project is within the aboriginal territory of the Tribe, the Tribe's files did not locate any known resources within the project boundary. The Tribe also requested to be consulted in case of late discovery.

No additional responses or requests for consultation was received by Tribal groups for this Project and no Tribal background research was provided regarding potential Tribal Cultural Resources (TCR) present within the Project footprint.

While no TCRs were identified through consultation, **Mitigation Measure TCR-1** should be implemented in case of accidental discovery or recognition of Tribal Cultural Resources in the Project Area. The impact upon Tribal Cultural Resources would be *less than significant impact with mitigation incorporated*.

TCR-1 Unanticipated/Inadvertent Discoveries of TCRs

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the Project Area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and Tribal protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the Project Area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by the California Native American Tribe that is traditionally and culturally affiliated with the Project Area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB52, have been satisfied.

XI W	X. UTILITIES AND SERVICE SYSTEMS ould the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
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?				
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?			\boxtimes	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			\boxtimes	

- a) The proposed bridge replacement will be installed within the existing County ROW. Projects within the right-of ways that involve the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures involving negligible or no expansion of use beyond that existing at the time of the lead agencies determination shall not have an impact on the environment. All required infrastructure expansions will be located in the existing right-of-ways and will therefore create a *less than significant* impact.
- b) and c) The project does not require the use of any new wastewater treatment facilities. No significant impacts related to the adequacy of the water supply for the project were identified during the course of the project review because the project does not require the use of any new water or wastewater facilities. Since no major concerns have been expressed, any impact related to water supply is expected to be *less than significant*.
- d) and e) The project will comply with federal, state and local regulations related to solid waste. The project is not anticipated to result in the generation of any solid waste and will only generate waste during the construction phase. The Ostrom Road landfill has a capacity of 41,822,300 cubic yards and has adequate capacity to serve the project site. The project will have a minimal effect on this facility and the impact would be *less than significant*.

XX. WILDFIRE Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
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?				\boxtimes
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes

DISCUSSION/CONCLUSION/MITIGATION:

- a) The County of Yuba Office of Emergency Services adopted an Emergency Operations Plan in August 2015 (Yuba County 2015). The project is consistent with the policies and procedures within the Emergency Operations plan and will not interfere with implementation of the plan. Access to the project site will not be impacted by construction activities, and emergency evacuation routes along Ellis Road will remain open throughout construction. Therefore, the project will have *no effect* on emergency response.
- b) c) and d) The project is not located within a State Responsibility Area established by CalFire. There are also no factors which could exacerbate fire risk and expose project occupants to pollution from wildfires. No installation or maintenance of infrastructure that may exacerbate fire risk is proposed as part of the project. The project will have *no impact* related to wildfire risk.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Does th	he project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Hav env or v to elin nun plar maj	we the potential to degrade the quality of the vironment, substantially reduce the habitat of a fish wildlife species, cause a fish or wildlife population drop below self-sustaining levels, threaten to minate a plant or animal community, reduce the mber or restrict the range of a rare or endangered int or animal or eliminate important examples of the jor periods of California history or prehistory?				
b) Hav cum con proj with cum proj	we impacts that are individually limited, but mulatively considerable? ("Cumulatively nsiderable" means that the incremental effects of a oject are considerable when viewed in connection th the effects of past projects, the effects of other rrent projects, and the effects of probable future ojects)?				
c) Hav sub dire	ve environmental effects which will cause ostantial adverse effects on human beings, either ectly or indirectly?		\boxtimes		

Discussion/Conclusion/Mitigation:

a) As discussed in the Biological Resources section, construction is anticipated to have impacts to wetlands, such as Simmerly Slough, and special-status species, such as Sanford's Arrowhead, Giant Garter Snake, Northern Harrier, Western Pond Turtle, as well as impacts to sensitive habitat communities including jurisdictional drainage and riparian habitat. Proposed mitigation measures **BIO-1** through **BIO-27**, would reduce impacts to biological resources to *less than significant with mitigation*.

As discussed in the Cultural Resources and Tribal Cultural Resources section, construction could potentially impact cultural resources. Proposed mitigation measures in CR-1, CR-2, and TCR-2, would reduce the impact to *less than significant with mitigation*.

b) The project is consistent with the Yuba County 2030 General Plan land use designation, as well as the zoning ordinance for the Project Area (Yuba County 2011). No cumulative impacts associated with this project have been identified. Therefore, the project's cumulative considerable impacts will be *less than significant*.

c) Due to the nature of the proposed project, no substantial adverse effects on humans are expected. The project would not emit substantial amounts of air pollutants, including hazardous materials. These effects are temporary in nature and subject to Feather River Air Quality Management District's Standard Mitigation Measures that would reduce these emissions to a level that would not be considered a significant impact. The project would not expose residents to flooding. Any hazardous materials from the old bridge will be addressed by **HAZ-1** and **HAZ-2**. Therefore, the project is considered to have a *less than significant impact with mitigation*.

REFERENCES

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- 8. Federal Emergency Management Agency (FEMA). 2024. FEMA Flood Map Service Center.
- 9. Feather River Air Quality Management District (FRAQMD). 2010. Indirect Source Review Guidelines Thresholds of Significance.

LIST OF APPENDICES

- Appendix A: Bridge Construction Emissions Model
- Appendix B: Natural Environmental Study

Appendix C: Aquatic Resources Delineation Report

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Appendix E: Historic Property Survey Report

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Appendix A. Bridge Construction Emissions Model

Ellis Road Bridge Replacement Project Summary Report

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- 7. Health and Equity Details
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 - 7.5. Evaluation Scorecard

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Ellis Road Bridge Replacement Project
Construction Start Date	1/1/2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	39.6
Location	39.198044588930145, -121.5782237865955
County	Yuba
City	Unincorporated
Air District	Feather River AQMD
Air Basin	Sacramento Valley
TAZ	346
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

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
Road Construction	51.0	Mile	8.13	0.00	—	—	—	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-3	Use Local Construction Contractors
Construction	C-4*	Use Local and Sustainable Building Materials
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	С-10-В	Water Active Demolition Sites
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Construction	C-13	Use Low-VOC Paints for Construction

* 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	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	4.61	28.9	0.06	1.21	6.07	7.28	1.11	1.02	2.13	—
Mit.	4.61	28.9	0.06	1.21	4.13	5.34	1.11	0.81	1.92	—
% Reduced	—	—	—	—	32%	27%	—	21%	10%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	1.86	< 0.005	0.08	0.43	0.50	0.07	0.08	0.14	—
Mit.	0.32	1.86	< 0.005	0.08	0.31	0.38	0.07	0.06	0.13	—
% Reduced	—	—	—	—	27%	23%	—	17%	9%	—

Annual (Max)	_	—	—	_		—	—		_	—
Unmit.	0.06	0.34	< 0.005	0.01	0.08	0.09	0.01	0.01	0.03	—
Mit.	0.06	0.34	< 0.005	0.01	0.06	0.07	0.01	0.01	0.02	—
% Reduced	_	—			27%	23%		17%	9%	_

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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	5	3	2	4
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	5	3	2	4
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	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 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)	42.0
Healthy Places Index Score for Project Location (b)	59.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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.

Appendix B. Natural Environmental Study

Ellis Road Bridge Replacement Project



Natural Environment Study

Discussion of Biological Resources, Wetland Studies, Project Impacts, and Mitigation

Yuba County, California

District 3 – YUB – County of Yuba

BRLO-5916(131)

November 2023



Natural Environment Study

Discussion of Biological Resources, Wetland Studies, project Impacts, and Mitigation Yuba County, California District 3 – YUB – County of Yuba BRLO-5916 (131)

November 2023

STATE OF CALIFORNIA Department of Transportation Yuba County

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Acronyms List

AASHTO	American Association of State Highway and Transportation Officials
ARDR	Aquatic Resources Delineation Report
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CGP	Construction General Permit
СН	Critical Habitat
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Yuba County
CWA	Clean Water Act
EFH	Essential Fish Habitat
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
IPaC	Information for Planning and Consultation
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High-Water Mark
Project	Ellis Road Bridge Replacement Project
PBFs	Physical and Biological Features
RWQCB	Regional Water Quality Control Board
RSP	Rock Slope Protection
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Service

Summary

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge over Simmerly Slough (Project). The Project is located on Ellis Road approximately 2 miles north of Marysville and approximately 0.2 miles east of Highway 70 in an agricultural part of Yuba County, California. The purpose of this Project is to provide a structure that meets current design standards and improve safety and operation of the facility. This Natural Environment Study (NES) provides a review and evaluation of the potential impacts to biological resources including special status species and sensitive habitats as a result of the proposed Project. Field surveys were conducted within the Biological Study Area (BSA), which encompasses the Project area, plus a 50-foot buffer.

During a biological survey conducted on February 6, 2023, several habitat types were observed within the BSA, including active rice fields and associated infrastructure (e.g., irrigation canals, drainage ditches, farm roads), ruderal vegetation, Himalayan blackberry, riparian, emergent wetland, and barren areas. The existing bridge passes over Simmerly Slough, a perennial channel that divides the BSA from east to west.

The Project is anticipated to have approximately 0.04 acres of temporary impacts and approximately 0.02 acres of permanent impacts to Simmerly Slough, a jurisdictional water of the United States (U.S.) and State. In addition, the Project is anticipated to have approximately 0.01 acres of temporary impacts and approximately 0.04 acres of permanent impacts to emergent wetlands, which is considered a water of the U.S. and State. These impacts would be mitigated for via regrading, on-site seeding, and the purchase of mitigation bank credits from an appropriate bank. Mitigation provided by the Project would ensure a no net loss of sensitive habitat within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

For the purposes of this analysis, "special-status species" includes any species that has been afforded special recognition by federal, state or local resources agencies (e.g., U.S. Fish and Wildlife Service [USFWS], CDFW, etc.), and/or resource conservation organizations (e.g., California Native Plant Society [CNPS]). Literature review, habitat assessment, and field surveys determined that eight special status species have the potential to occur within or adjacent to the Project area: Giant garter snake (*Thamnophis gigas*; GGS), greater sandhill crane (*Antigone canadensis tabida*), northern harrier (*Circus hudsonius*), Sanford's arrowhead (*Sagittaria sanfordii*), song sparrow - "Modesto" population (*Melospiza melodia pop. 1*), tricolored blackbird (*Agelaius tricolor*), western pond turtle (*Emys marmorata*; WPT), and white-tailed kite (*Elanus leucurus*). Avoidance, minimization, and mitigation measures for these species

have been incorporated into this NES. The Project may affect and is likely to adversely affect the federally listed GGS and federally proposed WPT. The County and Caltrans will consult with USFWS through the Section 7 process of FESA for project related impacts to GGS and WPT. The result of this consultation will be a biological opinion (BO) written by USFWS which specifies conservation measures and includes an incidental take statement for the project. The statement will include the amount or extent of the take, and avoidance/minimization measures and compensatory mitigation to minimize the take. If CDFW finds that the incidental take statement in the Federal BO is consistent with CESA, a consistency determination may be issued under section 2080.1 of the Fish and Game Code. If CDFW finds that the BO is not consistent with CESA, a separate Incidental Take Permit (ITP) will be required under section 2081(b) of the Fish and Game Code.

Project activities within Simmerly Slough would require a Flood Encroachment Permit from the Central Valley Flood Protection Board, a Section 401 Certification under the Clean Water Act (CWA) from the Central Valley Regional Water Quality Control Board (RWQCB), a Section 1600 Streambed Alteration Agreement from CDFW, and a Section 404 Permit from the U.S. Army Corps of Engineers (USACE). All permits would be obtained prior to construction.

Chapter 1: Introduction

The Project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California. The Project area is within the United States Geological Survey (USGS) 7.5-minute quadrangle of Yuba City (Figure 1. Project Vicinity; Figure 2. Project Location; Figure 3. Project Features).

Project History

This project is included in the 2023-2026 Metropolitan Transportation Improvement Program (MTIP). The project will be primarily funded through Federal Highway Bridge Program. As such, the project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for NEPA compliance is Caltrans and the lead agency for CEQA compliance is the County.

Project Purpose and Need

Purpose

The purpose of the project is to:

- Provide a structure that meets current design standards
- Improve the safety and operation of the facility

Need

The Ellis Road Bridge over Simmerly Slough was built in 1928 and is structurally deficient and scour critical. The scour sustained by the bridge has begun to undermine the structural integrity of the bridge, which has caused a 10-ton limit to be imposed on the structure. Improvements are needed to meet current design standards and to provide improved safety and operations of the facility.

Project Description

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge.

The existing 44-foot-long, 20-foot wide bridge was originally constructed in 1928 and consists of a three-span continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cfs of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by FEMA to be within the 100-year floodplain (special flood hazard Zone AE).

Build Alternative

The existing bridge will be demolished which will include breaking up the concrete deck with a mounted impact hammer and hauling debris off site for proper disposal. Existing abutments, columns, and foundations will also be removed to a minimum depth of 5 feet below ground level and disposed of at a landfill or other suitable offsite location.

The replacement bridge will be built mostly within the footprint of the existing bridge. The bridge replacement will be a single span, cast-in-place slab bridge which will be51 feet long and 24 feet wide. The design will meet current American Association of State Highway and Transportation Officials (AASHTO) standards and Yuba County requirements. The project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will be required to construct the new bridge. Temporary stream diversions may be required during construction if water is present in the channel. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

No Build Alternative

Under the no-build alternative, the bridge will not be replaced. The bridge will remain structurally deficient and scour critical and public safety and access will not be improved.







75	150	225	300	375
				Feet

0

Project Features BRLO-5916(131) Ellis Road Bridge ReplacementProject Yuba County, California

Chapter 2 – Study Methods

Regulatory Requirements

This section describes the Federal, State, and local plans, policies, and laws that are relevant to biological resources within the BSA. Applicable Federal permits and approvals that would be required before construction of the proposed Project are provided in Chapter 5.

National Environmental Policy Act

The National Environmental Policy Act (NEPA) provides an interdisciplinary framework for environmental planning by federal agencies and contains action-forcing procedures to ensure that federal agency decisions take environmental factors into account. NEPA is applicable when a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans is the designated NEPA lead agency for this Project acting under delegation from the Federal Highways Administration (FHWA).

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by USFWS or NMFS. Section 7 of ESA mandates all federal agencies to consult with USFWS and/or NMFS if they determine that a proposed project may affect a listed species or its habitat.

Section 9 of ESA prohibits the take of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. Take is defined as any action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule has been defined with regard to take at the time of listing. Under Section 9 of ESA, the take prohibition applies only to wildlife and fish species. However, Section 9 also prohibits the unlawful removal and possession, or malicious damage or destruction, of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed for or under petition for listing receive no protection under Section 9.
Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Clean Water Act

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the United States (U.S.). The CWA serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing both point-source and non-pointsource pollution. Point-source pollution originates or enters surface waters at a single, discrete location such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Section 303(d)

Under the mandate of Section 303(d) of the CWA, the RWQCB is required to formulate a list of surface water bodies that exceed applicable water quality standards. Subsequently, the RWQCB is required to describe the impairment sources and prioritize these water bodies to develop Total Maximum Daily Loads (TMDLs). The current list was approved by the EPA on May 11th, 2022. An integrated report map published by the State Water Resources Control Board was used to determine Simmerly Slough is 303(d) listed with "Toxicity" (Water Board 2022).

Section 401

The Central Valley RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the Central Valley RWQCB coincide with waters of the U.S. including any wetlands. The Central Valley RWQCB also asserts authority over "waters of the State" under waste discharge requirements

pursuant to the Porter-Cologne Water Quality Control Act. The proposed Project is located within the jurisdiction of the Central Valley RWQCB and would require a Clean Water Certification from the Central Valley RWQCB.

Section 402

Construction General Permit (CGP) (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), became effective on February 14, 2011 and July 17, 2012, respectively. The permit regulates stormwater discharges from construction sites which result in a land disturbance of equal to or greater than 1 acre, and/or are smaller sites that are part of a larger common plan of development. For all Projects subject to the CGP, applicants are required to develop and implement an effective Stormwater Pollution Prevention Plan (SWPPP). The Project will use Caltrans 2023 Standards and updates and shall be supplemented with Yuba County Standards through Special Provisions.

By law, all stormwater discharges associated with construction activity, including, but not limited to, clearing, grading, grubbing or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop a Stormwater Pollution Prevention Plan; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP.

The CGP separates Projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) Project would require compulsory stormwater runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows.

Section 404

The USACE regulates discharges of dredged or fill material into waters of the United State. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations). Simmerly Slough is considered a jurisdictional water and is regulated under this section.

Executive Order 11990 – Protection of Wetlands

Executive Order (EO) 11990 established a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. The U.S. Department of Transportation (DOT) promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts on wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding. An additional requirement is to provide early public involvement in projects affecting wetlands. The FHWA provides technical assistance (Technical Advisory 6640.8A) and reviews environmental documents for compliance.

Executive Order 13112: Prevention and Control of Invasive Species

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list, maintained by the Invasive Species Council of California to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Under the EO, federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations (CFR) 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question).

California Environmental Quality Act

CEQA (California Public Resource Code [PRC] § 21000 et seq) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment.

Proposals for physical development in California are subject to the provisions of CEQA, as are many governmental decisions which do not immediately result in physical development (such as adoption of a general or community plan). Development project which requires a discretionary governmental approval will require at least some environmental review pursuant to CEQA, unless an exemption applies. The environmental review required imposes both procedural and substantive requirements. A project may not be approved as submitted if feasible alternatives or mitigation measures are able to substantially lessen the significant environmental effects of the project. The County is the CEQA lead agency for the proposed Project.

California Endangered Species Act

The California Fish and Game (CFG) Code Section 2050, henceforth referred to as the California Endangered Species Act (CESA), requires the CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires CDFW to comply with CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating Incidental Take Permit (ITP) applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or

activity (California Code Regulations, Title 14, Section 783.5(d)(3)). CDFW cannot issue an ITP if issuance would jeopardize the continued existence of the species (CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)).

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory nongame bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Porter Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., such as groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA.

The RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges

to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired, and the standards cannot be met through point source or non-source point controls (National Pollutant Discharge Elimination System [NPDES] permits or Waste Discharge Requirements), the CWA requires the establishment of TMDLs which specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

Yuba County General Plan

The Yuba County 2030 General Plan contains a number of policies that are implemented to protect the City's biological resources (Yuba County 2011). Such policies include:

- Policy NR 5.1: New developments that could adversely affect specialstatus species habitat shall conduct a biological resources assessment and identify design solutions that avoid such adverse effects. If, after examining all feasible means to avoid impacts to special-status species habitat through project design, adverse effects cannot be avoided, then impacts shall be mitigated in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species, including pre-construction surveys conducted according to applicable standards and protocols, where necessary.
- Policy NR 5.4: New developments shall be located and designed to preserve and incorporate existing native vegetation to the maximum extent feasible. Fire safety standards may override consideration of retaining existing vegetation in certain circumstances.
- Policy NR 5.5: The County will support cooperative restoration, development, and promotion of natural resources with the USFWS, the USACE, the Bureau of Reclamation, the U.S. Forest Service, and

other public agencies with an interest in the Yuba County's water and wildlife assets.

- Policy NR 5.10: The County will encourage measures on agricultural lands that conserve or restore habitat.
- Policy NR 5.15: Roads, water lines, sewer lines, drainage facilities, and other public facilities constructed to serve unincorporated County development shall be located and designed to avoid substantial impacts to stream courses, associated riparian areas, and wetlands, to the greatest extent feasible.

Studies Required

Literature Search

Prior to fieldwork, literature research was conducted through the following government databases; the USFWS Species List (Appendix A. USFWS Species List), CDFW California Natural Diversity Database (CNDDB) (Appendix B. CNDDB Species List), the CNPS Electronic Inventory of Rare and Endangered Plants (Appendix C. CNPS Species List), and the NMFS (Appendix D. NFMS Species List) in order to identify habitats and special status species having the potential to occur within the BSA.

Field Reviews

General biological field surveys were completed by Dokken Engineering biological staff to document existing site conditions, identify plant communities, and determine the potential for special status species to be present.

A jurisdictional delineation was completed by GPA Consulting to delineate and map the limits of waters of the U.S. and State.

Biological Study Area

Prior to field surveys, the BSA was defined as the Project impact area plus an approximate 50-foot buffer to facilitate construction access and capture potential biological resources adjacent to Project limits that may be affected by the project.

Survey Methods

Survey methods included recording vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. All plant and wildlife observations were recorded and are discussed in Chapter 3.

In addition, an aquatic resource delineation of wetland areas was conducted in accordance with the technical methods outlined in the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and

A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008).

Personnel and Survey Dates

On February 6, 2023, Dokken biologists Scott Salembier and Katie Jacobson surveyed the Project BSA to document existing biological resources, detect potential jurisdictional waters, and survey for sensitive and protected species and/or their habitats. In addition, Dokken arborist Roberto Ramirez conducted a tree survey throughout the BSA.

On March 23, 2023, a jurisdictional delineation was conducted by JPA Consulting biologists Mario Mayo and Joseph Huang.

Agency Coordination and Professional Contacts

United States Fish and Wildlife

On October 30, 2023, a list of Federally listed plant and wildlife species with the potential to occur in the Project vicinity was obtained from the USFWS IPaC using a shapefile of a preliminary Project area. (Appendix A).

California Department of Fish and Wildlife

On October 30, 2023, a list of State and Federally listed plant and wildlife species with the potential to occur in the Project vicinity was obtained from the CDFW CNDDB using a four-quad search of the 7.5-minute USGS quadrangles Gridley, Honcut, Sutter, and Yuba City. (Appendix B).

The County and Caltrans will coordinate with CDFW regarding potential project effects to GGS. This coordination will result in either a 2080.1 Consistency Determination, if CDFW determines that protective measures specified in the BO are sufficient, or in a 2081 Incidental Take Permit.

California Native Plant Society

On October 30, 2023, a list of rare plant species with the potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California using a four-quad search of the 7.5-minute USGS quadrangles Gridley, Honcut, Sutter, and Yuba City (Appendix C).

National Marine Fisheries Service

On October 30, 2023, a list of Federally listed fish species with the potential to occur in the Project vicinity was obtained from the NMFS West Coast Region Species List using a four-quad search of the 7.5-minute USGS quadrangles Gridley, Honcut, Sutter, and Yuba City (Appendix D).

Limitations That May Influence Results

Sensitive wildlife species with the potential to occur in the BSA may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this biological resource technical report represents a "snapshot" in time and may not reflect actual future conditions. The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. However, due to the experience and qualifications of the consulting biologists involved in the surveys, this limitation is not expected to severely influence the results or substantially alter the findings.

Biological surveys were conducted in the first week of February, which occurs early in both the nesting bird season as well as the blooming season for local flora. This survey timing reduced the likelihood of identifying migratory bird species and annual plants. No additional limitations were present that could influence the results of this document. All surveys were conducted during appropriate weather and temperature conditions.

Chapter 3 – Results: Environmental Setting

Description of the Existing Physical and Biological Conditions

Study Area

A BSA was defined for the purposes of biological studies of the Project area and includes all areas necessary for Project construction, access, and staging, as well as an approximate 50-foot buffer to record all biological features and to account for changes to the Project design. The BSA is approximately 8.13 acres in area (**Figure 4. Biological Study Area**). Land use within the BSA is designated as Agriculture (Yuba County 2011).

Physical Conditions

The Project is located in Yuba County, California, within the Sacramento Valley geographic subdivision of the California Floristic Province (Jepson 2022). This region is also part of the Great Valley section of the California Dry Steppe ecological province (USDA 2007). The area experiences hot, dry summers and cool, wet winters, typical of a Mediterranean climate. Average summer highs range from 91-96°F and average winter lows range from 37-42°F. Average annual precipitation is approximately 22 inches in the form of rain (U.S. Climate Data 2022).

Topography

Topography within the BSA is relatively flat, with an elevation ranging from approximately 62 to 68 feet above sea level. The area is predominantly used for rice farming and all extant microtopographic features are leveled rice fields and associated irrigation and drainage ditches. (**Figure 5. Topographic Map**).

Soils

The soil types within the BSA include San Joaquin loam, 0 to 1 percent slopes, occasionally flooded (83% of BSA) and trainer loam, 0 to 1 percent slopes, occasionally flooded (17% of BSA) (Natural Resource Conservation Service [NRCS] 2021; Appendix G. NRCS Soil Survey Report).

Hydrology

Surface hydrology within the BSA includes Simmerly slough which is a channelized natural tributary to Jack slough. Water flow within the slough is heavily influenced by rice farming activities and controlled by water pumps and wiers. During irrigation season, the local irrigation district releases water into the slough from the Cordua Canal. The Slough collects drainage water from the rice fields and conveys it south to Jack Slough about 1.3 miles south of the BSA. Agricultural ditches are also present throughout the BSA, which border the rice

fields. These ditches are used as both irrigation and drainage channels which transport irrigation and drainage water to and from the surrounding rice fields.



1 inch = 200) feet			
200	400	600	800	1,000
				⊢eet

0

Figure 4 Biological Study Area BRLF-5916(131) Ellis Road Bridge Replacement Project Yuba County, California



Biological Conditions

Natural Communities and Land Cover Types

The BSA is situated within a region that has largely been developed for agricultural use. As such, land use within the BSA is dominated by rice fields that are regularly disturbed. The existing Ellis Road Bridge passes over Simmerly Slough, a perennial channel that divides the BSA from north to south. Vegetation communities along this channel include willow-dominated riparian habitat, dense patches of Himalayan blackberry (*Rubus armeniacus*), and emergent wetland habitat. In addition to Simmerly Slough, the BSA includes irrigation channels that service the rice fields. The BSA is bisected by Ellis Road, a gravel road devoid of vegetation. Ruderal vegetation occurs along the margins of Ellis Road (**Figure 6. Vegetation Communities**).

Active Rice Fields

Active agricultural within the BSA includes actively farmed fields. These areas are characterized by rice fields with very little or no native vegetation. Within the BSA, rice fields occupy approximately 2.84 acres (35%) of the BSA.

Agricultural Ditches

Within the BSA, irrigation and drainage channels consist of artificial channels built to convey irrigation water to agriculture rice fields or drainage water from agriculture rice fields. Channels are typically at least partially cleared of vegetation and scraped on a regular basis to preserve water capacity. Irrigation channels comprise 0.31 acres (4%) of the BSA

Ruderal Vegetation

Ruderal vegetation communities are characterized by early successional annual vegetation, typically invasive grasses and forbs. The disturbance may be natural, or due to human activity. The habitat is characterized by a lack of vegetation or dominated by non-native plant species. Ruderal vegetation occurs throughout the BSA along roadside and irrigation canals. 1.64 acres (20%) within the BSA consists of ruderal vegetation.

<u>Blackberry</u>

Within the BSA, stands of nearly mono-specific Himalayan blackberry (*Rubus armeniacus*) are found along several of the irrigation and drainage channels. Blackberry vines require large amounts of water but do not survive when soils are completely saturated or anoxic. Streambanks and irrigation infrastructure provide ideal habitat for this rapidly spreading invasive vine. Blackberry is self-fertile and produce crops of fruit for several weeks in late summer and autumn. Seeds are spread primarily by birds which consume the seed laden fruit and excrete the seeds. This habitat type comprises approximately 0.46 acres (6%) of the BSA.



N	1 inch = 100) feet			
	100	200	300	400	500
					⊢eet

Figure 6 Vegetation Communities BRLF-5916(131) Ellis Road Bridge Replacement Project Yuba County, California

Willow Dominated Riparian

Willow dominated riparian habitat is found within the BSA along the northern bank of Simmerly Slough south of Ellis Road. This riparian corridor is partially vegetated and is dominated by sandbar willows (*Salix exigua*). The understory is composed of mostly native shrubs and herbs. Within the Project impact area, willow dominated riparian habitat makes up approximately 0.08 acres (1%).

Emergent Wetland

Emergent wetlands are most common on level to gently rolling topography, where a basin or depression can be saturated or at least periodically flooded. These wetlands are typically associated with the margins of riverine habitat, lacustrine habitat, or wet meadows, where saturated soils allow for the growth of hydrophytic vegetation. Vegetation generally consists of perennial monocots such as sedges, rushes, bulrushes, and cattails. Emergent wetland makes up approximately 0.41 acres (5%) of the BSA.

Stream Channel – Simmerly Slough

Simmerly Slough enters the BSA from the north. The channel passes beneath Ellis Road, runs parallel to the roadway east for approximately 500 feet, then continues south out of the BSA. The channel is perennial and is tributary to Jack Slough and eventually the Feather River, approximately 3.2 miles southwest of the BSA. Simmerly Slough occupies approximately 0.27 acres (3%) of the BSA.

Barren Areas

Barren habitat is defined by the absence of vegetation and contains rock, gravel, soil, or pavement. Barren areas within the BSA are categorized by a gravel roadway (Ellis Road) and associated pullouts alongside the road. The BSA contains 2.16 acres (27%) of barren areas.

Species Observed

During biological surveys, plant and wildlife species observed within the BSA were identified and are listed below by common and scientific name. Approximately 22 plant species and 10 wildlife species were seen within the BSA on February 6, 2023 (Table 1. Species Observed).

Common Name	Scientific Name	Native (N) / Non-Native (X) ¹
Plant Species		
Bitter lettuce	Lactuca virosa	Х
Black mustard	Brassica nigra	X [Moderate]
Blessed milkthistle	Silybum marianum	X [Limited]
Bristly oxtongue	Helminthotheca echioides	X [Limited]
Broadleaf cattail	Typha latifolia	N
California Chicory	Rafinesquia californica	N
California wild rose	Rosa californica	N
Common bog rush	Juncus effusus	N

Table 1. Species Observed

Common Name	Scientific Name	Native (N) / Non-Native (X) ¹
Coyote brush	Baccharis pilularis	N
Curly dock	Rumex crispus	X [Limited]
Cutleaf geranium	Geranium dissectum	X
Domestic rice	Oryza sativa	X [High]
English plantain	Plantago lanceolata	X [Limited]
Himalayan blackberry	Rubus armeniacus	X [High]
Italian thistle	Carduus pycnocephalus	X [Moderate]
Needle spikerush	Eleocharis acicularis	N
Red stemmed filaree	Erodium cicutarium	X [Limited]
Salt grass	Distichlis spicata	N
Sandbar willow	Salix exigua var. hindsiana	N
Valley oak	Quercus lobata	N
White stemmed filaree	Erodium brachycarpum	X
Wild radish	Raphanus sativus	X [Limited]
Wildlife Species		
California gull	Larus californicus	N
Gopher snake	Pituophis catenifer	N
Greater egret	Ardea alba	N
House finch	Haemorhous mexicanus	N
Mallard	Anas platyrhynchos	N
Mute swan	Cygnus olor	X
Northern pintail	Anas acuta	N
Northern shoveler	Anas clypeata	N
Red-winged blackbird	Agelaius phoeniceus	N
White-faced ibis	Plegadis chihi	N

¹California Invasive Plant Council (Cal-IPC) Rating

Wildlife observed within the BSA consisted of common bird species such as the house finch (*Haemorhous mexicanus*), red-winged blackbird (*Agelaius phoeniceus*), California gull (*Larus californicus*), and mallard (*Anas platyrhynchos*). Uncommon species of wading birds such as the greater egret (*Ardea alba*) and white-faced ibis (*Plegadis chihi*) were observed foraging along in partially flooded ricefields. These species are likely only seasonally present when ricefields are partially flooded before planting. In addition, the surrounding rice fields likely provide seasonal foraging habitat for migrating species of ducks and geese in the winter and early spring. No mammal burrows were observed within the BSA during the biological survey conducted on February 6, 2023.

Invasive Species

Numerous invasive species that are commonly associated with ruderal areas and riparian habitats were observed within the BSA. These include but are not limited to Himalayan blackberry (*Rubus armeniacus*), Italian thistle (*Carduus pycnocephalus*), and wild radish (*Raphanus sativus*).

Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2023a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 3 – Connections

with implementation flexibility. This ranking indicates that this area has not been identified as a habitat linkage or species corridor; however, it holds connectivity importance, and its status may change depending on local land use. Implementation of this Project will not permanently fragment any existing natural habitats and therefore will not impact any existing habitat connectivity networks.

Simmerly slough provides poor aquatic connectivity to other water features with multiple culverts and other obstructions that would limit aquatic migration. The slough is not known to be a migratory corridor for anadromous fish and does not connect to suitable spawning habitat.

Regional Species and Habitats and Natural Communities of Concern

Plant and animal species have special status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, CNPS, and NMFS databases to identify regionally sensitive species with potential to occur within the BSA. **Table 2. Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area** provides the list of regional special status species returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. There were twelve plant species and twenty five wildlife species with the potential to occur in the Project vicinity returned by the database searches. The following special status species were determined to have potential of occurring within the Project area:

- Giant garter snake (*Thamnophis gigas*)
- Greater sandhill crane (Antigone canadensis tabida)
- Northern harrier (*Circus hudsonius*)
- Sanford's arrowhead (Sagittaria sanfordii)
- Song sparrow "Modesto" population (*Melospiza melodia pop.* 1)
- Tricolored blackbird (Agelaius tricolor)
- Western Pond Turtle (*Emys marmorata*)
- White-tailed kite (Elanus leucurus)

Table 2. Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
Amphibian Species	5					
Western spadefoot	Spea hammondii	Fed: State: CDFW:	 SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeding occurs during late winter through March.	A	Presumed Absent: The BSA lacks the habitat characteristics required by the species. Furthermore, no CNDDB occurrences have been reported in the region surrounding the BSA. Due to the absence of potentially suitable habitat features and with no local occurrences, the species is presumed absent from the BSA.
Bird Species						
Bald eagle	Haliaeetus leucocephalus	Fed: State: CDFW:	DL E FP	Species occurs near ocean shores, lakes, rivers, rangelands, and coastal wetlands for nesting and wintering; nesting occurs within one mile of a water source with abundant fish near mountain forests and woodlands. The species nests in large, old growth, or dominant live trees with open branches. Prefers ponderosa pines and often chooses the largest tree in a stand. Nesting does not usually occur near evident human disturbance. Prefers lower elevations and is not found in the high Sierra Nevada. The breeding season is from February through July.	A	Presumed Absent: The Project area lacks large, open water features with sources of fish for the species to forage on and is not situated within any old growth woodlands that could support nesting individuals of this species. Furthermore, there are no CNDDB occurrences within 10 miles of the BSA. Due to the absence of potentially suitable habitat features and with no local occurrences, the species is presumed absent from the BSA.
Bank swallow	Riparia riparia	Fed: State:	 T	A migratory colonial nester inhabiting lowland and riparian habitats west of the	А	Presumed Absent: The BSA does not include any vertical banks or cliffs that

Common Name	Species Name	Stat	us¹	General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
		CDFW:		deserts during spring through fall. Majority of current breeding populations occur along the Sacramento and Feather Rivers in the north Central Valley. Forages in grassland, brushland, wetlands, and cropland during migration. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes, or the ocean. The breeding season occurs from May through July.		could be utilized as nesting habitat by this species. In addition, all of the recent CNDDB occurrences of this species occur within the Feather and Sacramento River channels. Due to the absence of locally suitable habitat as well as the species' pattern occurrence, the species is presumed absent from the BSA.
Burrowing owl	Athene cunicularia	Fed: State: CDFW:	 SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in small old mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet).	A	Presumed Absent: The BSA does not include disturbed open areas with sparse vegetative cover that could host this species. In addition, no suitable mammal burrows were observed within the BSA. There are no recent CNDDB occurrences of this species within 10 miles of the BSA. Due to the lack of potentially suitable habitat features and with no local occurrences, the species is presumed absent from the BSA.
California black rail	Laterallus jamaicensis coturniculus	Fed: State: CDFW:	 T FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and	A	Presumed Absent: The nearest recent (2007) CNDDB occurrence is located approximately 7.6 miles northeast of the Project. The Project does not fall within the delta, coastal range, or Sierra Nevada foothill regions that are typical for this species. In addition, the wetland habitat present within the BSA do not reflect the vegetative communities

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
				Suisun Bays. Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.		preferred by this species. The species is presumed absent due to the species' pattern of occurrence as well as the absence of suitable habitat features within the BSA.
Greater sandhill crane	Antigone canadensis tabida	Fed: State: CDFW:	 T FP	The sandhill crane is one of the largest migratory cranes in North America and has a range that spans from Siberia and Alaska to California's Central Valley. Sandhill cranes are often found near large freshwater marshes and ponds during the summer and on grainfields or prairies during the winter. In non-migratory populations, they lay eggs anytime between December and August. In migratory populations, sandhill cranes usually lay their eggs in April and May. Once very common breeders, unregulated hunting and habitat loss has resulted in a drastic reduction in population. Wintering populations of sandhill cranes find their home in the agricultural fields and wetlands of California's Central Valley. Population levels remain low: however.	HP	High Potential: The BSA encompasses Simmerly Slough as well as adjacent rice fields, which serve as suitable habitat for this species. There are numerous EBird occurrences of the species within the vicinity of the Project, with the closest occurrence approximately 3 miles from the Project area (2021). Due to the presence of suitable habitat and number of occurrences within the vicinity of the Project area, the species has a high potential to occur due to the presence of suitable habitat.

Common Name	Species Name	Status ¹		Species Name Status ¹ General Habitat Description		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
				local habitat restoration and farmland management may serve to benefit the species.				
Least Bell's vireo	Vireo bellii pusillus	Fed: State: CDFW:	E E 	Summer resident of southern California inhabiting low elevation riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting site. Forages in dense brush and occasionally treetops. The species is known to occur in all four southern California national forests, with the largest population in the Los Padres National Forest (below 2,000 feet).	HP	Presumed Absent: There is a historic (1878) CNDDB occurrence located 2 miles from the BSA; however, the species has since been extirpated from the northern regions of the state. Although the BSA presents a habitat that could be suitable for the species, the species is presumed absent due to its recent pattern of occurrence.		
Northern harrier	Circus hudsonius	Fed: State: CDFW:	 SSC	Species occurs in flat, or hummocky, open areas of tall, dense grasses and moist or dry shrubs. Inhabits meadows, grasslands, open rangelands, desert sinks, and fresh or saltwater emergent wetland communities. Nesting occurs on the ground within grasslands, grain fields, sagebrush or other shrubby vegetation. Nest sites are often chosen at marsh edges or in proximity to water. Breeds April through September (0- 5,700 feet).	HP	High Potential: The BSA includes suitable wetland habitat with adjacent rice fields for nesting. Furthermore, there are numerous recent eBird occurrences of this species within the vicinity of the Project, including one (2015) observation identified within the BSA. The species may have a high potential to occur due to the presence of suitable habitat features as well as the recent local occurrence.		
Song sparrow ("Modesto" population)	Melospiza melodia pop. 1	Fed: State: CDFW:	 SSC	An endemic bird found exclusively in the north-central portion of the Central Valley, with highest densities in the Butte Sink and Sacramento-San Joaquin River Delta. The species is usually found in open brushy habitats, along the borders of ponds or streams, abandoned pastures, desert washes, thickets, or woodland edges. In addition, there is a strong affinity for	HP	Low Potential: The BSA is situated approximately 15 miles from the Butte Sink, which is known to support high densities of this species. Furthermore, the BSA includes a willow-dominated riparian corridor with dense Himalayan blackberry thickets. Despite the lack of local occurrences, the species may have a low potential to occur due to the		

Common Name	Species Name	Stat	us¹	General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
				emergent freshwater marshes dominated by tules and cattails, riparian willow thickets, and valley oak forests with a blackberry understory. Nests often found in base of shrubs or clumps of grass, and require low, dense vegetation for cover, usually near water. Breeds from March through August.		presence of suitable habitat features as well as the Project's proximity to a known population of this species.
Swainson's hawk	Buteo swainsoni	Fed: State: CDFW:	 T 	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeding occurs in March through late August.	A	Presumed Absent: In the Central Valley, Swainson's hawk utilize tall trees for nesting, with as much as 85% of the population nesting within established riparian forest corridors (Woodbridge 1998). Swainson's hawks prefer foraging habitat that provides a continually available prey base with minimal vegetative cover (Estep 1989) such as grasslands, alfalfa, hay fields, and fallow fields (Estep 1989, Backcock 1995). The BSA is situated within rice fields that are flooded seasonally; therefore, this habitat does not support a prey base for the species. Although there are several recent (2004-2015) CNDDB occurrences within 3 miles of the BSA, there are no suitable trees for nesting within the BSA. The species is presumed absent from the BSA based on a lack of suitable nesting and foraging habitat.
Tricolored blackbird	Agelaius tricolor	Fed: State: CDFW:	 T SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-	HP	High Potential: The BSA includes dense patches of Himalayan blackberry that may provide suitable nesting habitat for this species. In addition, the BSA is situated in the vicinity of rice fields that provide suitable foraging habitat for this

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
				5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August but may extend until October or November in the Sacramento Valley region.		species. There is a recent (2015) eBird observation of this species within the BSA. Due to the presence of potentially suitable habitat features as well as the recent eBird occurrence within the BSA, the species may have a high potential to occur within the BSA.
Western yellow- billed cuckoo	Coccyzus americanus occidentalis	Fed: State: CDFW:	T E 	Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; requires water near nesting site. Breeding occurs during June through August.	A	Presumed Absent: The species has been recorded to historically occur in the regions near the BSA and is considered extant, however only a couple of CNDDB occurrences have been reported near the BSA between 1976 and 1986, both at about 3 miles from the BSA. Overall, the BSA may not present a suitable habitat for the species, as it differs from a dense riparian community required by the species. Hence, due to the lack of suitable habitat and recent occurrences, the species is presumed absent from the BSA.

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
White-tailed kite	Elanus leucurus	Fed: State: CDFW:	 FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October.	HP	High Potential: The BSA is situated within open rice fields with isolated trees for nesting. In addition, there are numerous eBird observations of this species within the vicinity of the Project, including a 2020 occurrence within 0.5 miles east of the Project. Due to the presence of suitable habitat features and with recent local occurrences, the species may have a high potential to occur within the BSA.
Fish Species						
Chinook salmon – Central Valley spring-run ESU	Oncorhynchus tshawytscha pop. 11	Fed: State: CDFW:	Т Т	Spring-run Chinook enter the Sacramento- San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties.	EFH	Presumed Absent: The BSA is not situated along any river or stream that is known to support remaining runs of this species. However, Simmerly Slough is eventually tributary to the Feather River, where this species is known to occur (CNDDB 2023). Despite this connectivity, the BSA lacks the Physical and Biological Features (PBFs) necessary to support this species, such as suitable gravel substrate, water quality, water flow, aquatic vegetation, and shade cover. Due to the lack of suitable habitat within the BSA, the species is presumed absent.

Common Name	Species Name	Status ¹		Status ¹ General Habitat Description		Habitat Present ²	Potential for Occurrence and Rationale
Chinook salmon – Sacramento River winter run	Oncorhynchus tshawytscha pop. 7	Fed: State: CDFW:	E 	Winter-run Chinook are currently restricted within the Sacramento River below Keswick dam; species does not spawn in tributaries. Species requires cold water over gravel beds to spawn.	EFH	Presumed Absent: The BSA occurs along the Simmerly Slough, which is tributary to the Feather River. This species is restricted to the Sacramento River below the Keswick Dam; as such, it is presumed absent from the BSA.	
Delta smelt	Hypomesus transpacificus	Fed: State: CDFW:	T 	This species is endemic to California and can tolerate a wide range of salinity and temperatures but is most commonly found in brackish waters. Juveniles require shallow waters with food rich sources. Adults require adequate flow and suitable water quality for spawning in winter and spring. Occurs within the Sacramento-San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait and San Pablo Bay. Most often occurs in partially saline waters	A	Presumed Absent: The BSA does not occur within the Sacramento-San Joaquin Delta, the Suisun Bay, the Carquinez Strait, or the San Pablo Bay. Due to the species' pattern of occurrence, the species is presumed absent from the BSA.	
Green sturgeon – southern DPS	Acipenser medirostris pop. 1	Fed: State: CDFW:	T 	Most marine of the sturgeon species. Predominately spawns in the upper Sacramento River, with some recorded in the Rogue River, Klamath and Trinity Rivers (Klamath River basin). In the Sacramento River, green sturgeon spawn above Hamilton City up to Keswick Dam. Known to occupy other river bodies including the lower Feather River; spawning not recorded; no green sturgeon has ever been documented in the San Joaquin River or its tributaries. Large cobbles preferred for spawning but may utilize a range of substrates from bedrock to sand. Spawning occurs March through July.	СН	Presumed Absent: This species is known to occupy the lower Feather River (CNDDB 2023), which Simmerly Slough has eventual connectivity to; however, this is a bottom-dwelling species that prefers large cobbles and deeper, faster waters. The BSA lacks suitable aquatic features and the species is presumed absent.	

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale				
Steelhead – Central Valley DPS	Oncorhynchus mykiss irideus pop. 11	Fed: State: CDFW:	T 	Southern California and central California steelhead utilize rivers and creeks from Pajaro River south to Santa Maria River. Spawning occurs in coastal watersheds while rearing occurs in freshwater or estuary habitats prior to emigrating to the ocean in the winter and spring. Preferred spawning sites contain gravel substrate with sufficient water flow and riverine cover. Rearing habitat contains sufficient feeding with associated riparian forest containing willow and cottonwoods. Migration upstream for reproduction occurs from October to May with spawning occurring January to April.	СН	Presumed Absent: Simmerly Slough is eventually tributary to the Feather River, where this species is known to occur (CNDDB 2023). Despite this connectivity, the BSA lacks the aquatic habitat necessary to support this species, such as suitable gravel substrate, water flow, aquatic vegetation, and shade cover. Due to the lack of suitable habitat within the BSA, the species is presumed absent.				
Invertebrate Specie	Invertebrate Species									
Monarch butterfly	Danaus plexippus	Fed: State: CDFW:	C 	Winter roosts along the coast from northern Mendocino to Baja California. Utilizes wind protected tree groves in proximity to nectar and water sources. Host plants include milkweed species such as <i>Asclepias</i> <i>syriaca, A. incarnara,</i> and <i>A. speciosa</i> . Suitable habitat includes fields, meadows, weedy areas, marshes, and roadsides. Mass adult migrations occur from August to October.	A	Presumed Absent: The BSA is not located within a protected tree grove and is not proximal to any suitable nectar sources. Furthermore, occurrences of this species are concentrated along the coast and do not occur within the Sacramento Valley. Due to the absence of potentially suitable habitat features as well as the species' pattern of occurrence, the species is presumed absent from the BSA.				
Conservancy fairy shrimp	Branchinecta conservatio	Fed: State: CDFW:	E 	Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88	A	Presumed Absent: The BSA does not include any vernal pool habitat. The species is presumed absent due to the lack of suitable habitat features within the BSA.				

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
				acres in size, but species may utilize smaller, less turbid pools.		
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus	Fed: State: CDFW:	T 	Species requires red or blue elderberry (<i>Sambucus sp.</i>) as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Adults are active, feeding, and breeding from March until June (sea level-3,000 feet).	A	Presumed Absent: There is a recent (2013) CNDDB occurrence of this species located approximately 3 miles west of the Project area. However, the BSA does not include any elderberry shrubs, which are mandatory to support this species. Due to the absence of the required host plant, the species is presumed absent from the BSA.
Vernal pool fairy shrimp	Branchinecta Iynchi	Fed: State: CDFW:	T 	In California, species inhabits portions of Tehama County, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species is associated with smaller and shallower cool- water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms.	A	Presumed Absent: The BSA does not include any vernal pool habitat. The species is presumed absent due to the lack of suitable habitat features within the BSA.
Vernal pool tadpole shrimp	Lepidurus packardi	Fed: State: CDFW:	E 	Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water.	A	Presumed Absent: The BSA does not include any vernal pool habitat. The species is presumed absent due to the lack of suitable habitat features within the BSA.

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
Reptile Species						
Giant garter snake	Thamnophis gigas	Fed: State: CDFW:	T T 	A highly aquatic species that inhabits marsh, swamp, wetland (including agricultural wetlands), sloughs, ponds, rice fields, low gradient streams and irrigation/drainage canals adjacent to uplands. Ideal habitat contains both shallow and deep water with variations in topography. Species requires adequate water during the active season (April- November), emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat and mammal burrows estivation. Requires grassy banks and openings in waterside vegetation for basking and higher elevation uplands for cover and refuge from flood waters during winter dormant season. Mating occurs in the spring and females bear live young.	HP	Presumed Present: The BSA includes Simmerly Slough, an aquatic feature that includes emergent wetland vegetation and provides adequate water throughout the GGS active season. Furthermore, adjacent rice fields may provide suitable basking, foraging, refuge habitat for individuals of this species. There is a recent (2013) CNDDB occurrence of this species located approximately 5 miles west of the Project area. Due to the presence of potentially suitable habitat features as well as the recent local occurrence, the species is presumed present within the BSA.
Western pond turtle	Emys marmorata	Fed: State: CDFW:	PT SSC	A fully aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Requires basking sites and suitable (sandy banks or grassy open field) upland habitat for reproduction (up to 4,690 feet).	HP	High Potential: Potentially suitable aquatic foraging habitat (Simmerly Slough) is present within the BSA. In addition, the Project area contains suitable upland habitat within the BSA. There are numerous CNDDB occurrences of the species within the vicinity of the Project, with the closest occurrence approximately 5 miles from the Project area (1998). The species is considered to have a high potential of occurring within the BSA based on presence of potentially suitable habitat

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale				
						and the proximity of recent occurrences to the BSA.				
Plant Species										
Ahart's dwarf rush	Juncus Ieiospermus var. ahartii	Fed: State: CNPS:	 1B.2	An annual herb inhabiting grassland swales, gopher mounds, and vernal pool margins of mesic valley and foothill grassland communities. Flowers March-May (100-750 feet).	A	Presumed Absent: The BSA lacks suitable swale and vernal pool habitat. In addition, no CNDDB occurrences have been reported in proximity of the BSA, which lead to presume that species is absent from the region.				
Ahart's paronychia	Paronychia ahartii	Fed: State: CNPS:	 1B.1	An annual herb inhabiting well-drained, rocky outcrops and volcanic upland of cismontane woodland, valley and foothill grassland, and vernal pool communities. Flowers February-June (100-1,675 feet).	A	Presumed Absent: The BSA lacks the soil types and habitat communities that support the species. Furthermore, no CNDDB occurrences have been recorded in the region in which the BSA is located. Due to the absence of potentially suitable habitat and with no local occurrences, the species is presumed absent.				
Baker's navarretia	Navarretia leicocephala ssp. bakeri	Fed: State: CNPS:	 1B.1	An annual herb inhabiting mesic soils of vernal pools and swales within cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland communities. Flowering occurs from April to July (15-5,700 feet)	A	Presumed Absent: The BSA does not include any vernal pool or wetland swale habitat and is not located within a woodland, meadow, seep, or grassland community. Due to the absence of locally suitable habitat, the species is presumed absent from the BSA.				
Dwarf downingia	Downingia pusilla	Fed: State: CNPS:	 2B.2	An annual herb inhabiting vernal pools and mesic soils in valley and foothill grassland communities. Flowers March-May (0-1,500 feet).	A	Presumed Absent: Land use within the BSA is predominantly rice fields and does not include suitable vernal pool or mesic grassland habitats that could support this species. Furthermore, there are no recent CNDDB occurrences of this species within 10 miles of the BSA.				

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
						Due to the absence of potentially suitable habitat features and with no local occurrences, the species is presumed absent from the BSA.
Indian Valley bush-mallow	Malacothamnus aboriginum	Fed: State: CNPS:	 1B.2	Species inhabits foothill woodland and chaparral communities, with a preferred elevation of 490-2295 feet. It blooms during April and October.	A	Presumed Absent: In addition to the lack of chaparral and woodland communities required by the species, there are no CNDDB occurrences recorded within 10 miles of the BSA. The species is presumed absent from the BSA.
Ferris' milk-vetch	Astragalus tener var. ferrisiae	Fed: State: CNPS:	 1B.1	An annual herb inhabiting vernally mesic meadows and seeps and subalkaline flats within valley and foothill grassland communities. Known only from six extant occurrences. Flowering occurs during April- May (0-250 feet).	A	Presumed Absent: There is a historic (1891) CNDDB occurrence of this species located 3.5 miles from the BSA; however, the BSA lacks suitable vernal pool, meadow, seep, or subalkaline flat habitat that could support this species. Due to the lack of suitable habitat, the species is presumed absent from the BSA.
Hartweg's golden sunburst	Pseudobahia bahiifolia	Fed: State: CNPS:	E E 1B.1	An annual herb inhabiting clay, often acidic soils of cismontane woodland and valley and foothill grassland communities. Flowers March-April (50-660 feet).	A	Presumed Absent: There is a historic (1847) CNDDB occurrence of the species identified in the vicinity of the BSA; however, the BSA has since been developed for agriculture and does not include any habitat suitable for this species. As such, the species has been locally extirpated and is presumed absent due to the lack of suitable habitat.
Legenere	Legenere limosa	Fed: State: CNPS:	 1B.1	An annual herb inhabiting wet areas, vernal pools, and ponds. Flowers April-June (0-2,900 feet).	A	Presumed Absent: This species is strongly associated with vernal pool habitat and other wet areas within freshwater wetlands and valley grasslands. The BSA has been extensively developed due to local agriculture use and does not include the habitat features necessary to support this

Common Name	Species Name	Status ¹		General Habitat Description	Habitat Present²	Potential for Occurrence and Rationale
						species. As such, it is presumed absent from the BSA.
Recurved larkspur	Delphinium recurvatum	Fed: State: CNPS:	 1B.2	A perennial herb inhabiting poorly drained, fine, alkaline soils in chenopod scrub, Atriplex scrub, cismontane woodland, and valley and foothill grassland communities. Flowers March-June (10-2,600 feet).	A	Presumed Absent: The BSA lacks suitable scrub, woodland, and grassland habitat that could support this species. There is a historic (1900) CNDDB occurrence of this species approximately 4 miles south of the Project; however, this occurrence is presumed extirpated due to local development. Due to the absence of locally suitable habitat and with no recent local occurrences, the species is presumed absent from the BSA.
Sanford's arrowhead	Sagittaria sanfordii	Fed: State: CNPS:	 1B.2	A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May-October (0-2,130 feet).	HP	Low Potential: The BSA includes Simmerly Slough, an aquatic freshwater channel, and suitable wetland habitat that may support this species. There are no CNDDB occurrences of this species within 10 miles of the Project area; however, the Project falls within the anticipated range of this species. The species has a low potential to occur due to the presence of suitable habitat.
Veiny monardella	Monardella venosa	Fed: State: CNPS:	 1B.1	An annual herb inhabiting heavy clay soils in cismontane woodlands, valley grasslands, and foothill grasslands. Flowers May-July (195-1,350 feet).	HP	Presumed Absent: There is one occurrence of this species mapped generally to Yuba City; however, the BSA has been extensively developed for agriculture and the species has been locally extirpated. No habitat communities suitable for this species occur within the BSA and the species is presumed absent.
Common Name	Species Name	Stat	us ¹	General Habitat Description	Habitat Present ²	Potential for Occurrence and Rationale
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Woolly rose- mallow	Hibiscus Iasiocarpos var. occidentalis	Fed: State: CNPS:	 1B.2	A perennial rhizomatous herb inhabiting freshwater wetlands, wet banks, and marsh communities. Often found in-between riprap on levees. Flowers June-September (0-400 feet).	HP	Low Potential: There are no CNDDB occurrences of this species within 10 miles of the Project; however, the Project occurs within the established range of this species. In addition, the BSA includes wet banks and emergent freshwater wetland habitat that may support this species. Despite the absence of local occurrences, the species may have a low potential to occur within the BSA due to the presence of suitable habitat.

¹Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS)

²Habitat Present: Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit but does not necessarily mean that appropriate habitat is present.

Chapter 4 – Results: Biological Resources, Discussion of Impacts, and Mitigation

Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on Federal, State, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or animals occurring on site. Wetlands and waters of the U.S. are also considered sensitive by both Federal and State agencies. The natural communities of special concern within the BSA were identified as Simmerly Slough, the associated willow riparian corridor, and adjacent emergent wetland habitat. Table 3. Impacts to Sensitive Natural Habitats and Figure 5. Project Impacts outline the impacts of the Project on these communities. Avoidance and minimization, and compensatory mitigation measures concerning Simmerly Slough, the willow riparian corridor, and emergent wetland habitat are discussed in detail in their respective sections.

Discussion of Simmerly Slough

Simmerly Slough is an aquatic freshwater channel that flows generally southward from Ramirez, CA. The channel within and around the BSA has been artificially channelized to facilitate the agricultural development of the surrounding area. The channel is perennial but flows are managed to support rice cultivation. Simmerly Slough is a tributary to Jack Slough and eventually the Feather River, approximately 3.2 miles southwest of the BSA.

Survey Results for Simmerly Slough

On March 23, 2023, JPA Consulting biologists Mario Mayo and Joseph Huang conducted a jurisdictional delineation of the aquatic features identified within the BSA, including Simmerly Slough. Simmerly Slough is considered a jurisdictional water of the U.S. (WoUS) and water of the State (WoS). The BSA contains approximately 1,231 linear feet and 0.27 acres of Simmerly Slough, which flows north to south under the existing Ellis Road Bridge. The channel includes dense stands of cattails and is bordered by patches of Himalayan blackberry and sandbar willows (Salix exigua var. hindsiana).

Project Impacts to Simmerly Slough

In total, approximately 0.02 acres of Simmerly Slough would be permanently impacted due to the installation of rock slope protection (RSP). Approximately 0.04 acres of Simmerly Slough would be temporarily impacted during construction due to equipment access and movement needs (Table 3, Figure 7. Habitat Impacts).

Biological Study Area

Permanent Habitat Impacts

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Permanent Ditch Impacts (>0.001 ac)
Permanent Blackberry Impacts (0.01 ac
Permanent Ruderal Impacts (0.01 ac)
Permanent Slough Impacts (0.02 ac)
Permanent Wetland Impacts (0.01 ac)

Temporary Habitat Impacts

Temporary Ditch Impacts (0.10 ac)
Temporary Wetland Impacts (0.06 ac)
Temporary Rice Impacts (0.07 ac)
Temporary Blackberry Impacts (0.12 ac)
Temporary Ruderal Impacts (0.33 ac)
Temporary Slough Impacts (0.04 ac)

Permanent Impacts from RSP







FIGURE 7 Vegetation Community Impacts BRLO-5916(131) Ellis Road Bridge ReplacementProject Yuba County, California

	Jurisdictional Feature			
Impact Type (acres)	Simmerly Slough (WoUS, WoS)	Emergent Wetland (WoUS, WoS)		
Temporary	0.04	0.01		
Permanent	0.02	0.04		
Total	0.06	0.05		

Table 3. Impacts to Simmerly Slough

Avoidance and Minimization Efforts for Simmerly Slough

The following avoidance, minimization, and mitigation measures will be incorporated into the Project design and Project construction to reduce potential impacts to Simmerly Slough within the BSA.

BIO-1: Best Management Practices (BMPs):

- Exposed soils would be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- Exposed soils would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities.
- All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.
- All erosion control measures and storm water control measures would be properly maintained until final grading has been completed and permanent erosion control measures are implemented.
- All disturbed areas would be restored to pre-construction contours and revegetated, where applicable, through hydroseeding with a native seed mix specific to the habitat type.
- All construction materials would be hauled off-site after completion of construction.

BIO-2: Prior to the start of construction activities, the Project limits in proximity to Simmerly Slough and emergent wetlands must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters or sensitive habitats. A qualified biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-3: Refueling or maintenance of equipment shall not be permitted to occur within 100 feet of Simmerly Slough. All refueling and maintenance that must occur within 100 feet of the creek must occur over plastic sheeting or other secondary containment to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-4: Equipment will be checked daily for leaks and will be well maintained to prevent lubricants and any other deleterious materials from entering Simmerly Slough and the associated riparian area.

BIO-5: Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.

BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.

BIO-7: Secondary containment consisting of plastic sheeting or other impermeable sheeting shall be installed underneath all stationary equipment to prevent petroleum products or other chemicals from contaminating the soil or from spilling directly into Simmerly Slough. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-8: All temporary impact areas within Simmerly Slough and adjacent habitats will be re-graded to pre-construction contours, cleaned of any trash or debris, and seeded with a native seed mix specific to that habitat type. This will allow natural habitats to return to pre-construction conditions.

Compensatory Mitigation for Simmerly Slough

The Project anticipates approximately 0.02 acres of permanent impacts to Simmerly Slough. Permanent impacts to Simmerly Slough would be mitigated for via measure BIO-9, below:

BIO-9: The County will be responsible for purchasing mitigation credits from a mitigation bank, or other approved methods, at a 2:1 ratio. The final mitigation method will satisfy CDFW, RWQCB, and USACE requirements and will be finalized during the permitting phase of the Project.

Cumulative Impacts to Simmerly Slough

The proposed Project has been designed to minimize all temporary and permanent impacts to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, and ESA fencing. Mitigation provided by the Project would ensure a no net loss in emergent wetlands within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

Discussion of Willow Riparian Corridor

Riparian habitats occur alongside sources of surface water and are often centers of biological activity. The general structure of riparian habitats typically involves a canopy,

subcanopy, and an understory shrub layer; however, riparian communities can also be dominated by willows (Salix sp.) as a form of climax vegetation (Rosiere 2017).

Survey Results for Willow Riparian Corridor

Within the BSA, willow riparian habitat primarily occurs along the northern bank of Simmerly Slough, directly south of Ellis Road and east of the proposed bridge replacement. This habitat type is comprised of dense stands of sandbar willows that provide nesting opportunities for local bird species. The willow riparian corridor comprises approximately 0.06 acres of the BSA.

Project Impacts to Willow Riparian Corridor

The Project is not anticipated to have impacts to willow riparian corridor habitat. Work within Simmerly Slough and its associated emergent wetland habitat would occur outside of delineated riparian corridor boundaries.

Avoidance and Minimization Efforts for Willow Riparian Corridor

With the incorporation of avoidance and minimization measures BIO-2, impacts to willow riparian corridor would be avoided.

Compensatory Mitigation for Willow Riparian Corridor

The Project will avoid potential impacts to willow riparian corridor; therefore, compensatory mitigation is not proposed.

Cumulative Impacts to Willow Riparian Corridor

The Project will avoid potential impacts to willow riparian corridor. No cumulative impacts to the habitat are anticipated.

Discussion of Emergent Wetland

Emergent wetlands typically occur along the margins of rivers, lakes, or wet meadows, where saturated soils can facilitate the growth of hydrophytic vegetation. Emergent wetlands are most common on level to gently rolling topography, where a basin or depression can be saturated or at least periodically flooded so that it may support suitable wetland species. Vegetation within this community is characterized by perennial monocots such as sedges, rushes, bulrushes, and cattails. This habitat type provides suitable habitat for a large variety of birds, mammals, reptiles, and amphibians, and is considered one of the most productive habitat types in California (CDFW 1988).

Survey Results for Emergent Wetland

On March 23, 2023, JPA Consulting biologists Mario Mayo and Joseph Huang conducted a jurisdictional delineation of the aquatic features identified within the BSA, including the emergent wetlands identified adjacent to Simmerly Slough. Wetland delineations were conducted in accordance with technical methods outlined in the Corps of Engineers Wetlands Delineation Manual (USACE 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE

2008), and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008). The results of the delineation are included in the attached Aquatic Resources Delineation Report (ARDR) (Appendix F. ARDR). The emergent wetland within the BSA measures approximately 0.62 acres in size.

Project Impacts to Emergent Wetland

The Project is anticipated to temporarily impact approximately 0.06 acres and permanently impact 0.01 acres of emergent wetland habitat (Table 3, Figure 5). Permanent impacts to emergent wetland habitat would result from the placement of roadway fill along Ellis Road. Temporary impacts would result from equipment access and construction activity within the Project footprint.

Avoidance and Minimization Efforts for Emergent Wetland

With the incorporation of avoidance and minimization measures BIO-1 through BIO-8 and BIO-10, impacts to emergent wetland would be minimized to the extent feasible.

Compensatory Mitigation for Emergent Wetland

The Project will result in approximately 0.01 acres of permanent impacts to emergent wetland habitat. Permanent impacts to emergent wetland habitat would be mitigated for via measure BIO-10, below:

BIO-10: The County will be responsible for purchasing wetland mitigation credits from an agency- approved mitigation bank, or other approved methods, to be determined during the permitting phase for the Project. Based on agency agreed upon ratios, permanent impacts to emergent wetland habitat will be mitigated at a 3:1 ratio.

Cumulative Impacts to Emergent Wetland

The proposed Project has been designed to minimize all temporary and permanent impacts to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, and ESA fencing. Mitigation provided by the Project would ensure a no net loss in emergent wetlands within the region. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, no cumulative impacts attributed to the Project are anticipated.

Special Status Plant Species

The plants listed are considered to be of special concern based on (1) Federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. One special status plant species, Sanford's arrowhead (*Sagittaria sanfordii*), was determined to have a low potential to occur within the BSA. Survey results, Project impacts, and avoidance, minimization, and mitigation measures for this species are discussed in the following sections.

Discussion of Sanford's Arrowhead

Sanford's arrowhead is a perennial rhizomatous herb that is associated with marsh and swamp habitat types. It can be found in freshwater ponds and ditches. The species is not State or Federally listed but is a CNPS rare plant with a rare plant rank of 1B.2, meaning that it is fairly endangered and California and may be rare or endangered elsewhere. It is known from 126 occurrences in California, 79 of which have been documented in the last 20 years. The species has been extirpated from southern California and portions of the Central Valley and is threatened by development such as road widening and channel alternation, among other stressors (CNPS 2023).

Survey Results for Sanford's Arrowhead

Sanford's arrowhead was not observed during the February 2023 biological survey; however, the survey was conducted outside the species' typical blooming period, reducing the likelihood of detecting the species within the BSA. The BSA contains freshwater stream channel and irrigation ditch habitat that is potentially suitable for the species. Despite the absence of local CNDDB occurrences, Sandford's arrowhead is known to occur sporadically throughout the Sacramento and Central Valleys and the Project area is located within this anticipated range. As such, Sanford's arrowhead has a low potential to occur within the BSA due to the presence of suitable habitat as well as the species' pattern of occurrence.

Project Impacts to Sanford's Arrowhead

While Sanford's arrowhead was not observed within the BSA at the time of the biological surveys, the species may still occur within Project impact areas and the species has the potential to be directly impacted by Project activities. With implementation of the avoidance and minimization measure described below, the Project's direct impact on Sanford's arrowhead would be negligible, if not non-existent. Indirect impacts are also anticipated due to the loss of suitable wetland habitat the species is known to inhabit.

Avoidance and Minimization Efforts for Sanford's Arrowhead

With the implementation of the following avoidance and minimization measure, BIO-11, direct impacts to Sanford's arrowhead are not anticipated. Additionally, with the implementation of BIO-1 through BIO-8 and BIO-10, indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

BIO-11: Prior to construction, a focused plant survey will occur within the typical blooming season of special status plant species that have potential to occur within the Project area (for Sanford's arrowhead, May through October). The survey will be conducted by a qualified biologist with the purpose of identifying populations of Sanford's arrowhead and other special status plant species within the Project area. If special status plant species are observed within the Project area, the identified plant or population of plants will be protected with ESA fencing and work will be prohibited from

occurring within the delineated area. If ESA delineation is not possible due to Project design, then plant relocations may be conducted by a qualified biologist in coordination with the County and CDFW.

Compensatory Mitigation for Sanford's Arrowhead

With the incorporation of avoidance and minimization measure BIO-11, direct impacts to Sanford's arrowhead are not anticipated. Compensatory mitigation is not proposed at this time.

Cumulative Impacts to Sanford's Arrowhead

Due to implementation of BIO-11, The Project is not anticipated to directly impact Sanford's arrowhead; however, impacts to emergent wetland habitat, potentially suitable habitat for Sanford's arrowhead, are expected. The proposed Project has been designed to minimize all temporary and permanent impacts to emergent wetland habitat to the maximum extent practicable through the use of BMPs, implementation of regulatory permit conditions, ESA fencing, and compensatory mitigation. Additionally, the Project would not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. No cumulative impacts to this species will result from this Project and the Project is not anticipated to negatively contribute to cumulative impacts to Sanford's arrowhead on a regional scale.

Special Status Animal Species

Animals are considered to be of special concern based on (1) Federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. Based on literature review, habitat assessment, and biological surveys, seven special status species have the potential to occur within the BSA: GGS, greater sandhill crane, northern harrier, song sparrow ("Modesto" population), tricolored blackbird, western pond turtle, and white-tailed kite. Survey results, Project impacts, and avoidance, minimization, and mitigation measures for these species are discussed in the following sections.

Discussion of Giant Garter Snake

GGS is state and federally listed as threatened. This is a highly aquatic reptile species that inhabits mash, swamp, wetland (including agricultural wetland), slough, pond, rice field, as well as stream and canal habitat. During the species active season, from April through November, GGS utilizes adjacent upland habitat for basking or finding shelter and emergent, herbaceous wetland vegetation for cover and foraging habitat. The species also requires adequate flowing water during this time. Outside of the active season, mammal burrows are used for estivation. GGS has been extirpated from a large part of its former range, particularly in the San Joaquin Valley. Habitat loss and introduced predatory fish are cited as substantial causes of decline. However, GGS in

the Sacramento Valley have been able to use artificial waterways and agricultural wetlands as an alternative to their natural habitats. Examples of these alternative habitats include irrigation canals, drainage canals and rice fields. According to USFWS, giant garter snakes appear to have the highest populations in rice growing regions, which provide a mix of habitat elements which the snake may utilize throughout the year. Artificial levees also create suitable upland basking habitat since some areas are constantly dry.

Survey Results for Giant Garter Snake

GGS was not observed within the BSA during general biological surveys completed for the project. An analysis of species occurrences on CNDDB indicates that known populations of GGS are concentrated on the west side of the Feather River, predominantly along the Sacramento River and in the Butte Sink region; however, the BSA is within dispersal range of known populations of the species and potentially suitable habitat is present onsite.

Simmerly slough, associated wetlands, and irrigation/drainage ditches within the BSA provide potentially suitable aquatic foraging and dispersal habitat. Blackberry and ruderal areas provide potential upland habitat for the species. Rice fields adjacent of the Project area may also provide suitable basking, foraging, and refuge habitat for individuals of this species. There is a recent (2013) CNDDB occurrence of this species located approximately 5 miles west of the Project area. Due to the presence of potentially suitable habitat features as well as the recent local occurrence, the species is presumed present within the BSA.

Project Impacts to Giant Garter Snake

Installation of rock slope protection and construction of the slightly widened bridge structure would result in permanent modification of 0.02 acres of aquatic GGS habitat and 0.02 acres of upland habitat. Temporary work areas, access routes, and staging areas would temporarily impact 0.20 acres of aquatic habitat, 0.45 acres of upland habitat, and 0.07 acres of rice field. These impacts are summarized on **Table 4. GGS Habitat Impacts** and shown on **Figure 8. GGS Habitat Impacts**. The project may affect and is likely to adversely affect GGS.

Giant Garter Snake Habitat Type	Temporary Impacts (ac)	Permanent Impacts (ac)
Upland Habitat	0.45	0.02
Rice Field Habitat	0.07	0
Aquatic Habitat	0.20	0.02
Total Habitat	0.72	0.04

Table 4. GGS Habitat Impacts



Source: ESRI Maps Online; Dokken Engineering 9/27/2023; Created By: scotts



FIGURE 8 Giant Garter Snake Habitat Impacts BRLO-5916(131) Ellis Road Bridge ReplacementProject Yuba County, California

Avoidance and Minimization Efforts for Giant Garter Snake

Due to the high potential for the species to occur within the BSA, species specific avoidance and minimization measures will be implemented to minimize the risk of the project resulting in take of the species. The following measures will exclude GGS from the impact area and greatly reduce their potential to be encountered during construction.

BIO-12: Construction personnel must receive environmental awareness training from a USFWS- and CDFW-approved biologist who has experience in the natural history of species that may occur within the Project area. The training will cover protocol for, identification of, and natural history of the special status species that have the potential to occur within the Project area (such as GGS, greater sandhill crane, northern harrier, song sparrow ("Modesto" Population), Sanford's arrowhead, tricolored blackbird, western pond turtle, and white-tailed kite).

BIO-13: Ground disturbance will be limited to the GGS active period of May 1 to October 1. If Project activities within GGS habitat must occur outside of this period, approval will be obtained from CDFW and USFWS and additional protective measures may be required.

BIO-14: Prior to construction, GGS habitat areas outside of the Project limits will be marked as Environmentally Sensitive Areas (ESAs) using temporary high-visibility fencing. In addition, GGS exclusion fencing will be installed at the boundary between GGS habitat and the project area. The exclusion fencing material will consist of a material that snakes cannot get through or become entangled in and must be buried at least six inches below ground to prevent animals from entering work areas from below the fence. Exclusion fencing will be monitored by a qualified biologist or on-site inspector on a weekly basis during construction and maintained to ensure that the fencing is in good working order.

BIO-15: A pre-construction survey of the Project area will be conducted within 24 hours of the start of construction activities within GGS habitat. The survey will be conducted by a CDFW and USFWS-approved biologist. If a GGS is discovered within the Project area, activities within 200 feet of the individual will be paused until CDFW and USFWS have been notified and the appropriate corrective measures have been completed. Appropriate measures may include allowing the individual to leave the work area unharmed or the installation of additional exclusion fencing.

BIO-16: Any dewatered habitat should remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling of the dewatered habitat.

BIO-17: If a GGS is observed under or within any construction-related equipment, vehicles, or materials, the individual(s) must be left undisturbed, and the County notified. Work will be paused within 200 feet of any discovered GGS individuals. A qualified biologist will monitor the individual until it leaves the Project site of its own

accord, or it is determined, in coordination with CDFW and USFWS, that additional protective measures are needed.

BIO-18: A CDFW and USFWS approved biological monitor will be onsite during vegetation removal and ground disturbing activities within GGS upland habitat (all vegetated areas within 200 feet of Simmerly Slough) and during construction activities within the wetted portion of Simmerly Slough.

BIO-19: Construction personnel will operate vehicles at a speed no greater than 15 mph on unpaved roads within the Project area.

Compensatory Mitigation for Giant Garter Snake

Permanent impacts to GGS habitat will be mitigated at a 3:1 ratio as described in measure BIO-19 below. Temporarily impacted aquatic habitat will be mitigated at a 1:1 ratio to offset temporal loss of habitat. Temporary impacts to upland habitat areas will be mitigated by regrading work areas and access routes to pre-project contours and installing a native seed mix as described in measure **BIO-8**.

BIO-20: Temporary and Permanent impacts to GGS habitat will be mitigated for via the purchase of GGS-specific mitigation credits from a USFWS and CDFW approved mitigation bank. Temporary impacts to aquatic habitat will be mitigated at a 1:1 ratio and permanent impacts to both aquatic and upland habitat will be mitigated at a 3:1 ratio.

Cumulative Impacts to Giant Garter Snake

With the incorporation of the appropriate avoidance and minimization measures, direct impacts to GGS will be avoided to the extent feasible. Additionally, mitigation provided by the Project would result in no net loss of GGS habitat in the region. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative impacts to GGS or its habitat.

Discussion of Greater Sandhill Crane

Greater sandhill cranes are state-threatened and fully protected under CDFW. These large birds are distinguished by their broad, drooping wings, long necks, and the red skin along the crown of their head. This species primarily winters within the Sacramento and San Joaquin Valleys, where it occupies moist croplands, wet meadows, emergent wetlands, and grasslands. Migrating flocks prefer open, treeless habitats where individuals can forage for cereal crops as well as use their long bills to search for roots, tubers, and insects in moist soils; however, they can also eat larger prey. Nesting pairs may nest within scooped out depressions in upland habitat or within large mounds of wetland plants within shallow water. Ideal nesting sites include small islands protected by tall tules, cattails, or shrubs. Large breeding flocks migrate from Washington and Oregon in September/October, wintering in the Central Valley before returning north in March/April. Migration is rapid and direct, and flocks fly both night and day stopping only for short periods to feed and rest.

Survey Results for Greater Sandhill Crane

The BSA includes rice fields, which provide potential foraging and nesting habitat for this species. The Project also falls within the greater sandhill crane's migration corridor between California's Bay Area and southern Washington (Sonoran Joint Venture 2023). Greater Sandhill Crane was not observed within the BSA at the time of the biological surveys; however, there are numerous documented occurrences of the species near the BSA on CNDDB suggesting that the species has a high potential of occurring within BSA during the overwintering period.

Project Impacts to Greater Sandhill Crane

Greater Sandhill Crane has a high potential to occur seasonally within the BSA during the winter months. Since ground disturbance will be limited to the GGS active period of May 1 to October 1, per **BIO-13**, the species will not be present in the BSA during construction. Therefore, no direct impacts to Greater Sandhill Crane are anticipated. In addition, the project will not impact adjacent rice fields which provide potentially suitable habitat for the species.

Avoidance and Minimization Efforts for Greater Sandhill Crane

Species specific avoidance and minimization measures are not required since all project features are outside of rice field habitat and construction will be timed outside of the overwintering period for the species.

Compensatory Mitigation for Greater Sandhill Crane

No impacts to greater sandhill cranes are anticipated. No compensatory mitigation for this species is proposed at this time.

Cumulative Impacts to Greater Sandhill Crane

The Project will not impact Greater Sandhill Cranes. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Northern Harrier

The northern harrier is not a state or federally listed species but is a CDFW Species of Special Concern (SSC). The northern harrier is a migratory raptor preferring northern latitudes in the summer and southern latitudes in the winter. This species most commonly inhabits areas with marshes, farmland, and grasslands, as these provide the best foraging habitat. Although most of its original habitat has been destroyed or degraded within the California Central Valley, this region still supports the majority of

nesting harriers in California. Harriers breed mainly at private or public wetlands or other reserves as well as in some types of agricultural fields and pasturelands. Northern harriers breed and forage in a variety of open (treeless) habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs or fence posts. In California such habitats include freshwater marshes, brackish and saltwater marshes, wet meadows, weedy borders of lakes, rivers and streams, grasslands, and some croplands. Harriers feed on a broad variety of small to medium sized vertebrates, primarily rodents and passerines. Harriers nest on the ground mostly within patches of dense, often tall, vegetation in undisturbed areas (Sibley 2003, CNDDB 2011).

Survey Results for Northern Harrier

The BSA includes large areas of treeless rice fields and ruderal areas along farm roads and irrigation/drainage ditches which provide potentially suitable nesting habitat for the species. Furthermore, there are numerous recent eBird occurrences of this species within the vicinity of the Project, including one (2015) observation identified within the BSA. While Northern Harrier was not observed at the time of the biological surveys, the species is considered to have a high potential to occur within the BSA.

Project Impacts to Northern Harrier

With implementation of BIO-12 described above and measure 21 below, direct impacts to Northern harrier or their nests are not anticipated.

Avoidance and Minimization Efforts for Northern Harrier

With the implementation of BIO-21, listed below, direct impacts to Northern Harrier are not anticipated. Additionally, with implementation of BIO-1 through BIO-8 and BIO-10. Indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

BIO-21: Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a qualified biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

A minimum 100-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300-foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by a qualified biologist and approved by CDFW.

Compensatory Mitigation for Northern Harrier

With the implementation of site-specific avoidance and minimization measures, no impacts to Northern Harriers are anticipated. No compensatory mitigation for this species is proposed.

Cumulative Impacts to Northern Harrier

The Project will avoid potential impacts to northern harriers. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Song Sparrow ("Modesto" Population)

The song sparrow is not a state or federally listed species but is a CDFW Species of Special Concern (SSC). The ecological requirements of the species are largely undescribed, but the species is known to have an affinity for emergent freshwater marshes dominated by tules and cattails (Grinnell and Miller 1944). Marshall (1948) described the primary habitat requirements of several subspecies of Song Sparrow in California as being moderately dense vegetation to supply cover for nest sites, a source of standing or running water, semi-open canopies to allow light, and exposed ground or leaf litter for foraging. Habitat loss, fragmentation, and degradation are the primary threats to the species. Nesting season for the species usually begins in April, and most nesters in California are nonmigratory, with other migrants coming from the north (Shuford and Gardali 2008).

Survey Results for Song Sparrow ("Modesto" Population)

The BSA is situated approximately 15 miles east/southeast of the Butte Sink, which is known to support high densities of this species (CNDDB 2023). Furthermore, the BSA includes a willow-dominated riparian corridor with dense Himalayan blackberry thickets that may provide potentially suitable nesting habitat for this species. In addition, dense stands of cattails occur sporadically throughout Simmerly Slough within the BSA, providing additional potential habitat for the species. While Song Sparrow ("Modesto Population") was not observed within the BSA during biological surveys and there are no recent local occurrences, the species may have a low potential to occur due to the presence of potentially suitable habitat features as well as the Project's proximity to the established population in the Butte Sink.

Project Impacts to Song Sparrow ("Modesto" Population)

The Project has potential to indirectly impact Song Sparrow ("Modesto" Population) due to the loss of Himalayan blackberry thickets and emergent wetland habitats, which are both potentially suitable habitats for the species. Direct impacts to Song Sparrow ("Modesto" Population) will be avoided with implementation of BIO-21 described above.

Avoidance and Minimization Efforts for Song Sparrow ("Modesto" Population)

With the implementation of BIO-21, direct impacts to song sparrow ("Modesto" population) are not anticipated. Additionally, with implementation of BIO-1 through BIO-8 and BIO-10, indirect impacts to the species due to habitat loss would be minimized to the greatest extent.

Compensatory Mitigation for Song Sparrow ("Modesto" Population) With the implementation of measure BIO-21 direct impacts to song sparrow ("Modesto" population) are not anticipated. The project will also not result in permanent loss of nesting habitat for this species. No compensatory mitigation for this species is proposed.

Cumulative Impacts to Song Sparrow ("Modesto" Population)

The Project will avoid potential effects to song sparrow ("Modesto" population). The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Tricolored Blackbird

The tricolored blackbird is state listed as threatened and is identified by the CDFW as a Species of Special Concern (SSC). This blackbird is prevalent throughout the Central Valley as well as in coastal communities and finds its home in thickets of willow, cattails, blackberry, and tall herbs. The tricolored blackbird feeds on insects, spiders, seeds, and grains, and its foraging habitat include grassland and cropland habitats. This species locates its nest near fresh water, especially emergent wetlands, and is known to fly up to 4 miles to foraging habitat. Individuals are highly gregarious, and nesting areas often support a minimum of 50 bird pairs. Due to colony density, colonies are vulnerable to significant predation as well as habitat fragmentation.

Survey Results for Tricolored Blackbird

The BSA includes dense stands of Himalayan blackberry and sandbar willows, rice fields, and emergent vegetation within Simmerly Slough which all may provide nesting habitat for the species. There is a recent (2015) eBird observation of this species within the BSA. While tricolored blackbird was not observed at the time of the biological surveys, the species has a high potential to occur within the Project area and may be directly impacted by Project activities.

Project Impacts to Tricolored Blackbird

The Project will remove potentially suitable tricolored blackbird habitat as part of the clearing and grubbing process at the start of construction. These activities not only will

temporarily remove these potentially suitable habitats but also may directly impact individuals of the species if initial clearing and grubbing are completed during the species' nesting season.

Avoidance and Minimization Efforts for Tricolored Blackbird

With the inclusion of BIO-21, direct impacts to tricolored blackbird and their nests will be minimized to the greatest extent feasible. No additional species-specific avoidance measures are proposed.

Compensatory Mitigation for Tricolored Blackbird

With the implementation of BIO-8, temporarily impacted potential tricolored blackbird nesting habitat will be regraded, cleaned, and seeded with a native seed mix to accelerate natural regeneration of the plant community. The project will not result in permanent loss of potential nesting habitat and no compensatory mitigation is proposed.

Cumulative Impacts to Tricolored Blackbird

The Project will avoid potential effects to tricolored blackbirds. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of Western Pond Turtle

The western pond turtle (WPT) is not a State listed species but is a CDFW Species of Special Concern and is Federally proposed for listing. WPTs are native to the west coast and are found from Baja California, Mexico north through Klickitat County, Washington. The WPT is a fully aquatic turtle, inhabiting ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. The species requires suitable basking sites such as logs, rocks, mats of floating vegetation as well as exposed mud banks and associated upland habitat consisting of sandy banks or grassy open fields for reproduction. The species is omnivorous, consuming aquatic wildlife such as fish, insects and frogs as well as aquatic vegetation. The WPT is known to hibernate underwater beneath a muddy bottom in colder climates and reproduces from March to August (Zeiner 1990). Nests are generally found in flat areas with low vegetation and dry, hard soil.

Current threats to WPTs are numerous and include fire, flooding, drought, upper respiratory disease, habitat destruction, habitat alterations, predation, and lack of genetic variation. Introduction of predators such as the bullfrog and bass also threaten the species as they prey on small juvenile turtles. The lack of genetic variation is due to the isolation of individual populations over ranges too large to be covered by migration.

Habitat destruction is the result of intense urbanization. Additionally, humans pose a great threat via off-road vehicles, chemical spills, and incidental catch by fishermen.

Survey Results for Western Pond Turtle

Simmerly Slough provides potentially suitable aquatic habitat for WPT and ruderal vegetation, farm roads, and blackberry patches provide potentially suitable upland habitat for the species. The nearest CNDDB occurrence of the species is approximately 5 miles southeast of the BSA and was recorded in 1998. WPT was not observed within the BSA at the time of biological surveys; however, this species has a high potential to occur within the BSA due to multiple occurrences within the vicinity of the Project and the presence of suitable aquatic and upland habitat.

Project Impacts to Western Pond Turtle

The Project may directly impact individuals of the species during initial vegetation clearing and grubbing of the work areas as well as dewatering of the Simmerly Slough. The Project may also temporarily and permanently impact WPT habitat. Habitat may be temporarily impacted during the installation of the temporary water diversion within Simmerly Slough as well as during construction staging in upland habitat areas. Habitat may be permanently impacted through the installation of RSP within the OHWM of Simmerly Slough. The project may affect and is likely to adversely affect WPT.

With the inclusion of BIO-22 through BIO-23, and BIO-19, WPT would be excluded from the impact area and no adverse impacts to the species is anticipated.

Avoidance and Minimization Efforts for Western Pond Turtle

With the implementation of the following avoidance and minimization measures, BIO-22 through BIO-23, along with BIO-19, direct impacts to WPT are not anticipated. Additionally, with the implementation of BIO-1 through BIO-9, indirect impacts to the species due to habitat loss would be minimized to the greatest extent feasible.

BIO-22: To avoid impacts to western pond turtles, an agency-approved biologist will conduct a pre-construction survey of Simmerly Slough, and adjacent banks and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a WPT is located within the construction area, a qualified biologist will capture the turtle and relocate it to an appropriate habitat a safe distance from the construction site.

BIO-23: If water pumps are used to dewater the Project area, pump intakes will be screened and equipped with an energy dissipater to protect aquatic species. The energy dissipater should be large enough to reduce approach velocity to 0.33 feet per second or less and be enclosed with $\frac{1}{2}$ inch metal screen. The surface area of the energy dissipater shall be determined by dividing the maximum diverted flow, by the allowable approach velocity (example: 1.0 ft3 per second/ 0.33 feet per second = 3.0 ft2 surface area).

Compensatory Mitigation for Western Pond Turtle

With the implementation of BIO-22 through BIO-23, along with BIO-19, direct impacts to WPT are not anticipated. No additional compensatory mitigation for this species is proposed.

Cumulative Impacts to Western Pond Turtle

Direct impacts to WPT are not anticipated. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Discussion of White-Tailed Kite

The white-tailed kite is a fully protected species under CFG Code Section 3511. The species has a restricted distribution in the U.S., occurring only in California and western Oregon and along the Texas coast (American Ornithologists' Union 1983). The species is fairly common in California's Central Valley margins with scattered oaks and river bottomlands. White-tailed kites nest in riparian and oak woodlands and forage in nearby grasslands, pastures, agricultural fields, and wetlands. They use nearby treetops for perching and nesting sites. Voles and mice are common prey species.

Survey Results for White-Tailed Kite

The BSA is situated within open agricultural fields with isolated trees along their margins that may serve as suitable nesting habitat for white-tailed kite. In addition, there are numerous eBird observations of this species within the vicinity of the Project, including a 2020 occurrence within 0.5 miles east of the Project. White-tailed kite was not observed within the BSA at the time of biological surveys; however, due to the presence of suitable habitat features and with recent local occurrences, the species has a high potential to occur within the BSA.

Project Impacts to White-Tailed Kite

Project activities will not encroach onto the adjacent rice fields or trees, which are suitable habitats for white-tailed kite. Additionally, the adjacent rice fields are seasonally flooded and would not provide suitable foraging habitat during the nesting season for this species. The small number of medium sized trees within the project area do provide potentially suitable nesting habitat but the limited foraging habitat provided by the flooded rice fields reduce the likelihood of a pair electing to nest within the BSA. With the inclusion of pre-construction nesting bird surveys as described in measure BIO-21, direct impacts to the species are not anticipated.

Avoidance and Minimization Efforts for White-Tailed Kite

With the implementation of pre-construction nesting bird surveys and protective buffers as described in measure BIO-21, direct impacts to white-tailed kite are not anticipated. No additional species specific avoidance and minimization measures are proposed.

Compensatory Mitigation for White-Tailed Kite

No compensatory mitigation for this species is proposed.

Cumulative Impacts to White-Tailed Kite

The Project is not expected to directly impact white-tailed kites. The Project would also not encourage future development or change land use within the area since the existing bridge would be replaced along the same alignment and would not increase capacity. Therefore, the Project is not anticipated to contribute to regional-scale cumulative habitat loss from development. No cumulative impacts to the species are anticipated.

Chapter 5 – Conclusions and Regulatory Determinations

Federal Endangered Species Act Consultation Summary

Table 5. Federally Listed Species Determinations lists the 10 federally listed species that were returned via database searches and the effect determinations made for each species. Based on literature review, habitat assessment, and biological surveys, the federally-threatened GGS, and the federally-proposed WPT have potential to occur within the BSA.

Species specific avoidance and minimization measures are being proposed to minimize impacts to GGS; however, the potential impacts to the species during construction cannot completely be eliminated. The Project therefore may affect and is likely to adversely affect this species. Formal Section 7 consultation with the USFWS regarding impacts to GGS is required.

Species specific avoidance and minimization measures are being proposed to minimize potential impacts on the WPT. However, the potential for impacts to the species and its habitat during construction cannot be completely eliminated. Therefore, the Project may affect and is likely to adversely affect WPT. Therefore, conferencing with the USFWS for this species is required.

Species Name	Federal Status	Potential	Determination	
Delta smelt	Threatened	Absent	No Effect	
(Hypomesus transpacificus)	Threatened	Absent		
Conservancy fairy shrimp	Endangered	Absent	No Effect	
(Branchinecta conservatio)	Lindangered	Absent		
Giant gartersnake	Threatened	Presumed	May Affect, Likely to	
(Thamnophis gigas)	Threatened	Present	Adversely Affect	
Western yellow-billed cuckoo	Threatened	Absent	No Effect	
(Coccyzus americanus)	Threatened	Absent	NO Ellect	
Monarch butterfly	Candidate	Absent	No Effect	
(Danaus plexippus)				
Valley elderberry longhorn beetle	Threatened	Absent	No Effect	
(Desmocerus californicus dimorphus)	Threatened	Absent		
Vernal pool fairy shrimp	Threatened	Absent	No Effect	
(Branchinecta lynchi)	Threatened	Absent		
Vernal pool tadpole shrimp	Endengered	Absent	No Effect	
(Lepidurus packardi)	Lindangered	Absent		
Western pond turtle (Emys marmorata)	Proposed	High Potential	May Affect, Likely to	
Threatened		r ligh r Otential	Adversely Effect	
Hartweg's golden sunburst	Endangered	Absent	No Effect	

Table 5. Federally Listed Species Determinations

Following approval of this NES, a Biological Assessment will be prepared to further analyze potential project impacts to GGS and WPT. This BA will be used to initiate formal consultation and conferencing with USFWS under Section 7 of the Endangered Species Act.

Essential Fish Habitat Consultation Summary

Database research indicated that the BSA is within Essential Fish Habitat (EFH) for Chinook salmon (Oncorhynchus tshawytscha). However, Simmerly Slough within the BSA does not meet the criteria to be considered a Habitat Area of Particular Concern (HAPC), due to the anthropogenic modification of the channel and the lack of key habitat features, including connectivity to potential spawning habitat, that indicate high ecological function characteristic of HAPCs. No adverse effect to EFH is anticipated.

California Endangered Species Act Consultation Summary

Database searches returned eleven animal species protected under the CESA that may occur in the vicinity of the BSA. Literature review, habitat assessment, and biological surveys determined that three state-listed species have the potential to occur within the BSA: GGS, greater sandhill crane, and tricolored blackbird. With summer construction timing and the incorporation of the appropriate avoidance and minimization measures outlined in Chapter 4, direct impacts to the two avian species is not anticipated and further coordination with CDFW regarding these species is not required.

Since GGS is presumed present within the BSA and the project will temporary and permanent impacts to the habitat for the species, the project may result in direct "take" of the species as defined in §2080 of the California Fish and Game Code and consultation under CESA will be necessary.

Caltrans will consult with USFWS through the Section 7 process of FESA for Project related impacts to GGS. The result of this consultation will be a biological opinion (BO) written by USFWS which specifies conservation measures and includes an incidental take statement for the Project. The statement will include the amount or extent of the take, and avoidance/minimization measures and compensatory mitigation to minimize the take. If CDFW finds that the incidental take statement in the Federal BO is consistent with CESA, a consistency determination may be issued under section 2080.1 of the Fish and Game Code. If CDFW finds that the BO is not consistent with CESA, a separate Incidental Take Permit (ITP) may be required under section 2081(b) of the Fish and Game Code.

Wetlands and Other Waters Coordination Summary

The Project is anticipated to have approximately 0.04 acres of temporary impacts and approximately 0.02 acres of permanent impacts to Simmerly Slough, a jurisdictional water of the U.S. and State. In addition, the Project is anticipated to have approximately

0.01 acres of temporary impacts and approximately 0.04 acres of permanent impacts to emergent wetlands, which is considered a water of the U.S. and State. The following permits, relating to waters, will be obtained for the Project: A Flood Encroachment Permit from the Central Valley Flood Protection Board, a §401 Water Quality Certification from the Central Valley RWQCB, a §404 permit from the USACE, and a §1602 Streambed Alteration Agreement from CDFW. These permits would be obtained prior to construction.

Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. Measure BIO-24 will be incorporated into the Project to ensure that invasive species are not introduced or spread.

BIO-24: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

Other

General Wildlife

To minimize and avoid potential effects to local wildlife, the following measures BIO-25 through BIO-27 have been incorporated into the Project design.

BIO-25: All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.

BIO-26: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-27: If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

Migratory Birds

Native birds are protected by the MBTA and CFG Code Section 3513. The implementation of measure BIO-21 would avoid all potential impacts to migratory birds.

Chapter 6 – References

Babcock 1995	Babcock 1995. Home Range and Habitat use of Breeding Swainson's Hawks in the Sacramento Valley of California.
CDFW 1988	California Department of Fish and Wildlife. 1988. A Guide to Wildlife Habitats of California. Available at: <https: cwhr="" data="" wildlife-habitats="" wildlife.ca.gov=""></https:>
CDFW 2023	California Department of Fish and Wildlife. 2023. Biogeographic Information and Observation System Habitat Connectivity Viewer. Available at: https://wildlife.ca.gov/Data/BIOS
CNPS 2023	California Native Plant Society. 2023. Inventory of Rare and Endangered Plants of California. Available at: <http: www.rareplants.cnps.org=""></http:>
Estep 1989	Estep 1989. Biology, Movements, and Habitat Relationships of the Swainson's Hawk in the Central Valley of California.
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Lichvar 2008	Lichvar, R.W. & McColley, S.M. 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 Engineer Research and Development Center, Hanover, New Hampshire.
Rosiere 2017	Rosiere, R.E. "Willow & Riparian Types." <i>Shrublands - Range Types</i> of North America
Sonoran Joint Venture 2023	Sonoran Joint Venture. 2023. Supporting Cranes in the Arid Southwest. Available at: <https: cranes-in-the-arid-<br="" sonoranjv.org="">southwest/></https:>
USACE 1987	United States Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Environmental Laboratory, Vicksburg, Mississippi.
USACE 2008	United States Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). United States Army Engineer Research and Development Center, Vicksburg, Mississippi.
USDA 2007	United States Department of Agriculture Forest Service. 2007. California Ecological Sections.
Water Board 2022	2020-2022 Integrated Report for Clean Water Act 303(d) List and 305(b) Report. Available at: https://www.waterboards.ca.gov/water_issues/programs/water_quality

	_assessment/2020_2022_integrated_report.html (accessed 11/3/2023).
Woodbridge 1998	Woodbridge 1998. Swainson's Hawk (Buteo swainsoni). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight. Available at: <http: calpif="" htmldocs="" riparian_v-2.html="" www.prbo.org=""></http:>
Yuba County 2011	Yuba County. 2011. 2030 General Plan. Available at: < https://www.yuba.org/departments/community_development/planning_ department/general_plan.php> (accessed 11/10/2022)
Zeiner 1988- 1990	Zeiner, D.C., Laudenslayer, W.F., Mayer, K.E., & White, M. 1988- 1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.

Appendix A. USFWS Species List



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



October 30, 2023

In Reply Refer To: Project Code: 2024-0010804 Project Name: Ellis Road Bridge Replacement

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 the IPaC system by completing the same process used to receive the enclosed list.

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

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

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

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

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 https://www.fws.gov/program/migratory-bird-permit/what-we-do.

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-birds.

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:2024-0010804Project Name:Ellis Road Bridge ReplacementProject Type:Bridge - ReplacementProject Description:Bridge ReplacementProject Location:Ellis Road Bridge Replacement

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@39.19800805,-121.57804271971696,14z</u>



Counties: Yuba 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 Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

BIRDS

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/3911</u>	Threatened
REPTILES NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4482</u>	Threatened
INSECTS NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9743</u>	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/7850</u>	Threatened
CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/8246</u>	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/498</u>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/2246</u>	Endangered

FLOWERING PLANTS

NAME	STATUS
Hartweg's Golden Sunburst <i>Pseudobahia bahiifolia</i>	Endangered
No critical habitat has been designated for this species.	C
Species profile: <u>https://ecos.fws.gov/ecp/species/1704</u>	

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: Dokken Engineering
- Name: Katie Jacobson
- Address: 110 Blue Ravine Rd #200
- City: Folsom
- State: CA
- Zip: 95630
- Email kjacobson@dokkenengineering.com
- Phone: 9168449581

Appendix B. CNNDB Species List





Quad IS (Yuba City (3912125) OR Sutter (3912126) OR Browns Valley (3912124) OR Wheatland (3912114) OR Olivehurst (3912115) OR Gilsizer Slough (3912116) OR Gridley (3912136) OR Honcut (3912135) OR Loma Rica (3912134))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
Juncus leiospermus var. ahartii						
Ahart's paronychia	PDCAR0L0V0	None	None	G3	S3	1B.1
Paronychia ahartii						
American bumble bee	IIHYM24260	None	None	G3G4	S2	
Bombus pensylvanicus						
Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
Navarretia leucocephala ssp. bakeri						
bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Haliaeetus leucocephalus						
bank swallow	ABPAU08010	None	Threatened	G5	S3	
Riparia riparia						
burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Athene cunicularia						
cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL
Branta hutchinsii leucopareia						
California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Laterallus jamaicensis coturniculus						
California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Linderiella occidentalis						
chinook salmon - Central Valley spring-run ESU	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
Oncorhynchus tshawytscha pop. 11						
Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal and Valley Freshwater Marsh						
dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Downingia pusilla						
Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Astragalus tener var. ferrisiae						
giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Thamnophis gigas						
Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Cottonwood Riparian Forest				_	_	
Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great valley Mixed Riparian Forest				<i></i>	o	
Great Valley Valley Oak Riparian Forest	CT161430CA	None	None	G1	S1.1	
Great valley valley Oak Riparlan Forest						



Selected Elements by Common Name California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFV SSC or FP
greater sandhill crane	ABNMK01014	None	Threatened	G5T5	S2	FP
Antigone canadensis tabida						
green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
Acipenser medirostris pop. 1						
Hartweg's golden sunburst	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
Pseudobahia bahiifolia						
least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Vireo bellii pusillus						
legenere	PDCAM0C010	None	None	G2	S2	1B.1
Legenere limosa						
North American porcupine	AMAFJ01010	None	None	G5	S3	
Erethizon dorsatum						
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
northern harrier	ABNKC11011	None	None	G5	S3	SSC
Circus hudsonius						
recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Delphinium recurvatum						
Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sagittaria sanfordii						
silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasionycteris noctivagans						
song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
Melospiza melodia pop. 1						
steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Oncorhynchus mykiss irideus pop. 11						
Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Buteo swainsoni						
tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Agelaius tricolor						
valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Desmocerus californicus dimorphus						
veiny monardella	PDLAM18082	None	None	G1	S1	1B.1
Monardella venosa						
vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta lynchi						
vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
Lepidurus packardi						
western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Emys marmorata						
western ridged mussel	IMBIV19010	None	None	G3	S2	
Gonidea angulata						



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Spea hammondii						
western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coccyzus americanus occidentalis						
white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Elanus leucurus						
woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Hibiscus lasiocarpos var. occidentalis						

Record Count: 43

Appendix C. CNPS Species List

CNPS Rare Plant Inventory



Search Results

14 matches found. Click on scientific name for details

Search Criteria: <u>Quad</u> is one of [**3912126:3912136:3912135:3912125**]

▲ COMMON NAME	SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	рното
Ahart's dwarf rush	<u>Juncus</u> <u>leiospermus</u> var. ahartii	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	Yes	1984- 01-01	© 2004
												Carol W. Witham
Ahart's paronychia	<u>Paronychia</u> <u>ahartii</u>	Caryophyllaceae	annual herb	Feb-Jun	None	None	G3	S3	1B.1	Yes	1988- 01-01	© 2004 Carol W. Witham
Baker's navarretia	<u>Navarretia</u> <u>leucocephala</u> <u>ssp. bakeri</u>	Polemoniaceae	annual herb	Apr-Jul	None	None	G4T2	S2	1B.1	Yes	1994- 01-01	© 2018 Barry Rice
bristly leptosiphon	<u>Leptosiphon</u> <u>aureus</u>	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994- 01-01	© 2007 Len Blumin
English Peak greenbrier	<u>Smilax jamesii</u>	Smilacaceae	perennial rhizomatous herb	May- Jul(Aug- Oct)	None	None	G3G4	S3S4	4.2	Yes	1980- 01-01	Sheli Wingo 2004
Ferris' milk- vetch	<u>Astragalus</u> <u>tener var.</u> f <u>errisiae</u>	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	Yes	1994- 01-01	No Photo Available

Hartweg's	<u>Pseudobahia</u>	Asteraceae	annual herb	Mar-Apr	FE	CE	G1	S1	1B.1	Yes	1974-	
golden	<u>bahiifolia</u>										01-01	No Photo
sunburst												Available
hogwallow	<u>Hesperevax</u>	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	Yes	2001-	
starfish	<u>caulescens</u>										01-01	
												© 2017
												John
												Doyen
recurved	<u>Delphinium</u>	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes	1988-	
larkspur	<u>recurvatum</u>										01-01	No Photo
												Available

https://rareplants.cnps.org/Search/result?frm=T&sl=1&quad=3912126:3912136:3912135:3912125:&elev=:m:o

10/30/23, 4:01 PM				CNPS Rare Pla	ant Inventory S	Search F	Results					
red-stemmed cryptantha	<u>Cryptantha</u> <u>rostellata</u>	Boraginaceae	annual herb	Apr-Jun	None N	lone	G4	S3	4.2		2018- 06-26	No Photo Available
Sanford's arrowhead	<u>Sagittaria</u> <u>sanfordii</u>	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	None N	Jone	G3	S3	1B.2	Yes	1984- 01-01	©2013 Debra L. Cook
shield-bracted monkeyflower	<u>Erythranthe</u> glaucescens	Phrymaceae	annual herb	Feb- Aug(Sep)	None N	lone	G3G4	S3S4	4.3	Yes	1974- 01-01	Neal Kramer 2020
valley brodiaea	<u>Brodiaea rosea</u> <u>ssp. vallicola</u>	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	None N	lone	G5T3	S3	4.2	Yes	2019- 01-07	© 2011 Steven Perry
veiny monardella	<u>Monardella</u> <u>venosa</u>	Lamiaceae	annual herb	May-Jul	None N	lone	G1	S1	1B.1	Yes	1984- 01-01	© 2007 George W. Hartwell

Showing 1 to 14 of 14 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 30 October 2023].

https://rareplants.cnps.org/Search/result?frm=T&sl=1&quad=3912126:3912136:3912135:3912125:&elev=:m:o

Appendix D. NMFS Species List

Quad Name Yuba City

Quad Number 39121-B5

ESA Anadromous Fish

SONCC Coho ESU (T) -CCC Coho ESU (E) -CC Chinook Salmon ESU (T) -CVSR Chinook Salmon ESU (T) - X SRWR Chinook Salmon ESU (E) - X NC Steelhead DPS (T) -CCC Steelhead DPS (T) -SCCC Steelhead DPS (T) -SC Steelhead DPS (E) -X CCV Steelhead DPS (T) -Eulachon (T) -X sDPS Green Sturgeon (T) -ESA Anadromous Fish Critical Habitat SONCC Coho Critical Habitat -CCC Coho Critical Habitat -CC Chinook Salmon Critical Habitat -CVSR Chinook Salmon Critical Habitat - X SRWR Chinook Salmon Critical Habitat -NC Steelhead Critical Habitat -CCC Steelhead Critical Habitat -SCCC Steelhead Critical Habitat -SC Steelhead Critical Habitat -CCV Steelhead Critical Habitat -X Eulachon Critical Habitat sDPS Green Sturgeon Critical Habitat -X ESA Marine Invertebrates Range Black Abalone (E) -Range White Abalone (E) -ESA Marine Invertebrates Critical Habitat Black Abalone Critical Habitat -**ESA Sea Turtles** East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -Leatherback Sea Turtle (E) -North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -Fin Whale (E) -Humpback Whale (E) -Southern Resident Killer Whale (E) -North Pacific Right Whale (E) -Sei Whale (E) -Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

X

562-980-4000

MMPA Cetaceans -MMPA Pinnipeds -

Appendix C. Aquatic Resources Delineation Report

AQUATIC RESOURCE DELINEATION REPORT

Ellis Road Bridge Replacement Project, Yuba County, California

April 2023

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EXECUTIVE SUMMARY

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge. The project is located on Ellis Road approximately two miles north of Marysville in Yuba County, California.

The definition and methodology for identifying wetland resources are in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (United States Army Corps of Engineers, 2008a), which is a supplement to the *Corps of Engineers Wetlands Delineation Manual* (United States Army Corps of Engineers, 1987). The delineation for waters was conducted in accordance with the *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the United States* (United States Army Corps of Engineers, 2008b).

The Biological Study Area (BSA) includes areas that could be directly or indirectly impacted by the project, either temporarily or permanently. The BSA includes the roadway, bridge, Slimmerly Slough and adjacent drainages, staging area, and adjacent areas within the project footprint. Delineated areas include Slimmerly Slough, Unnamed Drainage 1, Unnamed Drainage 2, and Unnamed Drainage 3 within the BSA. Within the BSA there is approximately 0.63 acre of wetland waters and 0.64 acre of non-wetland waters under the potential jurisdiction of the Regional Water Quality Control Board (RWQCB) and United States Army Corps of Engineers (USACE). There is approximately 2.24 acres of waters potentially under the jurisdiction of California Department of Fish and Wildlife (CDFW). Aquatic resources within the BSA were classified as Riverine and Palustrine based on the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979).

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ACRONYMS AND ABBREVIATIONS

ΑΡΤ	Antecedent Precipitation Tool
ARD	Aquatic Resource Delineation
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
County	Yuba County
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
NES	Natural Environment Study
NRCS	National Resources Conservation Service
NWI	National Wetlands Inventory
OBL	obligate wetland
OHWM	ordinary high water mark
RWQCB	Regional Water Quality Control Board
U.S.	United States
UPL	upland
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey

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1.0 INTRODUCTION

This Aquatic Resource Delineation (ARD) describes the baseline data and preliminary results regarding the type, amount, and extent of wetland and non-wetland waters of the United States (U.S.) within the Biological Study Area (BSA) under jurisdiction of the United States Army Corps of Engineers (USACE). The report also describes the type, amount, and extent of wetland and non-wetland waters under jurisdiction of the Regional Water Quality Control Board (RWQCB), and amount of waters under the jurisdiction of the California Department of Fish and Wildlife (CDFW).

1.1 Project Description

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge. The project is located on Ellis Road approximately two miles north of Marysville in Yuba County, California.

The existing 44-foot-long, 20-foot wide bridge was originally constructed in 1928 and consists of a threespan continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cfs of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by the Federal Emergency Management Agency to be within the 100-year floodplain (special flood hazard Zone AE).

<u>Purpose</u>

The purpose of the project is to:

- Provide a structure that meets current design standards
- Improve the safety and operation of the facility

Need

The Ellis Road Bridge over Simmerly Slough was built in 1928 and is structurally deficient and scour critical. The scour sustained by the bridge has begun to undermine the structural integrity of the bridge, which has caused a 10-ton limit to be imposed on the structure. Improvements are needed to meet current design standards and to provide improved safety and operations of the facility.

Build Alternative

The bridge replacement will be a single span, cast-in-place slab bridge. The bridge will be 44 feet long and 24 feet wide. The design will meet current American Association of State Highway and Transportation Officials standards and Yuba County requirements. The project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will

be required to construct the new bridge. Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

No Build Alternative

Under the no-build alternative, the bridge will not be replaced. The bridge will remain structurally deficient and scour critical and public safety and access will not be improved.

This project is included in the 2023-2026 Metropolitan Transportation Improvement Program. The project will be primarily funded through Federal Highway Bridge Program. As such, the project requires compliance with both the National Environmental Policy Act and the California Environmental Quality Act. The lead agency for National Environmental Policy Act compliance is Caltrans and the lead agency for California Environmental Quality Act compliance is the County.

1.2 Contact Information

Contact Information for Yuba County:

Daniel W. Peterson Yuba County Public Works Department 915 8th Street, Suite 125 Marysville, CA 95901 (530) 749-5420 Contact Information for Consultant:

Sarah Holm Dokken Engineering 110 Blue Ravine Road, Suite 200 Folsom, CA 95630 (916) 858 -0642

2.0 LOCATION

The project area is located approximately 2.5 miles north of the City of Marysville in the northern portion of Yuba County within the United States Geologic Survey (USGS) Yuba City 7.5 minute quadrangle. Driving directions to the BSA from USACE Sacramento office are as follows; drive west on I street and take the I-5 north ramp towards Redding. In six miles use the right two lanes to exit for CA-99 toward Yuba City and continue for 12 miles. Use the right lane to merge onto State Highway 70 towards Marysville and continue for 27 miles. Turn right onto Ellis Road, the project site is located one and a half miles from the turn where Ellis Road passes over Simmerly Slough.

3.0 METHODS

3.1 Biological Study Area

The BSA includes areas that could be directly or indirectly impacted by the project, either temporarily or permanently including the staging of construction equipment. The BSA is surrounded by land being used for agriculture, primarily rice fields. The BSA includes Simmerly Slough, Ellis Road, Ellis Road Bridge, and three unnamed drainages (see **Appendix A: Figure 1**). Representative photographs of the BSA were taken during the surveys and are included in **Appendix B**. Locations and descriptions of the photographs are provided in **Table 1** and **Appendix A: Figure 2**.

Photo ID ^a	Geographic Coordinates (decimal degrees)	Compass Direction of View	Description				
1	39.1980° N -121.5781° W	North	Simmerly Slough and wetlands, from Ellis Road bridge view facing north upstream.				
2	39.1981° N -121.5774° W	West	Unnamed Drainage 1, from the north side of Ellis Road facing west				
3	39.1979° N -121.5786° W	East	Unnamed Drainage 2, from the south side of Ellis Road view facing east.				
4	39.1981° N -121.5786° W	West	Unnamed Drainage 3, from the north side of Ellis Road view facing west.				
5	39.1978° N -121.5781° W	East	Simmerly Slough downstream and south of Ellis Road bridge view facing east.				
6	39.1979° N -121.5786° W	N/A	Wetland Sampling Point 1 in Unnamed Drainage 2.				
7	39.1979° N -121.5786° W	N/A	Upland Sampling Point 2 in Unnamed Drainage 2.				
8	39.1980° N -121.5781° W	N/A	Wetland Sampling Point 3 in Unnamed Drainage 1.				
9	39.1980° N -121.5781° W	N/A	Upland Sampling Point 4 in Unnamed Drainage 1.				
10	39.7981° N -121.5773° W	N/A	Wetland Sampling Point 5 in Simmerly Slough.				
11	39.7981° N -121.5773° W	N/A	Upland Sampling Point 6 in Simmerly Slough.				
12	39.1979° N -121.5789° W	South	OHWM Transect 1 of Unnamed Drainage 2, south of Ellis Road view facing south.				
13	39.1986° N -121.5776° W	Northeast	OHWM Transect 2 of Simmerly Slough, north of Ellis Road and upstream of bridge view facing northeast.				

Table 1. Location and Description of Photographs
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Note:

^a The Photo ID corresponds to the number in Appendix B and Appendix A Figure 2.

3.2 Literature Review

A literature review was conducted to guide the field survey and locate areas of potential jurisdictional wetlands, non-wetland waters of the U.S., and waters of the state previously recorded within or near the BSA.

3.2.1 United State Geologic Survey Topographic Quadrangles

USGS topographical maps illustrate the physical setting of an area through topographic contour lines and

other major surface features. Features shown on USGS topographical maps include lakes, streams, rivers, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agency. The USGS Yuba City 7.5-minute quadrangle, which covers the BSA, was reviewed (United States Geological Survey, 2023).

3.2.2 Natural Resource Conservation Service Soil Data

The Natural Resources Conservation Service (NRCS) soil data can help to determine the types of soils within a project area. The presence of hydric soils is one of the primary indicators of jurisdictional wetlands. The Soils Survey of Yuba County, which includes the BSA, was reviewed (see **Appendix C**) (Natural Resource Conservation Service, 2022).

3.2.3 Google Earth Aerial Imagery

Google Earth aerial images show physical features within the BSA and surrounding area that can aid in determining upstream and downstream connections of waterways. Aerial images were reviewed to investigate and describe hydrology within the BSA and support determinations on connectivity between waterways and downstream navigable waters (Google Earth, 2023). In addition, aerial imagery was reviewed to observe changes in vegetation over time.

3.2.4 United States Fish and Wildlife Service National Wetlands Inventory

The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper provides an online geospatial reference for the locations and classifications of recorded wetlands and aquatic sites based on the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979). The NWI was reviewed to identify any recorded wetlands in the BSA, and to support research on waterway connectivity.

3.2.5 Natural Resources Conservation Service Wetlands Climate Data

The Antecedent Precipitation Tool (APT) provides a statistical summary of monthly precipitation and temperature that provide ranges of normal monthly precipitation. APT Tables provide precipitation data to determine whether recent rainfall is sufficient to expect normal hydrology indicators to be present at wetland sampling point locations. The closest climate station with available APT table data is located approximately three miles from the BSA in Marysville, California. This station, along with other stations in the nearby area, were used to determine these tables.

3.3 Definition of Ordinary High Water Mark

The ordinary high water mark (OHWM) is essentially the "line" on the bank or shore created by water fluctuations used to identify the lateral limits of non-wetland waters under Section 404 and Section 401 of the Clean Water Act. Waters in the Arid West Region of the U.S. are variable and include ephemeral/intermittent and perennial channel forms. The main physical characteristics of the OHWM include clear, natural line impressions on banks, shelves, changes in soil, destruction of terrestrial vegetation, or the presence of debris and litter.

3.4 Definition of Wetlands

The definition and methodology for identifying wetland resources in the BSA can be found in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (United States Army Corps of Engineers, 2008a), which is a supplement to the Corps of Engineers Wetlands Delineation Manual) (United States Army Corps of Engineers, 1987).

Hydrophytic Vegetation

Hydrophytes are plant species that are specialized to survive in permanently or periodically saturated soils where oxygen levels are typically very low, or the soils are anaerobic. The USACE and USFWS have identified over 2,000 plant species of this type in California and nearly 5,000 species throughout the U.S. as documented in the *National Wetland Plant List* (Lichavar, Banks, Kirchner, & Melvin, 2020). The wetland indicator categories reflect the range of estimated probability (expressed as a frequency of occurrence) that a species grows in wetlands versus non-wetlands. The indicator categories include obligate wetland (OBL) plants, which almost always grow in wetlands; facultative wetland (FACW) plants, which are usually found in wetlands, but can be found in non-wetlands; facultative upland (FACU) plants, which are found more often in non-wetlands; and obligate upland (UPL) plants, which almost always grow in non-wetlands.

The wetland indicator status of the plants within the sampling point are used to determine if hydrophytic vegetation is present by applying one of three tests: the dominance test, prevalence index, or morphological adaptation (as described in the Arid West Supplement). To meet the dominance test, more than 50 percent of the dominant plant species across all strata must be rated OBL, FACW, or FAC plants. If the dominance test is not satisfied, but hydric soils and wetland hydrology are present, the prevalence index can be applied, which considers the prevalence of wetland species among all plant species in the community, instead of only dominant species. Morphological adaptations (i.e. features that plants may acquire after years in saturated soil conditions) can be applied to distinguish certain wetland plant communities.

Hydric Soils

The National Technical Committee for Hydric Soils defines a hydric soil as a soil that is formed under conditions of saturation, flooding, or ponding that remains long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface, and that favor the establishment of hydrophytic vegetation (Natural Resource Conservation Service, 2018). The growing season is defined as the portion of the year when soil temperature (measured 20 inches below the surface) is above 41 degrees Fahrenheit (F). Hydric soils created under artificial conditions of flooding and inundation sufficient for the establishment of hydrophytic vegetation for hydrophytic vegetation also meet the definition for hydric soils.

Wetland Hydrology

Wetland hydrology, as defined in the Wetlands Delineation Manual, encompasses all hydrologic characteristics of an area that is periodically inundated or has soils saturated to the surface at some time during the growing season. Indications of wetland hydrology can include surface flows, the depth of flood

inundation, the depth to saturated soils, drift lines on vegetation, and the depth to the water table in soil test pits, which are excavated to test for hydric soils and confirm the wetland boundary.

3.5 Field Delineation

The BSA was visually surveyed by GPA biologists Mario Mayo, and Joseph Huang on March 23, 2023 and March 30, 2023. The OHWM was delineated in accordance with *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, 2008b).

Ordinary High Water Mark

A transect was selected to delineate the OHWM within Simmerly Slough and the three unnamed drainages in the BSA. Points were identified along the transect, recorded using global positioning system, and crosssections were labeled to denote the limits of the OHWM. Information on slope, sediment texture, staining on the bridge, vegetation, and any drift or ripples was recorded on the OHWM Datasheets (see **Appendix D**).

Wetland Delineation

Six sampling points (three pairs) were selected within the BSA that appeared to exhibit wetland indicators, or where conditions were uncertain, to confirm whether these locations meet the wetland parameters for USACE, and to determine the boundary of wetlands. At each sampling point, information on vegetation, soils, and hydrology was recorded on a Wetland Determination Data Form (Arid West Region) (see **Appendix E**). A soil test pit was excavated at each sampling location, to a depth necessary to determine wetland parameters, and the soil was evaluated for hydric indicators. Plots were delineated around each soil test pit, and plant species composition, cover, and dominance were recorded. Geographical coordinates were recorded.

3.6 Classification of Wetland Types

Areas meeting the definition of wetlands and/or non wetland waters of the U.S. within the BSA were classified using *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979). This system is the most widely accepted wetlands classification system, and it is currently used for the NWI mapping system. Under this system, wetlands are classified by identifying the delineated area's major class association (Riverine, Palustrine, Lacustrine, Estuarine, or Marine), general vegetation cover types, primary sources of hydrology, and factors related to the origin of the wetland.

4.0 EXISTING CONDITIONS

4.1 Landscape Setting

4.1.1 Topography

Topography within the BSA is relatively flat, with an elevation ranging from approximately 30 to 130 feet above sea level.

4.1.2 Climate

According to the Pacific Energy Center, Yuba County is within California Climate Zone 11 (Pacific Gas and Electric, 2006). This climate zone experiences high daytime temperatures in the summer with constant sunlight and dry conditions. Winters are very cold with the possibility of snow and thick Tule fog. Moderate to heavy rainfall experienced in this region between October and March.

According to the NRCS Agricultural Applied Climate Information System, the average annual low temperature for the area is approximately 45 degrees F and the average annual high temperature is approximately 81 degrees F (Natural Resource Conservation Service, 2022). The average annual precipitation is approximately 6.4 inches. The highest rainfall is between the months of December and January.

Precipitation Data and Analysis

To better understand conditions at the time of the field survey, climate data was evaluated to determine if recent rainfall levels were normal and sufficient to expect normal hydrologic indicators to be present in the BSA. The APT was used to determine if the rainfall during the three months leading up to the survey were drier, wetter, or normal. Rainfall amounts were compared to the normal range of the 30-year average. The range of normal precipitation is reported using long-term precipitation data to determine the 30th and 70th percentile of all the numbers in the precipitation record (see **Table 2** and **Appendix F**). During the time of the survey conditions were wet; however, for the three month period leading to the survey overall conditions were normal.

Month	30 th Percentile (Inches)	70 th Percentile (Inches)	Observed Rainfall (Inches)	Wetness Condition
March	1.94	3.42	5.56	Wet
February	2.18	5.00	0.38	Dry
January	1.73	5.34	10.78	Wet

Table 2. Rainfall Assessment for the Preceding 3-Month Period

4.1.3 Hydrology

The BSA is within the Lower Feather watershed (HUC 18020106) (United States Geologic Survey, 2021). The Lower Feather watershed is part of the Lower Sacramento Basin and drains into the Sacramento-San Joaquin Delta.

Simmerly Slough

Simmerly Slough is a natural, earthen bottom waterway and appears to have natural flows that go under the Ellis Road bridge. It appears that water from Simmerly Slough is used for irrigation for the surrounding rice fields and agricultural purposes. Simmerly Slough is a tributary to Jack Slough, where it confluences approximately one mile south of the BSA. Jack Slough ultimately connects to the Feather River approximately two miles southwest of the BSA. Based on aerial imagery and field surveys, there appears to be surface water year round (both during and outside of the irrigation season). Simmerly Slough is expected to be affected by natural hydrology.

Unnamed Drainage 1

Unnamed Drainage 1 is an earthen bottom feature that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 1 appears to receive water from the surrounding agricultural fields and roadside drainage. There is an earthen berm between Simmerly Slough and Unnamed Drainage 1 that disconnects water flow between the two features. Unnamed Drainage 1 does not appear to have connectivity to surface waters.

Unnamed Drainage 2

Unnamed Drainage 2 is an earthen bottom waterway that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 2 appears to receive water from surface waters outside the BSA and agricultural fields. Unnamed Drainage 2 appears to drain directly into Simmerly Slough via a concrete culvert pipe.

Unnamed Drainage 3

Unnamed Drainage 3 is an earthen bottom feature that appears manmade for the purpose of irrigation for the agricultural fields surrounding the BSA. Unnamed Drainage 3 appears to receive water from the surrounding agricultural fields and roadside drainage. Unnamed Drainage 3 appeared to have once had connectivity and flows into Simmerly Slough to the east. However, an earthen berm associated with a dirt access road appears to isolate Unnamed Drainage 3 from flowing into Simmerly Slough. Unnamed Drainage 3 does not appear to have connectivity to surface waters.

4.1.4 Soils

The soil types within the BSA include San Joaquin loam, 0 to 1 percent slopes, occasionally flooded and trainer loam, 0 to 1 percent slopes, occasionally flooded (Natural Resource Conservation Service, 2022) (see **Appendix C**). These soil units are described below.

San Joaquin Loam, 0 to 1 Percent Slopes, Occasionally Flooded

San Joaquin Loam, 0 to 1 Percent Slopes, Occasionally Flooded is found below elevations of 130 feet and typically receive 20 inches of rain. This soil unit has a very low capacity to transmit water with a water table depth of over 80 inches. This unit is comprised of sandy loam for the first 16 inches, clay from 16 to 25 inches, and duripan from 25 to 35 inches. This soil unit is not considered hydric.

Trainer Loam, 0 to 1 Percent Slopes, Occasionally Flooded

Trainer Loam, 0 to 1 Percent Slopes, Occasionally Flooded is comprised of mixed fine-loamy alluvium. This soil unit has a moderate to high capacity to transmit water with a water table depth of about 36 to 60 inches. This unit is comprised of loam for the first 36 inches and sandy clay loam below 36 inches. This soil unit is not considered hydric.

4.1.5 Vegetation Communities and Cover Classes

Active Agriculture

Active agriculture within the BSA includes actively farmed fields. These areas are characterized by rice fields with very little or no native vegetation.

Agricultural Ditches

Within the BSA, irrigation and drainage channels consist of artificial channels built to convey irrigation water to agriculture fields or drainage water from agriculture fields. Channels are typically at least partially cleared of vegetation and scraped on a regular basis to preserve water capacity.

Ruderal Vegetation

Ruderal vegetation communities are characterized by early successional annual vegetation, typically invasive grasses and forbs.

The disturbance may be natural, or due to human activity. The habitat is characterized by a lack of vegetation or dominated by non-native plant species. Most of these habitats can be suitable for restoration and enhancement back into a native plant dominated community.

Blackberry

Within the BSA, stands of nearly mono-specific Himalayan blackberry (*Rubus armeniacus*) are found along several of the irrigation and drainage channels. Blackberry vines require large amounts of water but do not survive when soils are completely saturated or anoxic. Streambanks and irrigation infrastructure provide ideal habitat for this rapidly spreading invasive vine. Blackberry are self-fertile and produce crops of fruit for several weeks in late summer and autumn. Seeds are spread primarily by birds which consume the seed laden fruit and excrete the seeds.

Willow Dominated Riparian

Willow Dominated Riparian is found within the BSA along the Simmerly Slough channel. This riparian corridor is partially vegetated, with the canopy dominated by willows (*Salix* spp.). The understory is composed of mostly native shrubs and herbs.

Emergent Wetland

Emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. However, they are most common on level to gently rolling topography. Vegetation generally consists of perennial monocots.

Stream Channel – Simmerly Slough

Simmerly Slough runs through the BSA and creates stream channel habitat. Simmerly Slough is a tributary to Jack Slough with the confluence approximately one mile south of the BSA. Jack Slough ultimately connects to the Feather River approximately two miles southwest of the BSA.

Barren Areas

Barren habitat is defined by the absence of vegetation and contains rock, gravel, soil, or pavement. Barren

areas within the BSA are categorized as the roadway (Ellis Road) and associated pullouts alongside the road.

4.2 Aquatic Resources

4.2.1 Aquatic Resource Types

Aquatic resources within the BSA were classified based on the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin, Carter, Golet, & LaRoe, 1979) (see **Table 3** and **Appendix H**). **Table 3** includes the location, size, and length of each aquatic resource in the BSA.

Aquatic Resource	Aquatic Re	sources Classification	Aquatic	Aquatic	
Name	Name Cowardin Location (Lat/Long)		Resource Size (acre)	Resource Size (linear feet)	
Simmerly Slough Non-Wetland Waters	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	39.198528, -121.577944	0.47	1,231	
Simmerly Slough Wetlands	Palustrine, Persistent Emergent Wetland, Permanently Flooded	39.198341, -121.577966	0.51	1,582	
Unnamed Drainage 1	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated	39.198162, -121.576716	0.06	573	
Unnamed Drainage 1 Wetlands	Palustrine, Persistent Emergent Wetland, Artificially Flooded	39.198162, -121.576716	0.08	412	
Unnamed Drainage 2 Non-Wetland Waters	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated	39.197896, -121.578647	0.17	939	
Unnamed Drainage 2 Wetlands	Riverine, Artificially Flooded, Persistent Emergent Wetland, Artificial, Excavated	39.197896, -121.578647	0.07	1,422	
Unnamed Drainage 3	Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial,	39.198104, -121.578690	0.07	532	

Table 3. Aquatics Resources within the Biological Study Area

Aquatic Resource	Aquatic Re	sources Classification	Aquatic	Aquatic Resource Size (linear feet)	
Name	Cowardin	Location (Lat/Long)	Resource Size (acre)		
	Excavated				
Total			1.43	6,691	

Table 3.	Aquatics	Resources	within the	Biological	Studv	Area
10010 01				. 5.6.69.64	•••••	

<u>Riverine</u>

A Riverine system includes all wetlands and deep-water habitats within natural and artificial stream, river, or ditch channels with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergent, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 part per thousand or greater. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water" (Cowardin, Carter, Golet, & LaRoe, 1979). The Riverine habitat observed in the BSA has been further classified as Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated, and Riverine, Artificially Flooded, Emergent Wetland, Nonpersistent, Artificial, Excavated.

Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded

This habitat class is characterized by a low gradient, well developed floodplain, no tidal influence, and some water flows all year, except years of extreme drought. The substrate consists of sand and mud. Surface water covers the substrate throughout the year in all years. In Riverine Systems, the Unconsolidated Bottom substrate is largely determined by the velocity of the current (Cowardin, Carter, Golet, & LaRoe, 1979). Within the BSA, Simmerly Slough is part of this classification.

Riverine, Artificially Flooded, Unconsolidated Bottom, Artificial, Excavated

This habitat class is characterized by flowing water for only part of the year. The amount and duration of flowing water is controlled by pumps in combination with dams and dikes. Unconsolidated particles smaller than stones are predominantly silt and clay, although coarser sediments or organic material may be intermixed. The ditches in this riverine classification are excavated and installed by humans. Since the ditches are manmade, two special modifiers were added to identify the ditches: artificial and excavated (Cowardin, Carter, Golet, & LaRoe, 1979). Within the BSA, Unnamed Drainage 1, 2, and 3 are part of this classification.

Riverine, Artificially Flooded, Persistent Emergent Wetland, Artificial, Excavated

This habitat class has flowing water for only a part of the year. The amount and duration of flowing water is controlled by pumps in combination with dams and dikes. Emergent wetland vegetation is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. Vegetation is present for most of the growing season in most years. Persistent emergent are emergent hydrophytes whose stems and leaves are evident above the water surface, or above the soil surface if surface water is absent, during and out of the growing season. The ditches in this riverine classification are excavated and installed by humans. Since the ditches are manmade, two special modifiers were added to identify the ditches:

artificial and excavated (Cowardin, Carter, Golet, & LaRoe, 1979). Within the BSA, Unnamed Drainage 2 has wetlands that are part of this classification.

<u>Palustrine</u>

A Palustrine System includes all freshwater wetlands (such as marshes, bogs, and swamps) dominated by trees, shrubs, emergent herbaceous plants, floating leaved and submergent plants, and mosses and lichens. It also includes wetlands without such vegetation, but with all of the following characteristics: (1) an area less than 20 acres, (2) a maximum water depth of 6.6 feet, and (3) a salinity of greater than 0.5 percent (Cowardin, Carter, Golet, & LaRoe, 1979). The Palustrine system in the BSA is further classified as Palustrine, Persistent Emergent Wetland, Permanently Flooded and Palustrine, Persistent Emergent Wetland, Permanent Palustrine, Persistent Emergent Wetland, Permanent Palustrine, Persistent Emergent Wetland, Permanent Palustrine, Persistent Palustrine, Per

Palustrine, Persistent Emergent Wetland, Permanently Flooded

This habitat class includes areas dominated by grass-like plants. Typical Palustrine species that may grow in this habitat include cattails, bulrushes (*Schoenoplectus* sp.), and sedges (*Carex* sp.). Surface water covers the substrate throughout the year in all years and vegetation is composed of obligate hydrophytes (Cowardin, Carter, Golet, & LaRoe, 1979). Within the BSA, Simmerly Slough has wetlands that are part of this classification.

Palustrine, Persistent Emergent Wetland, Artificially Flooded

This habitat class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. Vegetation is present for most of the growing season in most years. Persistent emergents are emergent hydrophytes whose stems and leaves are evident above the water surface, or above the soil surface if surface water is absent, during and out of the growing season. The amount and duration of flowing water is controlled by pumps in combination with dams and dikes (Cowardin, Carter, Golet, & LaRoe, 1979). Within the BSA, Unnamed Drainage 1 has wetlands that are part of this classification.

4.2.2 Survey Results

Ordinary High Water Mark

Two transects were used to evaluate and delineate the OHWM of Simmerly Slough and Unnamed Drainage 2 within the BSA (see **Appendix A: Figure 3**). The transects are each representative of their respective channels. At the time of the surveys, there was flowing water within Simmerly Slough that appeared to flow southeast through the BSA. There was water present in Unnamed Drainage 2; however, it appears this water was due to rain and not from conveyance. The OHWM was determined by the change in slope, vegetation, and change in the sediment texture.

Transect #1

Transect #1 was taken within Unnamed Drainage 2. The location of the OHWM was determined by the change in slope and vegetation type and coverage. Vegetation below the OHWM consists of *Juncus* and herbaceous species. The vegetation above the OHWM consists of blackberry and herbaceous species. The vegetation coverage was more dense above the OHWM than below. Unnamed Drainage 2 is approximately 18 feet wide at the OHWM within Transect #1.

Transect #2

Transect #2 was taken within Simmerly Slough. The location of the OHWM was determined by the change in slope, sediment texture, and vegetation type and coverage. The sediment texture below the OHWM is mostly clay, and the sediment texture above the OHWM is mostly sandy clay. Vegetation below the OHWM consists predominantly of dense cattail coverage and *Eleocharis*. The vegetation above the OHWM consists of blackberry and herbaceous species. The vegetation coverage was more dense above the OHWM than below. Simmerly Slough is approximately 55 feet wide at the OHWM within Transect #2.

Wetland Delineation

Sampling Points #1 and #2

A soil test pit for Sampling Point #1 was excavated at the bottom of the Unnamed Drainage 2, west of the bridge. The soil test pit was approximately 12 inches deep. Vegetation was comprised of iris leaved rush (*Juncus xiphioides*), slender cudweed (*Gnaphalium exilifoloum*), and valley redstem (*Ammannia coccinea*), herbaceous plants that meet the hydrophytic vegetation indicator. The soil was clay with redox features and meets the hydric soil indicator requirement. At the time of surveys, there was surface water within Unnamed Drainage 2, but outside of the sampling point. However, water marks were observed, meeting the hydrology indicator requirement. Therefore, Sampling Point #1 exhibited all three wetland indicators.

A soil test pit for Sampling Point #2 was excavated at the top of the bank at Unnamed Drainage 2, south of Sampling Point #1. The soil test pit was approximately 11 inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #2 exhibited none of the wetland indicators.

Sampling Points #3 and #4

A soil test pit for Sampling Point #3 was excavated at the bottom of Unnamed Drainage 1. The soil test pit was approximately 12 inches deep. Vegetation was comprised predominantly of broadleaf cattail (Typha latifoloa), an herbaceous plant that meets the hydrophytic vegetation indicator. The soil was silty clay and a depleted matrix was observed, which meets the hydric soil indicator requirement. At the time of surveys, surface water was present, meeting the hydrology indicator requirement. Therefore, Sampling Point #3 exhibited all three wetland indicators.

A soil test pit for Sampling Point #4 was excavated at the top of the Unnamed Drainage 1 bank, east of the bridge. The soil test pit was approximately eight inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #4 exhibited none of the wetland indicators.

Sampling Points #5 and #6

A soil test pit for Sampling Point #5 was excavated below the OHWM within Slimmerly Slough, south of the bridge. The soil test pit was approximately 16 inches deep. Vegetation was comprised of broadleaf cattail, curly dock (*Rumex crispus*), and common knotweed (*Polygonum plebeium*), herbaceous plants that meet the hydrophytic vegetation indicator. The soil was clay loam and clay with redox dark surface

meeting the hydric soil indicator requirement. At the time of surveys, water saturation was present below six inches, meeting the hydrology indicator requirement. Therefore, Sampling Point #5 exhibited all three wetland indicators.

A soil test pit for Sampling Point #6 was excavated at the top of the Simmerly Slough bank, east of the bridge. The soil test pit was approximately 11 inches deep. Vegetation was comprised of upland herbaceous plants that do not meet the hydrophytic vegetation indicator requirement. No hydric soils or wetland hydrology indicators were observed. Therefore, Sampling Point #6 exhibited none of the wetland indicators.

4.3 Sensitive Plants, Fish, Wildlife, and Cultural/Historic Properties

4.3.1 Special-Status Plants and Wildlife

Information on special-status plants and wildlife is provided in the Natural Environment Study (NES) for the Ellis Road Bridge Replacement Project (Yuba County, 2023a).

4.3.3 Cultural and Historic Properties

Information on Cultural and Historic Properties is provided in the 2023 Historic Property Survey Report for the Ellis Road Bridge Replacement Project (Yuba County, 2023b).

5.0 REGULATORY AGENCY JURISDICTION

This section discusses the results of the jurisdictional delineation for the USACE, RWQCB, and CDFW. The jurisdictional waters delineated within the BSA are included in **Table 4** below.

Regulatory Agency	Wetlands (acres)	Non-Wetland Waters (acres)	Total Jurisdiction within BSA (acres)
United States Army Corps of Engineers Jurisdiction	0.63	0.64	1.27
Regional Water Quality Control Board Jurisdiction	0.63	0.64	1.27
California Department of Fish and Wildlife Jurisdiction	-		2.24

Table 4. Jurisdictional Wetlands and Waters Delineated within the Biological Study Area

5.1 United States Army Corps of Jurisdiction

The BSA was evaluated for wetland and non-wetland waters under jurisdiction of the USACE by delineating the OHWM and assessing the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.

Simmerly Slough is an earthen bottom naturally formed stream that has been channelized in places for agricultural use. Simmerly Slough is a natural tributary of Jack Slough. Jack Slough appears to have unrestricted flows that connect to waters of the U.S. further downstream. Unnamed Drainage 2 is an earthen bottom waterway that appears to have direct connectivity to Simmerly Slough. Unnamed

Drainage 1 and 3 do not appear to have connectivity to any other surface waters and are isolated from Simmerly Slough by way of an earthen berm. Based on aerial imagery and field surveys there appears to be water within the Unnamed Drainages during the irrigation season and Simmerly Slough appears to convey water year round. Therefore, Simmerly Slough, Unnamed Drainage 2 are expected to fall under the jurisdiction of the USACE. Unnamed Drainage 1 and 3 have no direct connectivity to Simmerly Slough and are not expected to fall under jurisdiction of the USACE (See **Table 4** and **Appendix A: Figure 5**).

There are wetlands within Simmerly Slough, Unnamed Drainage 2, and Unnamed Drainage 1. The wetlands within Unnamed Drainage 1 are adjacent to Simmerly Slough. Wetlands adjacent to jurisdictional surface waters are expected to fall under jurisdiction of the USACE. Therefore, wetlands within Simmerly Slough, Unnamed Drainage 2, and Unnamed Drainage 1 wetlands are expected to fall under the jurisdiction of the USACE (See **Table 4** and **Appendix A: Figure 5**).

The USACE has final authority and discretion over the extent of wetlands and waters of the U.S., including areas under USACE jurisdiction, final determination of total jurisdictional area affected by a project, and type of permits and conditions required.

5.2 Regional Water Quality Control Board

The BSA was evaluated for wetlands and non-wetland waters under jurisdiction of the RWQCB by delineating the OHWM and assessing the presence of hydrophytic vegetation, hydric soils, and wetland hydrology.

At the time of survey, Simmerly Slough had flowing water and had unrestricted flows downstream. The passage of water from Simmerly Slough through the BSA appears to flow south before connecting to Jack Slough. Unnamed Drainage 2 is an earthen bottom waterway that appears to have direct connectivity to Simmerly Slough. Unnamed Drainage 1 and 3 do not appear to have connectivity to any other surface waters and are isolated from Simmerly Slough by way of an earthen berm. Based on aerial imagery and field surveys there appears to be water within the Unnamed Drainages during the irrigation season and Simmerly Slough appears to convey water year round. Therefore, Simmerly Slough, Unnamed Drainage 2 are expected to fall under RWQCB jurisdiction. Unnamed Drainage 1 and 3 have no direct connectivity to Simmerly Slough and are not expected to fall under jurisdiction of the RWQCB. (see **Table 4** and **Appendix A: Figure 5**).

There are wetlands within Simmerly Slough, Unnamed Drainage 2, and Unnamed Drainage 1. The wetlands within Unnamed Drainage 1 are adjacent to Simmerly Slough. Wetlands adjacent to jurisdictional surface waters are expected to fall under jurisdiction of the RWQCB. Therefore, wetlands within Simmerly Slough, Unnamed Drainage 2, and Unnamed Drainage 1 wetlands are expected to fall under the jurisdiction of the RWQCB (see **Table 4** and **Appendix A: Figure 5**).

5.3 California Department of Fish and Wildlife

The BSA was evaluated for waters under jurisdiction of the CDFW by delineating areas from the top of bank to the top of bank within Slimmerly Slough and adjacent unnamed drainages.

At the time of survey, Simmerly Slough had a defined bed and bank, conveyed water, and had emergent vegetation within OHWM and along the banks. Simmerly Slough appeared to have sufficient water to

support aquatic wildlife. Unnamed Drainage 1 had a defined bed and bank and standing water at the time of surveys. Based on aerial imagery, water within Unnamed Drainage 1 appears to be limited to winter and spring and appears to be dry during the fall and summer. Unnamed Drainage 1 appears to be isolated from any other surface waters. However, Unnamed Drainage 1 appeared to have sufficient emergent vegetation to support aquatic wildlife. Unnamed Drainage 2 had a defined bed and bank and water within the channel at the time of surveys. Based on aerial imagery, there appears to be water within Unnamed Drainage 2 nearly year round. Unnamed Drainage 2 has direct connectivity to Simmerly Slough. Unnamed Drainage 2 appeared to have sufficient emergent vegetation to support aquatic wildlife. Unnamed Drainage 2 has direct connectivity to Simmerly Slough. Unnamed Drainage 3 had a defined bed and bank and pools of water at the time of surveys. However, Unnamed Drainage 3 appears to be isolated from any other surface waters. Based on aerial imagery, Unnamed Drainage 3 only has water for some parts of the year. Unnamed Drainage 3 did not have enough emergent vegetation to support aquatic wildlife. Therefore, Simmerly Slough, Unnamed Drainage 1, and Unnamed Drainage 2 are expected to fall under CDFW jurisdiction. Unnamed Drainage 3 is not expected to fall under jurisdiction of CDFW (see **Table 4** and **Appendix A: Figure 6**).

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FIGURE 1. BIOLOGICAL STUDY AREA Ellis Road Bridge Replacement Project





FIGURE 2. PHOTO POINTS Ellis Road Bridge Replacement Project



FIGURE 3. POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTION

Ellis Road Bridge Replacement Project



FIGURE 4. POTENTIAL REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION Ellis Road Bridge Replacement Project



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FIGURE 5. POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION Ellis Road Bridge Replacement Project



Photo 1. Simmerly Slough and emergent wetlands, from Ellis Road bridge, view facing north upstream (March 2023)



Photo 2. Unnamed Drainage 1, from the north side of Ellis Road, facing west (March 2023)



Photo 3. Unnamed Drainage 2, from the south side of Ellis Road, view facing east (March 2023)



Photo 4. Unnamed Drainage 3, from the north side of Ellis Road, view facing west (March 2023)



Photo 5. Simmerly Slough downstream and south of Ellis Road bridge, view facing east (March 2023)



Photo 6. Wetland Sampling Point 1 at Unnamed Drainage 2 (March 2023)



Photo 7. Upland Sampling Point 2 at Unnamed Drainage 2 (March 2023)



Photo 8. Wetland Sampling Point 3 at Unnamed Drainage 1 (March 2023)



Photo 9. Upland Sampling Point 4 at Unnamed Drainage 1 (March 2023)



Photo 10. Wetland Sampling Point 5 at Simmerly Slough (March 2023)



Photo 11. Upland Sampling Point 6 at Simmerly Slough (March 2023)



Photo 12. OHWM Transect 1 of Unnamed Drainage 2, south of Ellis Road, view facing south (March 2023)



Photo 13. OHWM Transect 2 of Simmerly Slough, north of Ellis Road and upstream of bridge, view facing northeast (March 2023)

Appendix C. Soil Report



United States Department of Agriculture



Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Yuba County, California



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



	MAP L	EGEND		MAP INFORMATION
Area of In	terest (AOI) Area of Interest (AOI)	8	Spoil Area Stony Spot	The soil surveys that comprise your AOI were mapped at 1:24,000.
Solis ~ Special	Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points Point Features	© ⊘ ~	Very Stony Spot Wet Spot Other Special Line Features	Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed
() () () () () () () () () () () () () (Blowout Borrow Pit Clay Spot	Water Fea	ttures Streams and Canals ation Rails	scale. Please rely on the bar scale on each map sheet for map measurements.
◇ ¥	Closed Depression Gravel Pit Gravelly Spot	* *	Interstate Highways US Routes Major Roads	Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
۵ م	Landfill Lava Flow Marsh or swamp Mine or Quarry	Backgrou	Local Roads n d Aerial Photography	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.
© 0 ~	Miscellaneous Water Perennial Water Rock Outcrop			This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
+ :: =	Saline Spot Sandy Spot Severely Eroded Spot			Survey Area Data: Version 17, Sep 6, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
\$ \$ \$	Sinkhole Slide or Slip Sodic Spot			Date(s) aerial images were photographed: Dec 6, 2018—Dec 12, 2018 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background
				imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

		-	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
216	San Joaquin loam, 0 to 1 percent slopes, occasionally flooded	10.0	82.5%
248	Trainer loam, 0 to 1 percent slopes, occasionally flooded	2.1	17.5%
Totals for Area of Interest		12.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Yuba County, California

216—San Joaquin loam, 0 to 1 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: hg6l Elevation: 60 to 130 feet Mean annual precipitation: 18 to 22 inches Mean annual air temperature: 61 degrees F Frost-free period: 320 to 325 days Farmland classification: Not prime farmland

Map Unit Composition

San joaquin, loam, and similar soils: 92 percent Minor components: 8 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of San Joaquin, Loam

Setting

Landform: Fan terraces Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread Microfeatures of landform position: Mounds, swales Down-slope shape: Linear Across-slope shape: Linear Parent material: Mixed alluvium

Typical profile

H1 - 0 to 16 inches: loam *H2 - 16 to 25 inches:* clay *H4 - 25 to 35 inches:* duripan

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches; 20 to 40 inches to duripan
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 4w Land capability classification (nonirrigated): 4w Hydrologic Soil Group: D Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

Minor Components

Perkins

Percent of map unit: 2 percent

Ecological site: R017XY903CA - Stream Channels and Floodplains *Hydric soil rating:* No

Capay

Percent of map unit: 2 percent Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

Unnamed

Percent of map unit: 2 percent Hydric soil rating: No

248—Trainer loam, 0 to 1 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: hg7k Elevation: 30 to 110 feet Mean annual precipitation: 18 to 22 inches Mean annual air temperature: 61 to 63 degrees F Frost-free period: 250 to 290 days Farmland classification: Prime farmland if irrigated

Map Unit Composition

Trainer, loam, and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Trainer, Loam

Setting

Landform: Stream terraces Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread Down-slope shape: Linear Across-slope shape: Linear Parent material: Mixed fine-loamy alluvium

Typical profile

Ap-A - 0 to 9 inches: loam Bt1-Bt3 - 9 to 36 inches: loam BCt-C2 - 36 to 66 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent *Depth to restrictive feature:* More than 80 inches *Drainage class:* Somewhat poorly drained *Runoff class:* Low

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr) Depth to water table: About 36 to 60 inches Frequency of flooding: OccasionalNone

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 2w Land capability classification (nonirrigated): 3w Hydrologic Soil Group: B Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

Minor Components

Columbia

Percent of map unit: 4 percent Landform: Flood plains Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: Yes

Kimball

Percent of map unit: 3 percent Landform: Terraces Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

San joaquin

Percent of map unit: 3 percent Landform: Terraces Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

Unnamed, water table above 20 inches

Percent of map unit: 3 percent Landform: Channels Hydric soil rating: Yes

Wilsoncreek

Percent of map unit: 2 percent Landform: Stream terraces Ecological site: R017XY903CA - Stream Channels and Floodplains Hydric soil rating: No

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онум	Delineation	Cover Shee	t Transect 1

Page	1	of	2

Project:	Date:
Ellis Road Bridge Replacement	March 23, 2023
Location:	Investigator(s):
Yuba County	Mario Mayo, Joseph Huang

Project Description:

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge. The project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California

Describe the river or stream's condition (disturbances, in-stream structures, etc.): Drainage 2 is an earthen bottom drainage that is concrete lined at the mouth and drains into Simmerly Slough via a pipe culvert. There appears to be a weir gate structure that connects Drainage 2 to rice fields. Water was present at the time of surveys within the drainage but was not flowing.

Off-site Information

Remotely sensed image(s) acquired? \Box Yes or \boxtimes No [If yes, attach image(s) to datasheet(s) and index approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below]. Description:

Hydrologic/hydraulic information acquired? \Box Yes or \boxtimes No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up – and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Datasheet # 1 OHWM Datasheet Page 2 of 2 Transect (cross-section) drawing: (Choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length) juncus grasses 1AA 1A 1B **1BB** Points 1A and 1AA indicate the top of bank, and points 1B and 1BB indicate the OHWM. The distance between 1B and 1BB (OHWM) is approximately 18 feet. **Break in Slope at OHWM:** □ Sharp (>60°) | ⊠ Moderate (30-60°) | □ Gentle (<30°) | □ None Clay/Silt Boulders Developed Soil Sand Gravel Cobbles <0.05mm 0.05-2mm 2mm–1cm 1 – 10cm >10cm Horizons (Y/N) 0% Above 65% 25% 5% 5% Yes OHWM Below 75% 20% 5% 0% 0% Yes OHWM Notes/Description: There is a defined break in the slope at the OHWM. Therefore, break in slope was used as an indicator of the OHWM. There was no change in sediment texture from below to above the OHWM. Therefore, sediment texture was not used as an indicator of the OHWM. Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM. Tree (%) Shrub (%) Herb (%) Bare (%) Above OHWM 30% 70% **Below OHWM** 10% 90%

Notes/ Description:

There is juncus and sedge growing below and at the OHWM with dead mustard and blackberry growing above the OHWM. There is more vegetation coverage above the OHWM than below the OHWM. There is a clear change in vegetation type and density at the OHWM. Therefore, change in vegetation type and density at the OHWM.

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation.

Scour/water marks on the gate structure were used to determine the location of the OHWM.

OHWM Delineation Cover Sheet Transect 2

Dago 1

Page _1_ of _2
Date:
March 30, 2023
Investigator(s):
Mario Mayo, Joseph Huang

Project Description:

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge. The project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California.

Describe the river or stream's condition (disturbances, in-stream structures, etc.): Simmerly Slough is an earthen bottom waterway that flows north to south within the BSA. There is

dense coverage of cattail within the channel, and the banks are covered in blackberry. The slough appears to be undisturbed. The Ellis Road bridge is the only structure within the channel.

Off-site Information

Remotely sensed image(s) acquired? \Box Yes or \boxtimes No [If yes, attach image(s) to datasheet(s) and index approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below]. Description:

Hydrologic/hydraulic information acquired? \Box Yes or \boxtimes No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up – and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.


Notes/ Description:

Emerging cattails were observed below the OHWM. Upland grasses and blackberry bramble were observed growing above the OHWM. There is a clear change in vegetation type from above to below the OHWM. In addition, there was a clear change in vegetation coverage from above to below the OHWM. Therefore, vegetation type and coverage were used as an indicator of the OHWM.

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation.

Scour/water marks on the bridge structure was used as an indicator of the OHWM.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yuba County			Sampling Date:	3/23/2	023
Applicant/Owner: County of Yuba		State:	CA	Sampling Point:	1	
Investigator(s): Mario Mayo, Joseph Huang	Section, Township, Range:	Township	16 Nort	h, Range 3 East		
Landform (hillslope, terrace, etc.): Toe of slope	Local relief (concave, conve	x, none): <u>c</u>	concave	Slop	be (%):	30
Subregion (LRR): Mediterranean California Lat: 39	.1980 Lon	g: <u>-121.58</u>	311	Datur	n:	
Soil Map Unit Name: <u>San Joaquin Loam, 0 to 1 Percent Slopes,</u>	Occasionally Flooded	NW	I classific	ation: <u>Arid West</u>		
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No	(If no, exp	plain in R	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Norm	al Circums	tances" p	resent?Yes 🖌	No	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain ar	ny answer	rs in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes∕	No
Remarks [.]				

Sampling Point 1 was taken within Unnamed Drainage 2 at the OHWM. Pooling water was observed throughout the drainage.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30x30</u>) 1	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>2</u> (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 5x5)	0	_ = Total Co	ver	That Are OBL, FACW, or FAC:(A/B)
1	<u> </u>			Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species <u>24</u> x 1 = <u>24</u>
4.				FACW species <u>10</u> x 2 = <u>20</u>
5.				FAC species x 3 =
	0	= Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size: 3x3)				UPL species 17 x 5 = 85
1. iris leaved rush (Juncus xiphioides)	20	<u> </u>	OBL	Column Totals: 51 (A) 129 (B)
2. slender cudweed (Gnaphalium exilifolium)	10	<u>N</u>	FACW	、 , , 、 , ,
3. wild radish (Raphanus raphanistrum)	15	Y	UPL	Prevalence Index = $B/A = 2.53$
4. ripgut brome (Bromus diandrus)	2	<u>N</u>	UPL	Hydrophytic Vegetation Indicators:
5. valley redstem (Ammannia coccinea)	4	<u>N</u>	OBL	Dominance Test is >50%
6				\checkmark Prevalence Index is $\leq 3.0^1$
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
o	- <u></u>			Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 3x3)			ver	
1.				¹ Indicators of hydric soil and wetland hydrology must
2.				be present, unless disturbed or problematic.
	0	= Total Co	ver	Hydrophytic
% Bare Ground in Herb Stratum <u>49</u> % Cover	r of Biotic C	rust		Present? Yes <u>√</u> No
Remarks:				

Approximately 10% of the Bare Ground stratum consisted of dead Himalayan blackberry (Rubus armeniacus). Vegetation within Sampling Point 1 meets the indicator for hydrophytic vegetation.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redo	x Feature	es					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
<u>0-12 in</u>	<u>7.5 YR 3/3</u>	75	7.5 YR 5/8	15	<u> </u>	Μ	clay			
			<u>5 YR 4/1</u>	10	С	М				
				_						
<u> </u>										
<u> </u>			·				·			
			·				·			
¹ Type: C=C	oncentration, D=Dep	letion, RM	1=Reduced Matrix, CS	S=Covere	ed or Coate	ed Sand G	Grains. ² Loc	cation: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators: (Applic	able to al	I LRRs, unless othe	rwise no	ted.)		Indicators	for Problematic Hydric Soils ³ :		
Histosol	(A1)		Sandy Red	ox (S5)			1 cm N	/luck (A9) (LRR C)		
Histic E	pipedon (A2)		Stripped Ma	atrix (S6)			2 cm N	/luck (A10) (LRR B)		
Black H	istic (A3)		Loamy Muc	ky Miner	al (F1)		Reduc	ed Vertic (F18)		
Hydroge	en Sulfide (A4)		Loamy Gle	yed Matri	x (F2)		_∕ Red Pa	arent Material (TF2)		
Stratifie	d Layers (A5) (LRR	C)	Depleted M	latrix (F3)			Other (Explain in Remarks)			
1 cm Mi	uck (A9) (LRR D)	,	Redox Darl	< Surface	(F6)					
Deplete	d Below Dark Surfac	e (A11)	Depleted D	ark Surfa	ce (F7)					
Thick Da	ark Surface (A12)	()	Redox Dep	ressions	(F8)		³ Indicators	of hydrophytic vegetation and		
Sandy M	/ucky Mineral (S1)		Vernal Poo	Vernal Pools (F9)			wetland	hydrology must be present.		
Sandy C	Gleyed Matrix (S4)						unless di	isturbed or problematic.		
Restrictive	Layer (if present):									
Туре:										
Depth (in	ches):						Hydric Soil	Present? Yes _ ✓ No		
Remarks:										
De deu fei					al					
Redox tea	atures within th	iis sam	pling point were	e ciear	and nur	nerous	•			

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one required; c	heck all that apply)	Secondary Indicators (2 or more required)					
Surface Water (A1)	Salt Crust (B11)	✓ Water Marks (B1) (Riverine)					
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)					
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)					
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)					
Sediment Deposits (B2) (Nonriverine)	 Dry-Season Water Table (C2) 						
Drift Deposits (B3) (Nonriverine)	Crayfish Burrows (C8)						
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)					
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	Other (Explain in Remarks)	✓ FAC-Neutral Test (D5)					
Field Observations:							
Surface Water Present? Yes No	Depth (inches):						
Water Table Present? Yes No	Depth (inches):						
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetland H	ydrology Present? Yes _ ✓ No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							
Wetland hydrology indicators incl	uding water marks, were observed wit	hin this sampling point. Therefore					

wetland hydrology indicators, including water marks, were observed within this sampling point. Therefore, wetland hydrology is present within this sampling point.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yub	a County		Sampling Date:	3/30/2	2023
Applicant/Owner: <u>County of Yuba</u>		State:	CA	Sampling Point:	2	
Investigator(s): Mario Mayo, Joseph Huang	Section, Townshi	p, Range: <u>Township</u>) 16 Nor	th, Range 3 East		
Landform (hillslope, terrace, etc.): Top of bank	Local relief (cond	cave, convex, none): <u>(</u>	concave	Slop	be (%):	2
Subregion (LRR): Mediterranean California Lat: 39	9.1980	Long: <u>-121.5</u>	811	Datur	n:	
Soil Map Unit Name: San Joaquin Loam, 0 to 1 Percent Slopes,	Occasionally Flo	oded NW	/I classific	cation: <u>Arid West</u>		
Are climatic / hydrologic conditions on the site typical for this time of y	ear?Yes 🖌	No (If no, ex	plain in R	Remarks.)		
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circums	stances" p	oresent?Yes 🖌	<u>No</u>	
Are Vegetation, Soil, or Hydrology naturally pr	roblematic?	(If needed, explain a	ny answe	ers in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>✓</u> No <u>✓</u> No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

Sampling Point 2 was taken at top of bank on Unnamed Drainage 2 directly above Sampling Point 1, adjacent to Ellis Road.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size: <u>30x30</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species	(A)
2					(~)
3				Total Number of Dominant	(D)
аа				Species Across Air Strata. <u>2</u>	(B)
		- Total Co		Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size: 5x5)			701	That Are OBL, FACW, or FAC:	(A/B)
1				Prevalence Index worksheet:	
2				Total % Cover of: Multiply by	<u>:</u>
3				OBL species x 1 =	
4				FACW species x 2 =	
5				FAC species x 3 =	
	0	= Total Cov	ver	FACU species x 4 =	
Herb Stratum (Plot size: 3x3)		-		UPL species x 5 =	
1. foxtail barely (Hordeum murinum)	10	<u> N </u>	UPL	Column Totals: (A)	(B)
2. ripgut brome (Bromus diandrus)	30	Y	UPL		
3. common stork's bill (Erodium cirutarium)	35	Υ	UPL	Prevalence Index = B/A =	<u> </u>
4. blessed milk thistle (Silybum marianum)	7	<u>N</u>	UPL	Hydrophytic Vegetation Indicators:	
5				Dominance Test is >50%	
6				Prevalence Index is $≤3.0^1$	
7				Morphological Adaptations ¹ (Provide sup data in Remarks or on a separate she	porting et)
o	<u>-</u>	- Total Ca		Problematic Hydrophytic Vegetation ¹ (Ex	plain)
Woody Vine Stratum (Plot size: 3x3)	02		/ei		
1.				¹ Indicators of hydric soil and wetland hydrolog	jy must
2.				be present, unless disturbed or problematic.	
	0	= Total Cov	ver	Hydrophytic	
% Bare Ground in Herb Stratum <u>18</u> % Cover	r of Biotic C	rust		Vegetation Present? Yes No∕_	-
Pemarks:					
INCITIONS.					

hydrophytic vegetation. Therefore, hydrophytic vegetation is absent from this sampling point.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)												
Depth	Matrix	Atrix Redox Features										
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks			
<u>0-11 in</u>	7.5 YR 3/2	100					silty clay	soil is cor	npacted			
·		· ·										
·		· ·										
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix, CS	=Covered	or Coate	d Sand Gr	rains. ² Lo	cation: PL=F	Pore Lining, M	M=Matrix.		
Hydric Soil	Indicators: (Applic	able to all LF	RRs, unless other	wise note	ed.)		Indicators	Indicators for Problematic Hydric Soils ³ :				
Histosol	(A1)		Sandy Redo	ox (S5)			1 cm Muck (A9) (LRR C)					
Histic E	pipedon (A2)		Stripped Ma	trix (S6)			2 cm Muck (A10) (LRR B)					
Black H	istic (A3)		Loamy Muck	ky Mineral	(F1)		Reduced Vertic (F18)					
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Red Parent Material (TF2)					
Stratified	d Layers (A5) (LRR (C)	Depleted Ma	atrix (F3)			Other (Explain in Remarks)					
1 cm Mu	uck (A9) (LRR D)		Redox Dark	Surface (I	F6)							
Deplete	d Below Dark Surfac	e (A11)	Depleted Da	ark Surface	e (F7)		0					
Thick Da	ark Surface (A12)		Redox Depr	essions (F	8)		³ Indicators of hydrophytic vegetation and					
Sandy N	lucky Mineral (S1)		Vernal Pools	s (F9)			wetland hydrology must be present,					
Sandy G	Bleyed Matrix (S4)						unless o	listurbed or p	oroblematic.			
Restrictive	Layer (if present):											
Туре:												
Depth (in	ches):						Hydric Soi	Present?	Yes	No∕		
Remarks:							1					

No restrictive layer present in this soil pit. The soil is likely fill material, as the soil pit was excavated on top of an earthen berm feature. The soils in the soil pit do not meet any indicators for hydric soil. Therefore, hydric soil is absent from this sampling point.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required	Secondary Indicators (2 or more required)	
Surface Water (A1)	Water Marks (B1) (Riverine)	
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Roots (C3) Dry-Season Water Table (C2)	
Drift Deposits (B3) (Nonriverine)	Crayfish Burrows (C8)	
Surface Soil Cracks (B6)	(C6) Saturation Visible on Aerial Imagery (C9)	
Inundation Visible on Aerial Imagery (B	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes	No _ ✓ Depth (inches):	
Water Table Present? Yes	No 🧹 Depth (inches):	
Saturation Present? Yes (includes capillary fringe)	No _ ✓ _ Depth (inches): V	Vetland Hydrology Present? Yes No _✓
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspectior	ns), if available:
Remarks:		

No wetland hydrology indicators were observed within this sampling point. Therefore, wetland hydrology is absent from this sampling point.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yuba (County		Sampling Date:	3/30/2	023
Applicant/Owner: <u>County of Yuba</u>		State:	CA	Sampling Point:	3	
Investigator(s): Mario Mayo, Joseph Huang	Section, Township, I	Range: <u>Township</u>	16 North	n, Range 3 East		
Landform (hillslope, terrace, etc.): Toe of slope	Local relief (concav	e, convex, none): <u>(</u>	concave	Slop	e (%):	10
Subregion (LRR): Mediterranean California Lat: 39	.1980	Long: -121.5	311	Datum	n:	
Soil Map Unit Name: San Joaquin Loam, 0 to 1 Percent Slopes, C	Occasionally Flood	ed NW	I classifica	tion: Arid West		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No	o (If no, ex	olain in Re	marks.)		
Are Vegetation, Soil, or Hydrology significantly	disturbed? Ar	re "Normal Circums	tances" pr	esent?Yes 🖌	No	
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If	needed, explain ar	ny answers	in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing	sampling poin	t locations, tra	nsects,	important fea	atures,	etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ No Yes _ ✔ No Yes _ ✔ No	Is the Sampled Area within a Wetland?	Yes _ ✓ No
Remarks:			

Sampling Point 3 was taken within Unnamed Drainage 1 at the OHWM.

VEGETATION – Use scientific names of plants.

22.20	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30x30</u>)	% Cover	Species? Status	Number of Dominant Species
1		·	That Are OBL, FACW, or FAC: (A)
2		· ·	Total Number of Dominant
3			Species Across All Strata: (B)
4		·	Percent of Dominant Species
	0	= Total Cover	That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 5x5)			
1			Prevalence Index worksheet:
2			Total % Cover of:Multiply by:
3		·	OBL species <u>8</u> x 1 = <u>8</u>
4			FACW species x 2 =
5		·	FAC species x 3 =
	0	= Total Cover	FACU species <u>2</u> x 4 = <u>8</u>
Herb Stratum (Plot size: 3x3)			UPL species <u>1</u> x 5 = <u>5</u>
1. broadleaf cattail (Typha latifolia)	8	Y OBL	Column Totals: (A) (B)
2. burmuda grass (Cynodon dactylon)	2	N FACU	
3. ripgut brome (Bromus diandrus)	1	<u> </u>	Prevalence Index = $B/A = 1.90$
4			Hydrophytic Vegetation Indicators:
5.			✓ Dominance Test is >50%
6.			✓ Prevalence Index is ≤3.0 ¹
7			Morphological Adaptations ¹ (Provide supporting
8			data in Remarks or on a separate sheet)
0			Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 3x3)			
1			¹ Indicators of hydric soil and wetland hydrology must
2			be present, unless disturbed or problematic.
		= Total Cover	Hydrophytic
			Vegetation
% Bare Ground in Herb Stratum <u>89</u> % Cove	r of Biotic C	crust	Present? Yes <u>√</u> No
Remarks:			

Approximately 15 percent of the Bare Ground stratum is covered with dead Bermuda grass and cattails. Vegetation within this sampling point meets the indicators for hydrophytic vegetation. Therefore, there is hydrophytic vegetation present within this sampling point.

SOIL

Profile Desc	cription: (Describe	to the de	epth needed to docu	ment the	indicator	or confirm	m the absence of in	dicators.)
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u>0-9 in</u>	<u>10 YR 4/2</u>	100	<u></u>				silty clay	
<u>9-12 in</u>	10 YR 4/2	97	2.5 YR 4/8	3	<u> </u>	Μ	silty clay	
							· ·	
			·				·	
							· ·	
¹ Type: C=C	oncentration, D=Dep	bletion, RN	/=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	rains. ² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to a	II LRRs, unless othe	rwise not	ed.)		Indicators for P	roblematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	ox (S5)			1 cm Muck ((A9) (LRR C)
Histic Ep	pipedon (A2)		Stripped Ma	atrix (S6)			2 cm Muck ((A10) (LRR B)
Black Hi	stic (A3)		Loamy Muc	ky Minera	al (F1)		Reduced Ve	ertic (F18)
Hydroge	en Sulfide (A4)		Loamy Gle	yed Matrix	(F2)		Red Parent	Material (TF2)
Stratified	d Layers (A5) (LRR	C)	✓ Depleted M	atrix (F3)			Other (Expla	ain in Remarks)
1 cm Mu	ıck (A9) (LRR D)		Redox Darl	surface	(F6)			
Depleted	d Below Dark Surfac	e (A11)	Depleted D	ark Surfac	ce (F7)			
Thick Da	ark Surface (A12)		Redox Dep	ressions (F8)		³ Indicators of hyd	drophytic vegetation and
Sandy M	lucky Mineral (S1)		Vernal Poo	ls (F9)			wetland hydro	logy must be present,
Sandy G	Bleyed Matrix (S4)						unless disturb	ed or problematic.
Restrictive	Layer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil Pres	ent? Yes _ ✓ No
Remarks:							1	

Dense root layer was observed in the upper inches of the soil pit. A depleted matrix was observed within this soil pit. Therefore, there is hydric soil within this sampling point.

HYDROLOGY

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)					
✓ Surface Water (A1)	Water Marks (B1) (Riverine)						
_ High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)					
✓ Saturation (A3)	Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)					
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)					
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Livir	ng Roots (C3) Dry-Season Water Table (C2)					
Drift Deposits (B3) (Nonriverine)	Crayfish Burrows (C8)						
Surface Soil Cracks (B6)	Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6)						
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)					
Field Observations:							
Surface Water Present? Yes <u>✓</u> No_	Depth (inches):						
Water Table Present? Yes <u>✓</u> No _	Depth (inches): <u>4-12</u>						
Saturation Present? Yes <u>√</u> No _ (includes capillary fringe)	Wetland Hydrology Present? Yes _ ✓ No						
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous inspec	tions), if available:					
Remarks:							

Surface water, a high water table, and saturation were observed within this sampling point. Therefore, there is wetland hydrology present within this sampling point.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yub	a County		Sampling Date:	3/23/2	2023
Applicant/Owner: County of Yuba		State:	CA	Sampling Point:	4	
Investigator(s): Mario Mayo, Joseph Huang	Section, Townshi	p, Range: <u>Township</u>	0 16 Nor	th, Range 3 East		
Landform (hillslope, terrace, etc.): Top of bank	Local relief (conc	ave, convex, none):	concave	Slop	be (%):	2
Subregion (LRR): Mediterranean California Lat: 39	9.1980	Long: -121.5	811	Datur	n:	
Soil Map Unit Name: San Joaquin Loam, 0 to 1 Percent Slopes,	Occasionally Floo	oded NV	/I classific	ation: <u>Arid West</u>		
Are climatic / hydrologic conditions on the site typical for this time of y	ear?Yes 🖌	No (If no, ex	plain in R	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Normal Circums	stances" p	oresent? Yes 🖌	No	
Are Vegetation, Soil, or Hydrology naturally p	oblematic?	(If needed, explain a	ny answe	rs in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>✓</u> No <u>✓</u> No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

Sampling Point 4 was taken at top of bank on Unnamed Drainage 1 directly above Sampling Point 3. Adjacent to Ellis Road.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30x30</u>) 1.	<u>% Cover</u>	Species?	Status	Number of Dominant Species
2				
3.	- <u></u>			Total Number of Dominant Species Across All Strata: 1 (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 5x5)	0	_ = Total Co	ver	That Are OBL, FACW, or FAC:0% (A/B)
1				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species x 1 =
4.				FACW species x 2 =
5.				FAC species x 3 =
	0	= Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size: 3x3)				UPL species x 5 =
1. sow thistle (Sonchus oleraceus)	1	<u>N</u>	UPL	Column Totals: (A) (B)
ripgut brome (Bromus diandrus)	35	Y	UPL	
3. wild radish (Raphanus raphanistrum)	8	<u> N</u>	UPL	Prevalence Index = B/A =
4. cutleaf geranium (Geranium dissectum)	2	<u> N</u>	UPL	Hydrophytic Vegetation Indicators:
5				Dominance Test is >50%
6				Prevalence Index is $≤3.0^1$
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
o				Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 3x3)	40		ver	
1.				¹ Indicators of hydric soil and wetland hydrology must
2.				be present, unless disturbed or problematic.
	0	= Total Co	ver	Hydrophytic
% Bare Ground in Herb Stratum <u>54</u> % Cove	r of Biotic C	rust		Vegetation Present? Yes No
Remarks:				

The vegetation within the sampling point includes upland plants that do not meet the indicators for hydrophytic vegetation. Therefore, hydrophytic vegetation is absent from this sampling point.

Profile Des	cription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirr	n the absence	e of indicators.)
Depth	Matrix		Redo	x Features	5			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u>0-8 in</u>	<u>10 YR 4/2</u>	100					clay	gravel in soil from the roadway
		· ·						
		· ·						
		· ·						
		· ·						
¹ Type: $C=C$	oncentration D=Den	letion RM=	Reduced Matrix CS	S=Covered	l or Coate	d Sand G	rains ² Lo	cation: PI =Pore Lining M=Matrix
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	ed.)		Indicators	of or Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Red	ox (S5)			1 cm I	Muck (A9) (LRR C)
Histic E	oipedon (A2)		Stripped Ma	atrix (S6)			2 cm I	Muck (A10) (LRR B)
Black H	stic (A3)		Loamy Muc	ky Minera	l (F1)		Reduc	ced Vertic (F18)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)		Red P	Parent Material (TF2)
Stratified	d Layers (A5) (LRR (C)	Depleted M	atrix (F3)			Other	(Explain in Remarks)
1 cm Mu	ıck (A9) (LRR D)		Redox Dark	Surface (F6)			
Deplete	d Below Dark Surfac	e (A11)	Depleted Da	ark Surfac	e (F7)			
Thick Da	ark Surface (A12)		Redox Dep	ressions (I	-8)		³ Indicators	of hydrophytic vegetation and
Sandy N	lucky Mineral (S1)		Vernal Pool	s (F9)			wetland	hydrology must be present,
Sandy G	Bleyed Matrix (S4)						unless d	listurbed or problematic.
Restrictive	Layer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil	Present? Yes No _✓
Remarks:								

This sampling point was taken on a compact dirt and gravel roadway. Soils in this sampling point did not meet any hydric soil indicators and are likely fill material. Therefore, hydric soil is absent from this sampling point.

HYDROLOGY

Wetland Hydrology Indicato	ors:				
Primary Indicators (minimum	of one required;	Secondary Indicators (2 or more required)			
Surface Water (A1) Salt Crust (B11)					Water Marks (B1) (Riverine)
High Water Table (A2)			Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)
Saturation (A3)			Aquatic Invertebrates (B13)		Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonri	verine)		Hydrogen Sulfide Odor (C1)		Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	erine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)			
Drift Deposits (B3) (Nonr	Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)				Crayfish Burrows (C8)
Surface Soil Cracks (B6)	Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6)				Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)			Shallow Aquitard (D3)		
Water-Stained Leaves (B	Water-Stained Leaves (B9) Other (Explain in Remarks)			FAC-Neutral Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	o_ √	Depth (inches):		
Water Table Present?	Yes No	o_ √	Depth (inches):		
Saturation Present? Yes No _ ✓ Depth (inches): Wetland (includes capillary fringe)				Wetland Hyd	drology Present? Yes No _✓
Describe Recorded Data (stre	am gauge, mon	itoring	well, aerial photos, previous inspec	tions), if availa	ble:
Remarks:					
	. in diantana			استحصر الم	Therefore wetlend budgeless is

No wetland hydrology indicators were observed within this sampling point. Therefore, wetland hydrology is absent from this sampling point.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yub	a County		Sampling Date:	3/23/2	.023
Applicant/Owner: <u>County of Yuba</u>		State:	CA	Sampling Point:	5	
Investigator(s): Mario Mayo, Joseph Huang	Section, Township	o, Range: <u>Township</u>	16 Nort	h, Range 3 East		
Landform (hillslope, terrace, etc.): Terrace	Local relief (conc	ave, convex, none): <u>(</u>	concave	Slop	be (%):	5
Subregion (LRR): Mediterranean California Lat: 39	.1980	Long: -121.5	811	Datur	n:	
Soil Map Unit Name: Trainer Loam, 0 to 1 Percent Slopes, Occa	sionally Flooded	NW	I classific	ation: Arid West		
Are climatic / hydrologic conditions on the site typical for this time of ye	ear?Yes 🖌	No (If no, ex	plain in R	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	/ disturbed?	Are "Normal Circums	tances" p	resent?Yes 🖌	No	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain a	ny answei	rs in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes _ ✓	No
Remarks [.]				

Sampling Point 5 was taken within Simmerly Slough below the OHWM. Dense coverage of dead and emerging cattail was observed.

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30x30</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2			·	Total Number of Dominant
3			·	Species Across All Strata: <u>2</u> (B)
4			·	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 5x5)	0	_ = Total Co	ver	That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1.				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
3.				OBL species 5 $x 1 = 5$
4				FACW species $3 x 2 = 6$
5				FAC species $2 x 3 = 6$
	0	= Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size: 3x3)				UPL species 3 x 5 = 15
1. broadleaf cattail (Typha latifolia)	5	Y	OBL	Column Totals: 13 (A) 32 (B)
2. <u>curly dock (Rumex crispus)</u>	2	N	FAC	、,、,
3. <u>common knotweed (Polygonum plebeium)</u>	3	Y	FACW	Prevalence Index = B/A =2.46
4. ripgut brome (Bromus diandrus)	2	N	UPL	Hydrophytic Vegetation Indicators:
5. wild radish (Raphanus raphanistrum)	1	<u>N</u>	UPL	✓ Dominance Test is >50%
6				\checkmark Prevalence Index is $\leq 3.0^1$
7				Morphological Adaptations ¹ (Provide supporting
8				Displanatia Lludraphytic Vegetation ¹ (Evaluin)
	14	= Total Co	ver	
<u>Woody Vine Stratum</u> (Plot size: <u>3x3</u>)				¹ Indiastors of hydric soil and watland hydrology must
1				be present, unless disturbed or problematic.
2		Tatal Oa		Hudron hutio
		= 10tai Co	ver	Vegetation
% Bare Ground in Herb Stratum <u>86</u> % Cover	of Biotic C	rust		Present? Yes <u>√</u> No
Remarks:				

There was approximately 25% coverage of dead cattail within this sampling point, including 20% dead and 5% alive/emerging. Vegetation within this sampling point meets indicators for hydrophytic vegetation; therefore, hydrophytic vegetation is present within this sampling point.

Profile Desc	ription: (Describe	to the de	pth needed to docu	nent the	indicator	or confir	m the absence o	of indicators.)
Depth	Matrix		Redo	x Feature	es		_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u>0-10 in</u>	<u>10 YR 3/2</u>	80	7.5 YR 4/4	8	<u> </u>	Μ	clay	
			<u>5 YR 3/1</u>	12	С	М		
10-16 in	7.5 YR 4/1	100					sandy clay	
		_						
	-							
·								
			·					
¹ Type: C=Co	oncentration, D=Dep	pletion, RN	1=Reduced Matrix, CS	S=Covere	ed or Coate	ed Sand G	Brains. ² Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	cable to a	I LRRs, unless othe	rwise no	ted.)		Indicators for	or Problematic Hydric Soils":
Histosol	(A1)		Sandy Red	ox (S5)			1 cm Mu	uck (A9) (LRR C)
Histic Ep	oipedon (A2)		Stripped Ma	atrix (S6)			2 cm Mi	uck (A10) (LRR B)
Black Hi	stic (A3)		Loamy Muc	ky Miner	al (F1)		Reduce	d Vertic (F18)
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matriz	x (F2)		Red Par	rent Material (TF2)
Stratified	Layers (A5) (LRR	C)	Depleted M	atrix (F3)			Other (E	Explain in Remarks)
1 cm Mu	ick (A9) (LRR D)		Redox Dark	Surface	(F6)			
✓ Depleted	d Below Dark Surfac	e (A11)	Depleted D	ark Surfa	ce (F7)			
Thick Da	ark Surface (A12)		Redox Dep	ressions	(F8)		³ Indicators o	f hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Vernal Poo	s (F9)			wetland h	ydrology must be present,
Sandy G	Bleyed Matrix (S4)						unless dis	turbed or problematic.
Restrictive	_ayer (if present):							
Туре:								
Depth (in	ches):						Hydric Soil F	Present? Yes <u>√</u> No
Remarks:								
						<i>с</i> ,		

Organic matter was observed throughout the top layer in the form of decomposing leaf litter and roots. A depleted below dark surface was observed within this soil pit. Therefore, there is hydric soil present within this sampling point.

HYDROLOGY

Vetland Hydrology Indicators:								
Primary Indicators (minimum of one required; cl	neck all that apply)	Secondary Indicators (2 or more required)						
Surface Water (A1)	Salt Crust (B11)	✓ Water Marks (B1) (Riverine)						
High Water Table (A2)	Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)						
✓ Saturation (A3)	Aquatic Invertebrates (B13)	✓ Drift Deposits (B3) (Riverine)						
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)						
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living Roots (C3)	Dry-Season Water Table (C2)						
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish Burrows (C8)						
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)						
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neutral Test (D5)						
Field Observations:								
Surface Water Present? Yes No	✓ Depth (inches):							
Water Table Present? Yes No	✓ Depth (inches):							
Saturation Present? Yes <u>√</u> No _ (includes capillary fringe)	Depth (inches): <u>6-16 in</u> Wetland Hyd	rology Present? Yes No						
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspections), if availal	ble:						
Remarks:								
	development of the second state of the second	dia a set a transforma da se ta						

Saturation, water marks, and drift deposits were observed within this sampling point. Therefore, there is wetland hydrology present within this sampling point.

Project/Site: Ellis Road Bridge Replacement Project	City/County: Yuba County	Sampling Date: 3/30/2023				
Applicant/Owner: County of Yuba	State: CA	Sampling Point: 6				
Investigator(s): Mario Mayo, Joseph Huang	Section, Township, Range: Township 16 North, Range 3 East					
Landform (hillslope, terrace, etc.): Top of bank	Local relief (concave, convex, none): <u>concave</u>	Slope (%): 2				
Subregion (LRR): Mediterranean California Lat: 39	.1980 Long: -121.5811	Datum:				
Soil Map Unit Name: Trainer Loam, 0 to 1 Percent Slopes, Occa	sionally Flooded NWI classific	cation: Arid West				
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (If no, explain in R	Remarks.)				
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" p	oresent? Yes 🖌 No				
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answe	ers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects	s, important features, etc.				

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No <u>✓</u> No <u>✓</u> No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes	No	
Remarks:						
Sampling Point 6 was taken at the top of bank above Sampling Point 5.						

VEGETATION – Use scientific names of plants.

22.22	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30x30</u>) 1	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2 3	- <u> </u>			Total Number of Dominant Species Across All Strata:3(B)
4 Sapling/Shrub Stratum (Plot size: 5x5)	0	_= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1, 2	- <u> </u>			Prevalence Index worksheet: Total % Cover of:Multiply by:
3 4				OBL species x 1 = FACW species x 2 =
5	0	_= Total Co	ver	FAC species x 3 = FACU species x 4 =
<u>Herb Stratum</u> (Plot size: <u>3x3</u>) 1. <u>wild radish (Raphanus raphanistrum)</u>	20	Y	UPL	UPL species x 5 = Column Totals: (A)
2. <u>stickywilly (Galium aparine)</u>	18	<u> </u>	FACU	Drevelance Index D/A -
3. <u>blessed milk thistle (Silybum marianum)</u>		<u> </u>		Hudrophytic Vegetation Indicators:
4. <u>ripgut brome (Bromus diandrus)</u>	5	<u> N </u>	UPL	Dominance Test is >50%
5				Prevalence Index is $\leq 3.0^{1}$
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
0	46	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
<u>Woody Vine Stratum</u> (Plot size: <u>3x3</u>) 1. <u>Himalayan blackberry (Rubus armeniacus)</u> 2	5	<u> </u>	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	5	= Total Co	ver	Hydrophytic
% Bare Ground in Herb Stratum 47 % Cover of Biotic Crust				Vegetation Present? Yes No∕
Remarks:				

The vegetation within the sampling point includes upland plants that do not meet the indicators for hydrophytic vegetation. Therefore, hydrophytic vegetation is absent from this sampling point.

Profile Des	cription: (Describe	to the dept	h needed to docur	ment the i	ndicator	or confirn	n the absence of ir	ndicators.)	
Depth	Matrix		Redo	x Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-11 in	10 YR 3/2	100					silty clay		
							<u> </u>		
							·		
							·		
¹ Type: C=C	oncentration, D=Dep	letion, RM=I	Reduced Matrix, CS	S=Covered	or Coate	d Sand Gr	rains. ² Location	n: PL=Pore Lining, I	M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	rwise note	ed.)		Indicators for I	Problematic Hydric	Soils":
Histosol	(A1)		Sandy Red	ox (S5)			1 cm Muck	(A9) (LRR C)	
Histic E	pipedon (A2)		Stripped Matrix (S6)			2 cm Muck (A10) (LRR B)			
Black Hi	istic (A3)		Loamy Muc	ky Mineral	(F1)		Reduced V	′ertic (F18)	
Hydroge	en Sulfide (A4)		Loamy Gley	yed Matrix	(F2)		Red Parent	t Material (TF2)	
Stratified	d Layers (A5) (LRR (C)	Depleted Matrix (F3)				Other (Explain in Remarks)		
1 cm Mu	uck (A9) (LRR D)		Redox Dark	 Surface (I 	F6)				
Deplete	d Below Dark Surfac	e (A11)	Depleted Data	ark Surface	e (F7)				
Thick Da	ark Surface (A12)		Redox Depressions (F8)			³ Indicators of hydrophytic vegetation and			
Sandy Mucky Mineral (S1)			Vernal Pools (F9)			wetland hydrology must be present,			
Sandy Gleyed Matrix (S4)							unless distur	bed or problematic.	
Restrictive	Layer (if present):								
Туре:									
Depth (in	ches):						Hydric Soil Pres	sent? Yes	No∕
Remarks:									

Rock and gravel was observed within this soil pit. The soils in the soil pit do not meet any indicators for hydric soil. Therefore, hydric soil is absent from this sampling point.

HYDROLOGY

Wetland Hydrology Indicators:								
Primary Indicators (minimum	Secondary Indicators (2 or more required)							
Surface Water (A1)			Salt Crust (B11)		Water Marks (B1) (Riverine)			
High Water Table (A2)			Biotic Crust (B12)		Sediment Deposits (B2) (Riverine)			
Saturation (A3)			Aquatic Invertebrates (B13)		Drift Deposits (B3) (Riverine)			
Water Marks (B1) (Nonriverine)			Hydrogen Sulfide Odor (C1)		Drainage Patterns (B10)			
Sediment Deposits (B2) (Nonriverine)			Oxidized Rhizospheres along Livi	ng Roots (C3)	Dry-Season Water Table (C2)			
Drift Deposits (B3) (Nonriverine)			Presence of Reduced Iron (C4)		Crayfish Burrows (C8)			
Surface Soil Cracks (B6)			Recent Iron Reduction in Tilled Soils (C6)		Saturation Visible on Aerial Imagery (C9)			
Inundation Visible on Aerial Imagery (B7)			Thin Muck Surface (C7)		Shallow Aquitard (D3)			
Water-Stained Leaves (B	9)		Other (Explain in Remarks)		FAC-Neutral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No	✓	Depth (inches):					
Water Table Present?	Yes No	- ✓	Depth (inches):					
Saturation Present? Yes No _✓_ (includes capillary fringe)		_ Depth (inches): Wetland Hyd		drology Present? Yes No _✓				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Remarks:								

No wetland hydrology indicators were observed within this sampling point. Therefore, wetland hydrology is absent from this sampling point.





NICOLAUS #2

38.9261, -121.5447

42.979

12.216

Written by Jason Deters U.S. Army Corps of Engineers

- Daily Total
- 30-Day Rolling Total
 - 30-Year Normal Range

202	3 2	023 2023
ondition Value	Month Weight	Product
3	3	9
1	2	2
3	1	3
		Normal Conditions - 14

evation Δ	Weighted Δ	Days Normal	Days Antecedent
13.74	3.092	8017	88
4.921	1.437	3138	0
11.155	3.943	8	2
19.029	5.73	190	0

Plants Observed in the Biolog	Plants Observed in the Biological Study Area on March 23, 2023 and March 30, 2023 with Wetland Indicator Status								
Scientific Name	Common Name	Native Status	Wetland Indicator Status						
Ammannia coccinea	red ammannia	native	OBL						
Amsinckia intermedia	common fiddleneck	native	NL						
Avena barbata	slender oat	non-native, invasive	NL						
Avena fatua	wild oat	non-native, invasive	NL						
Baccharis pilularis	coyote bush	native	NL						
Brassica nigra	black mustard	non-native	NL						
Bromus diandrus	ripgut brome	non-native, invasive	NL						
Cirsium vulgare	bull thistle	non-native	FACU						
Cynodon dactylon	Bermuda grass	non-native, invasive	FACU						
Cyperus eragrostis	tall flatsedge	native	FACW						
Eleocharis palustris	common spikerush	native	OBL						
Elymus caput-medusae	medusa head	non-native, invasive	NL						
Erigeron canadensis	Canada horseweed	native	FACU						
Erodium brachycarpum	foothill filaree	non-native	NL						
Erodium cicutarium	redstem filaree	non-native	NL						
Galium aparine	common bedstraw	native	FACU						
Geranium dissectum	cut-leafed geranium	non-native, invasive	NL						
Hordeum murinum	wall barley	non-native	FACU						
Juncus xiphioides	iris leaved rush	native	OBL						
Lactuca serriola	prickly lettuce	non-native	FACU						
Lactuca virosa	bitter lettuce	non-native	NL						
Plantago lanceolata	English plantain	non-native, invasive	FAC						
Raphanus raphanistrum	wild radish	non-native	NL						
Rorippa palustris	bog yellow cress	native	OBL						
Rubus armeniacus	Himalayan blackberry	non-native, invasive	FAC						
Rumex crispus	curly dock	non-native	FAC						
Silybum marianum	blessed milkthistle	non-native, invasive	NL						
Sonchus oleraceus	common sow thistle	non-native	UPL						
Quercus lobata	valley oak	native	FACU						
Typha latifolia	broadleaf cattail	native	OBL						
Verbena bonariensis	purpletop vervain	non-native	FACW						

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount Units	Waters_Type	Latitude	Longitude	Local_Waterway
Simmerly Slough Wetlands	CALIFORNIA	PEM	RIVERINE	Area	0.51 ACRE	RPWWD	39.198528	-121.577944	
Simmerly Slough Non-Wetland Waters	CALIFORNIA	R2UB	RIVERINE	Area	0.47 ACRE	RPW	39.19852800	-121.577944	
Unnamed Drainage 1 Wetlands	CALIFORNIA	PEM	RIVERINE	Area	0.08 ACRE	RPWWN	39.19816200	-121.57671600	
Unnamed Drainage 1	CALIFORNIA	R2UB	RIVERINE	Area	0.06 ACRE	DELINEATE	39.19816200	-121.57671600	
Unnamed Drainage 2 Wetlands	CALIFORNIA	R2UB	RIVERINE	Area	0.07 ACRE	RPWWD	39.19789600	-121.57864700	
Unnamed Drainage 2 Non-Wetland Waters	CALIFORNIA	R2UB	RIVERINE	Area	0.17 ACRE	RPW	39.19789600	-121.57864700	
Unnamed Drainage 3	CALIFORNIA	R2UB	RIVERINE	Area	0.07 ACRE	DELINEATE	39.19810400	-121.57869000	

Appendix D. Archaeological Survey Report

ARCHAEOLOGICAL SURVEY REPORT FOR THE ELLIS ROAD OVER SIMMERLY SLOUGH BRIDGE REPLACEMENT PROJECT YUBA COUNTY, CALIFORNIA

BRLO 5916 (131)

Prepared by:

Michelle Campbell Michelle Campbell

Michelle Campbell Senior Environmental Planner/Archaeologist Dokken Engineering 110 Blue Ravine Road, Suite 200 Folsom, CA 95630

Reviewed and Approved by:

William CLarson

William Larson, MA PQS: Principal Investigator Prehistoric Archaeology Caltrans, District 3 703 B Street Marysville, CA 95901

Thalsena Bhattal

Thaleena Bhattal Acting Branch Chief, M-1 Caltrans, District 3 703 B Street Marysville, CA 95901

Yuba County Yuba City 7.5' Quadrangle Township 16N; Range 3E Mount Diablo Baseline and Meridian Acreage: APE 12.2 acres

July 2023

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APPENDICES

APPENDIX A: Record Search Results APPENDIX B: Native American Consultation

SUMMARY OF FINDINGS

Yuba County (County), in coordination with California Department of Transportation (Caltrans), propose to construct the Ellis Road over Simmerly Slough Bridge Replacement Project, located in Yuba County.

The existing 44-foot-long, 20-foot wide bridge was originally constructed in 1928 and consists of a three-span continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cfs of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by FEMA to be within the 100-year floodplain (special flood hazard Zone AE).

Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on the alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA).*

Efforts to identify potential archaeological resources in the Area of Potential Effects (APE) are detailed in this report and include background research, a search of site records and survey reports on file at the North Central Information Center (NCIC), efforts to coordinate with Native American representatives, and a pedestrian surface survey. The results from the NCIC identified no cultural resources within the APE and two cultural resources that are within a one-mile radius of the APE.

A pedestrian survey was conducted by Michelle Campbell, M.A. (Archaeologist) on January 27, 2023, for the purpose of identifying and recording archaeological resources. No archaeological resources were identified within or adjacent to the APE. Simmerly Slough Bridge (Bridge No. 16C-0075) is a Category 5 bridge listed in the Caltrans Bridge Inventory.

It is Caltrans policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work will stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

INTRODUCTION

This document reports efforts to identify potential archaeological resources within the Area of Potential Effects (APE) in support of the Ellis Road over Simmerly Slough Bridge Replacement Project (Project). The Project proponents are Yuba County (County), who is the CEQA lead agency and California Department of Transportation (Caltrans), who is acting as the lead agency for NEPA. Caltrans has been assigned environmental review and consultation responsibility under NEPA pursuant to 23 U.S.C. 327 effective May 27, 2022, which includes Section 106 responsibilities assigned as part of the NEPA Assignment MOU.

Key personnel involved with various stages of the project, including fieldwork and the production of this report include:

Michelle Campbell (M.A. Anthropology, California State University, Sacramento) acted as the Principal Investigator and produced this report. Ms. Campbell has 20 years of archaeological experience in California and the Great Basin region and meets the Secretary of the Interior's Professional Qualification Standards in Archaeology. Ms. Campbell also meets the Caltrans Professionally Qualified Staff (PQS) equivalent requirements for a Principal Investigator for prehistoric and historical archaeology, as outlined in Attachment 1 of the Caltrans Section 106 PA. She leads cultural resource projects as well as conducts field work, consultations, and produces reports for public works projects.

Amy Dunay (M.A. Archaeology, University of California, Los Angeles) conducted QA/QC on the report. Ms. Dunay has been practicing archaeology in California and the Great Basin region since 2002 and meets the Secretary of the Interior's Professional Qualification Standards in Archaeology. Ms. Dunay also meets the Caltrans PQS equivalent requirements for a Principal Investigator for prehistoric and historical archaeology, as outlined in Attachment 1 of the Caltrans Section 106 PA.

PROJECT LOCATION AND DESCRIPTION

Project Location

The Ellis Road over Simmerly Slough Bridge Replacement Project (Project) in Yuba County, California, is located approximately 2 miles north of Marysville. The existing three-span continuous concrete slab bridge (Bridge No. 16C-0075) crosses Simmerly Slough along Ellis Road. It is located within Sections 31 and 36 of Township 16 North and Range 3 East of the Mount Diablo Baseline and Meridian (see HPSR Attachment 1 Figure 1 and Figure 2).

Project Description

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road bridge. The project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California.

The existing 51-foot-long, 20-foot-wide bridge was originally constructed in 1928 and consists of a three-span continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cfs

of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by FEMA to be within the 100-year floodplain (special flood hazard Zone AE).

Purpose

The purpose of the project is to:

- Provide a structure that meets current design standards
- Improve the safety and operation of the facility

Need

The Ellis Road Bridge over Simmerly Slough was built in 1928 and is structurally deficient and scour critical. The scour sustained by the bridge has begun to undermine the structural integrity of the bridge, which has caused a 10-ton limit to be imposed on the structure. Improvements are needed to meet current design standards and to provide improved safety and operations of the facility.

Build Alternative

The bridge replacement will be a single span, cast-in-place slab bridge. The bridge will be 51 feet long and 24 feet wide. The design will meet current American Association of State Highway and Transportation Officials (AASHTO) standards and Yuba County requirements. The project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will be required to construct the new bridge. Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on the alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

No Build Alternative

Under the no-build alternative, the bridge will not be replaced. The bridge will remain structurally deficient and scour critical and public safety and access will not be improved.

This project is included in the 2023-2026 Metropolitan Transportation Improvement Program (MTIP). The project will be primarily funded through Federal Highway Bridge Program. As such, the project requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Area of Potential Effects

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the Project was established in consultation with William Larson, Caltrans PQS Principal Investigator in Prehistoric Archaeology, and Bomasur Banzon, Caltrans District Local Assistance Engineer, on February 16, 2023. The APE map is located as **Figure 3 in Attachment 1 of the HPSR**.

The horizontal APE was established as the area of direct and indirect and consists of an approximately 12-acre area. This includes all staging areas, temporary vehicle access, vegetation/tree removal, approach roadway work, bridge replacement, grading activities. The APE extends approximately 500 feet along Ellis Road from both sides of the existing bridge and approximately 300 feet east and west of the existing bridge and approximately.

The vertical APE consists of a maximum of 8 feet of depth from the existing ground surface to below ground surface (bgs) to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment work, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities.

SOURCES CONSULTED

Background research was conducted to identify previous studies and recorded cultural resources within, and adjacent to, the APE. The background research consisted of a record search, literature and map review, and consultation with the Native American Heritage Commission (NAHC) and Native American groups.

Records Search

Dokken Engineering obtained a record search (File #YUB-22-27) for the APE and a one-mile radius surrounding the APE from the North Central Information Center (NCIC), California State University, Sacramento on October 3, 2022. The record search was conducted by personnel from the NCIC. The search examined the Office of Historic Preservatino (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and the California Inventory of Historical Resources.

The record search disclosed two NCIC resources within the one-mile record search boundary, none are located within the APE (**Table 1** and **Appendix A**).

Table 1. Freviously Recorded Resources within One-whe Radius					
Primary/Site Number	Description	Distance from APE			
P-58-001284	Western Pacific Railroad Spur	>0.5 mi W			
P-58-001372	UPRR Segment over 5th Street along the Marysville Ring Levee	>0.5 mi E			

Table 1: Previously Recorded Resources within One-Mile Radius

A total of three surveys have taken place within the one-mile radius and one within the APE, which resulted in an approximate 25 percent previous survey coverage (**Table 2**). Document citations returned by the records search can be found under **Appendix A**.

Report# YU-	Title	Author	Within APE	Year
000927	Negative Archaeological Survey Report for a Project Study Report for Four Intersection Turn Lanes and Two Passing Lanes on State Route 70 in Yuba County, 03-YUB-70, PM 17.41/25.49.	Janis K. Offerman	No	1989
008370	Positive Archaeological Survey Report, Marysville to Oroville Freeway Project, Yuba and Butte Counties & Historic Properties Survey Report For The Marysville to Oroville Freeway Project, Yuba and Butte Counties, California.	Scott Williams, Amy Huberland, Lissa Westwood, Jarith Kraft, Denise Thomas, Erin Dwyer, and Andrew Hope	Yes	2002
008370B	Historic Properties Survey Report for the Marysville to Oroville Freeway Project, Yuba and Buttte Counties, California	Scott A. Williams and Andrew Hope	Yes	2002
008370C	Historic Architecture Survey Report for the Marysville- Oroville Freeway Project (Marysville Bypass) in Yuba and Butte Counties		Yes	2002

Table 2. Previous Investigations within the APE

Report# YU-	Title	Author	Within APE	Year
012418	Yuba County PTC Sites	Mark Salopek and Mary Cargill	No	2015
012551	Final Archaeological Survey Report, Yub-70 Road Widening Project, Yuba County, California	Kim Tremaine and Elizabeth Fernandez	No	2017

A review of historic General Land Office (GLO) maps (1960 and 1867), USGS topographic maps (1888, 1891, 1894, and 1895 30-minute Marysville quadrangle, 1911, 1952, 1973, 2012, 2015, and 2018 7.5-minute Yuba City quadrangle), and aerials (1937, 1947,1952, 1962, 1973, 1977, 1984, 1999, 2006, 2009, 2012, and 2016) was conducted. The GLO maps depict the Project within the Honcut Rancho, a designation which remains through the 1983 topo map. Features shown in the historic topographic maps include the Southern and Western Pacific Railroad, Ellis Road, and Simmerly Slough. The Southern Pacific Railroad, located east of the APE, is present in the 1888 topographic map and is last shown in 1973 topographic map. Current records indicate that the Southern Pacific Railroad track is abandoned. Rails and ties associated with this track have been removed. The Western Pacific Railroad, located west of the APE, is shown in the 1911 map and is present in the most recent 2018 topographic map. Ellis Road is present in the 1952 map and its alignment has not been altered. Simmerly Slough is present in all topographic maps and its alignment in the Project vicinity has been altered beginning in the 1940s.

A review of the readily available historical aerial photographs indicates that land use within the APE, and that of surrounding properties, has been rural and used for agricultural purposes for multiple decades. In general, development in the area is minimal up through the current day.

Native American Consultation

On November 2, 2022, Dokken Engineering sent a letter and a map depicting the Project vicinity to the NAHC in West Sacramento, asking the commission to review the Sacred Land Files (SLF) for any Native American cultural resources that might be affected by the Project (**see ASR Appendix B**). The request to the NAHC seeks to identify any Native American cultural resources within or adjacent to the APE. A list of Native American individuals who might have information or concerns about the Project was also requested. On December 8, 2022, Pricilla Torres-Fuentes, Cultural Resource Analyst, informed Dokken Engineering via email that a review of the SLF failed to indicate the presence of Native American cultural resources in the Project vicinity (**ASR Appendix B**).

On February 3, 2023, initial consultation letters were sent to the Native American individuals on the list provided by the NAHC. The letters provided a summary of the Project and requested information regarding comments or concerns the Native American community might have about the Project (**see Appendix B of the ASR**). For those individuals that did not reply to the letter, follow-up emails (or phone calls when no email was available) were sent on March 30, 2023 and May 9, 2023. The following summarizes the consultation efforts:

- Butte Tribal Council, Dennis Ramirez. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Glenda Nelson, Chairperson. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. On May 15, 2023, a response was received from Nelson Smith, THPO, stating that although the project is within the aboriginal territory of the Tribe,

the Tribe's files did not locate any known resources within the project boundary. The Tribe also requested to be consulted in case of late discovery.

- *Maidu Nation.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Mooretown Rancheria of Maidu Indians, Gary Archuleta.* On February 21, 2023 a letter from Matthew Hatcher, THPO, was received stating that the Tribe did not have any knowledge of resources within the project and requested notification in case of project change or late discovery.
- *Nevada City Rancheria Nisenan Tribe, Shelly Covert, Tribal Secretary.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- Nevada City Rancheria Nisenan Tribe, Richard Johnson, Chairman. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Nevada City Rancheria Nisenan Tribe, Saxon Thomas.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Pakan'yani Maidu of Strawberry Valley Rancheria, Tina Goodwin, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- Strawberry Valley Rancheria, Cathy Bishop, Chairperson. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Grayson Cooney, Cultural Director.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Don Ryberg, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- United Auburn Indian Community of the Auburn Rancheria, Gene Whitehouse, *Chairperson.* No response to initial letter submitted via the UAIC website consultation page. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Wilton Rancheria, Jesus Tarango, Chairperson.* No response to initial letter. A followup email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Wilton Rancheria, Steven Hutchason, THPO.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Wilton Rancheria, Dahlton Brown, Director of Administration.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.

A complete record of consultation is included under **Appendix B** of this ASR, Native American Consultation.

BACKGROUND

Brief sketches of the natural environment, ethnographic information, prehistoric record, and the historic era are included to provide a general framework for the investigation. The natural context review incudes short treatments of the geology and geomorphology and thumb-nail sketches of the local flora and fauna. The cultural context involves short synopses of prehistoric, ethnographic, and historic contexts.

Placement of the current investigation within an appropriate setting requires review of pertinent variables related to the natural and cultural context. Understanding these will aid in defining which behavioral activities likely took place, what sorts of material record might remain, and what kinds of post-depositional processes can be expected to have influenced the project context.

Environment

Geology and Morphology

According to the Geologic Map of the Chico Quadrangle (Division of Mines and Geology 1992), the APE consists of Pleistocene age alluvium deposits from the Modesto and Riverbank Formations.

The topography within the APE is relative flat, with slopes ranging from 0 to 1 percent and an elevation ranging from approximately 30 to 130 feet above mean sea level. The APE is located within the Jack Slough watershed. Simmerly Slough is the only water feature within the Project area. The soils are comprised of San Joaquin loam (0 to 1 percent slopes) and Trainer loam (0 to 1 percent slopes) (NRCS 2022).

Climate

Modern climate in Yuba County climate is characterized by hot, dry summers and cool, rainy winters. Summer conditions in Yuba County are typically characterized by high temperatures and low humidity, with prevailing winds from the south. Summer temperatures average approximately 90°F during the day and 50°F at night. Winter conditions in Yuba County are characterized by occasional rainstorms interspersed with stagnant and foggy weather. Winter temperatures average in the low 50s (°F), and nighttime temperatures average in the upper 30s. Rainfall occurs mainly from late October to early May, averaging 17.2 inches per year, but this varies significantly from year to year (Yuba County, 2011).

Vegetation

Yuba County contains many different habitat types capable of supporting a wide variety of species and wildlife and plant communities. Habitat ranges from highly disturbed areas, such as those in agricultural production adjacent to urban development, to high- quality native habitats that have experienced little disturbance, such as in the remote mountainous areas of Yuba County. The Project is located in an area used for agricultural production. Vegetation communities within the Project area include active agriculture, agricultural ditches, ruderal vegetation, riparian, emergent wetland, stream channel, and barren areas.

Active agriculture within the Project area includes actively farmed fields. These areas are characterized by rice fields with very little or no native vegetation. Irrigation and drainage channels consist of artificial channels built to convey irrigation water to agriculture fields or drainage water from agriculture fields. Channels are typically at least partially cleared of vegetation and scraped

on a regular basis to preserve water capacity. Ruderal vegetation communities are characterized by early successional annual vegetation, typically invasive grasses and forbs. This habitat is characterized by a lack of vegetation or dominated by non-native plant species. Stands of nearly mono-specific Himalayan blackberry (*Rubus armeniacus*) are found along several of the irrigation and drainage channels. Riparian woodland is found within the project area along the Simmerly Slough channel. This riparian corridor is partially vegetated, with the canopy dominated by willows (*Salix spp.*). The understory is composed of mostly native shrubs and herbs. Emergent wetland habitats occur on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. Vegetation generally consists of perennial monocots. Barren habitat is defined by the absence of vegetation and contains rock, gravel, soil, or pavement. Barren areas within the Project area are categorized as the roadway.

Subsurface Sensitivity

Based on a review of historic mapping, geographic features, previously recorded archaeological resources, and past survey reports, overall archaeological site sensitivity in the project vicinity is moderate. This area would have been a targeted location of prehistoric activity along the waterways of the Project vicinity. Within the APE however, archaeological site sensitivity is considered low due to the extensive disturbance of agriculture throughout the APE, lack of previously recorded archaeological resources within the APE, and negative pedestrian survey results. Bridge and road construction and maintenance as well as channel realignment activities likely impacted soils within the APE and maintains the potential to encounter archaeological resources as *low*.

Current knowledge of the geomorphic history of the region provides a strong basis for assessing the potential for discovering buried archaeological sites. Although the APE is located within and adjacent to Simmerly Slough, the presence of Pleistocene aged soils indicated the APE lies within an area determined to be of *low* sensitivity for buried deposits. Project activities, furthermore, will occur primarily within the previously disturbed bridge and roadway construction area. For this reason, the potential for the Project to impact intact buried cultural resource deposits in the APE is *low*.

Ethnography

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber (1925, 1936), and others, recognized the uniqueness of California Native Americans and classified them as belonging to the California culture area. Kroeber (1925, 1936) further subdivided California into four subculture areas, Northwestern, Northeastern, Southern, and Central. The Central area encompasses the current Project area and includes the Nisenan or Southern Maidu and Northern Sierra Miwok. (Yuba County, 2011)

Nisenan are members of the Maiduan Family of the Penutian stock and are generally divided into three groups based on dialect differences: the Northern Hill Nisenan in the Yuba River drainage; the Valley Nisenan along the Sacramento River, and the Southern Hill Nisenan along the American River (Kroeber 1925; Beals 1933); (Wilson and Towne 1978). Northern Sierra Miwok are members of the Utian Family of the Penutian Stock, and speak one of the seven Miwokan languages. All of the Miwokan languages are closely related.

The basic social and economic group of the Nisenan was the family or household unit, with the nuclear and/or extended family forming a corporate unit. Among the Nisenan these groups combined to form tribelets, which were their largest sociopolitical unit (Wilson and Towne 1978). Each tribelet had a chief or headman who exercised political control over all villages within it.

Tribelet populations of Valley Nisenan were as large as 500 persons living in permanent villages that were usually located on raised areas to avoid flooding (Wilson and Towne 1982). Beals (1933) estimates that Nisenan tribelet territory averaged approximately 100 square miles. Within these areas, the Nisenan practiced seasonal transhumance, moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting ecological zones that are in relatively close proximity to each other. The Valley Nisenan, however, generally did not range beyond the valley and lower foothills.

Valley Nisenan used a variety of flaked and ground stone tools (Wilson and Towne 1978). Obsidian was a highly valued material for tool manufacture, and was usually imported. Other tools and weapons were made of bone and wood, including stirring sticks, mush paddles, pipes, and hide preparation equipment. Cordage was made from plant material and used to construct fishing nets and braided and twined tumplines. Valley Nisenan also fostered trading relationships with surrounding groups for commodities such as salt, marine shells and basketry.

Fishing formed a large component of Valley Nisenan subsistence activity. Consequently, they used an extensive assemblage of fishing-related implements and facilities including: spears; cordage lines with bone fishhooks; harpoons with detachable points; dams for stream diversion; nets of cordage and basketry; weirs; and an array of fish traps (Wilson and Towne 1982). Tule lashed log and bark rafts were also used to acquire resources and facilitate travel. Other specialized food processing and cooking techniques primarily included grinding and leaching of ground acorn and buckeye meal. Acorns, buckeyes, pine nuts, seeds, berries, and meat were routinely processed using bedrock mortars and pestles. A soaproot brush was used to sweep meal into mortar cups and collect flour. Fist-sized, heated stones were used to cook and/or warm liquid-based foods such as acorn gruel. Whole acorns were stored in granaries. In addition to these plant resources, other plants may have been managed, primarily by controlled burning, for both food (e.g., edible grasses and seed producing plants) and the manufacture of baskets and other useful equipment (Blackburn and Anderson 1993).

Detailed information regarding these groups is presented in several sources. These sources include: Powers' (1877) Tribes of California; Kroeber's (1925) Handbook of the Indians of California, which forms the core of the ethnographic data for Nisenan and Northern Sierra Miwok groups; Wilson and Towne's (1978:387-397) summary description of the Nisenan; Levy's (1978:398-413) summary description of the Sierra Miwok; Downs (1966) comprehensive description of Washoe lifeways; Littlejohn's (1928) Nisenan Geography; Faye's (1923) Notes on the Southern Maidu; Beals' (1933) Ethnology of the Nisenan; Kroeber's (1936) The Valley Nisenan; Ritter and Schulz (1972) on Nisenan ecology; and Barrett and Gifford's (1933) Miwok Material Culture.

Indigenous Peoples History

The earliest traces of the occupants of the Sierra Nevada foothills and the Central Valley belong to the Early Man period. This period is characterized by large spear points used to kill big game including mammoths and giant bison, large mammals which existed at the end of the last Ice Age approximately 10,000 years ago (Johnson 1967). Population was low and consisted of small mobile bands of people who left few traces of their passage through the Central Valley. (Fredrickson 1973)

Prehistoric human populations in Sutter and Yuba Counties within the Sacramento Valley have evolved considerably since archaeologists first proposed a sequence of cultural change in the region in the 1930s. Although research has established that prehistoric groups inhabited parts of California prior to 6,000 years ago, the Windmiller Pattern (roughly 3,000 BC – 500 BC) is the

earliest recognized cultural pattern for the Sacramento Valley, which is the portion of the California Central Valley that lies to the north of the San Joaquin-Sacramento Delta (Fredrickson 1973). Archaeological deposits from this period contain a variety of flaked and ground stone artifacts, baked clay, and shell artifacts, suggesting that populations from this period exploited a diverse resource base. (Heizer 1949; Ragir 1972)

The Berkeley Pattern (roughly 500 BC – AD 500) suggests a shift in subsistence practices and technology. Mortar and pestle use increase indicated the types of technological changes during this time. The switch to mortar and pestle indicates the acorn became a diet staple (Ragir 1972). The addition of acorns, which were more time-consuming to process, implies greater diet breadth than that observed during Windmiller times. (Ragir 1972)

Material remnants from the Augustine Pattern (roughly AD 500- AD 1880) indicate an intensification of resource exploitation, increased sedentism (i.e., a transition from nomadic to permanent, year-round settlement), territoriality, and social complexity (Fredrickson 1973). Technological innovations, such as the bow and arrow, occurred during this period (Fredrickson 1973). Artifacts from this period include flaked and ground stone artifacts, shell beads and pendants, and bone tools (Johnson 1976). Bedrock milling features also are present, either in association with permanent settlements or as a component of smaller task-oriented locations (Johnson 1976).

History

Development of Marysville

The closest major city to the APE is Marysville, located approximately 2.5 miles south of the APE. The following context is taken from the *Archaeological Survey Report for the 5th Street Bridge Replacement Project, Yuba City, California* (Dokken Engineering 2011).

Marysville is situated in Northern California in Yuba County, which is bordered by Plumas, Nevada, Sierra, Placer, Butte, and Sutter Counties. It is the largest city in Yuba. Yuba County and Yuba City get their names from the Yuban Native American tribe that lived on the banks of the Feather River (Sullivan, 1974). Marysville is at the western portion of the county, east of the Feather River and north of the Yuba River. The land was part of the original Mexican land grant given to John Sutter. Theodore Cordua leased the land from Sutter in 1842, intending to transform the land into a cattle ranch; he named the area New Mecklenburg. However, gold was discovered on several locations on the Yuba River in the summer of 1848, resulting in miners surging into the area. During the height of the Gold Rush, over 2,000 men were prospecting at this location. As a result of the large mining population, Yuba County was established in 1850 and originally included what are now Nevada and Sierra Counties (Clark 1970). During the gold rush, as hundreds of thousands of new immigrants flooded into California, hostilities between these new immigrants and the Native Americans rapidly accelerated (Jenkins 1948). The new immigrant miners, ranchers and farmers came to see the Native Americans as threats to their prosperity and security. In 1863, some 461 Native Americans, mostly Maidu, were force-marched 125 miles to the Round Valley Reservation during which many were killed or died. (Sutter County 2010; Yuba County 2011)

Throughout the gold rush era Cordua went into business with Charles Covillaud, to whom he later sold a portion of his land. Cordua sold his remaining land to Michael Nye and William Foster, who with Covillaud established Nye's Ranch (Ramey, 1936). The location of the ranch was ideal. It was located at the confluence of the Yuba and Feather Rivers, which were navigable by ship to and from Sacramento. During the Gold Rush, the ranch became a point of debarkation for

riverboats from San Francisco and Sacramento filled with miners on their way to the dig sites. The steamer the Linda began taking trips up the river in 1849; by the next year, the Linda and the Lawrence were taking trips between Marysville and Sacramento twice a week bearing both freight and passengers (Ramey, 1936). Anticipating that their land was in an ideal location on the path of the steamers and with the advent of mining operations nearby, Cordua and Covillaud commissioned surveyor Auguste LePlongeon to lay out a town on the site of Nye's Ranch in 1849 (Ellis, 1939). The town's layout was modeled on that of a European city; it had a broad street—what became E Street—running the length of the town, beginning at a plaza at the edge of the Yuba River, and numerous squares and parks. Covillaud named the new town after his wife Mary Murphy Covillaud, who was a surviving member of the Donner Party that had arrived in California in 1847.

Marysville was preferred over its sister city, Yuba City, located across the Feather River because it was also accessible from the Yuba River, whereas Yuba City was not. Yuba City, founded in 1908, possessed the larger population of the two for a time, but Marysville eventually outgrew its sister city due to the abundance of ships stopping on its side of the Feather River (Ellis, 1939).

Marysville prospered during the Gold Rush era, becoming one of the largest cities in California. Marysville became a center of mining, including quartz mining, and trade. The new city was ideally located along the routes taken by vessels traveling up the Yuba River from Sacramento and San Francisco towards the mines (Ramey, 1936). Four stage lines ran in and out of the city in 1850. Yuba County was founded in February of that year. It was incorporated as a city in February 1851. Advertisements began appearing in the Sacramento and San Francisco newspapers, inviting people to Marysville. Steam ships were making regular trips past Marysville and lots were being sold. Most of the people that settled in Marysville came to cater to the miners nearby. The city began to develop rapidly (Sullivan, 1974).

Despite Marysville's ideal location along the confluence of two rivers, it faced isolation from trade when hydraulic mining filled the Feather River with debris and made navigation impossible during the dry season. This remained a problem until the coming of the railroad to Marysville (Gordon, 1988). This raising of the riverbeds also made Marysville vulnerable to flooding during winter storms and spring run-off causing the city to build a levee system. During the 1870s and 1880s, valuable farmland in Sutter County and the Gold mining settlements established in Yuba County were lost to the silting up of the rivers due to hydraulic gold mining in the Sierra (Clark 1970). Local farmers formed the Anti-Debris Association, and in 1884, they won a landmark suit halting the practice of hydraulic mining. After 1884, once land was cleared, river bottom land claimed and hydraulic mining stopped, agriculture developed rapidly (Clark 1970). Several famous agricultural varieties were developed in Sutter County, including Proper Wheat 1868, which opened up the wheat exporting market in Sutter County; the Thompson Seedless Grape in 1870s, which led to a thriving raisin industry; and the Phillips Cling Peach in the 1880s, which paved the way for a surge in the canning industry, with three local canneries established. (Sutter County 2003; Yuba County 1994). With the raising riverbeds and the levee system construction, Marysville's growth has been limited. The population has not increased much since the days of the Gold Rush (Yuba County, 1994).

The first railroad to provide access through Marysville was the Central Pacific Railroad, which arrived in 1864. This railroad provided north-south access across the Yuba River along A Street in Marysville. Transportation within the urban center of Marysville advanced as well. In 1889, David E. Knight founded the Marysville and Yuba City Railroad providing 3.2 miles of horse-drawn street car access throughout the Cities. By 1890, the Northern California Railroad constructed an additional route through Marysville providing east-west access across the Feather River to Yuba

City. This route ran along 9th Street, through Washington Square and continued north along E Street. As the turn of the century approached, additional railroad routes were constructed including the Southern Pacific in 1887, the Northern Electric Railroad in 1906 (which took over the Marysville and Yuba City Railroad line), and Western Pacific in 1909 (Sanborn, 1885-1948).

Following the establishment of a strong railroad transit system throughout Marysville, industrial opportunities began to flourish. Agriculture became a prime industry within City. Citrus, grapes, peaches, pears, prunes, pomegranates, rice, beans, barley and wheat began to be produced on a commercial level and shipped by freight throughout the country. The most dominate industries in Marysville during the late 1800s and into the beginning of the 1900s consisted of the Aetna Steam Boiler Works, the Empire Foundry, the Union Lumber Company, the Buckeye Flour Mill of the Sperry Company, the Marysville Woolen Mill and the Marysville Winery.

Marysville continued to grow in the 1920s, in 1923 it had an estimated population of 6,643, and in 1927, Marysville had a population of approximately 7,450 residents. During this period major businesses within the city consisted of the Pacific Gas and Electric Company, Yuba Manufacturing Company, Marysville Brick Company, the National Ice and Storage Company, and four sand and gravel plants.

During the Great Depression the population of Marysville dropped considerably to 5,970 residents. Growth following the great depression was slow up until the end of World War II. In the 1950s following war, Marysville received an economic boost with the construction of the Beale Air Force Base. In 1958, the Air Force funded the construction of 570 homes to accommodate military families in the area. Today Marysville continues to be a strong agricultural producer in Yuba County.

Agriculture and Flood Control

The following is taken from the Yuba County General Plan Final EIR (AECOM 2011).

Agriculture and ranching became the primary industries of the Yuba County region during the early historic period. Regional ranching originated on the New Helvetia and Johnson's ranchos in the early 1840s. The Gold Rush of 1848 precipitated growth in agriculture and ranching as ranchers and farmers realized handsome returns from supplying food and other goods to local miners (Fryman 1996). Frequent floods, however, plagued the residents of the Yuba-Feather-Bear River floodplain and posed a significant threat to the viability of agricultural interests and further settlement of Yuba County.

Initial efforts at flood control were usually uncoordinated and consisted of small levees and drains constructed by individual landowners. These features proved insufficient to protect cultivated land. and much land east of the Feather River remained marshland that was unsuitable for agriculture (U.S. Geological Survey 1910, 1911). In 1861, the California Legislature created the State Board of Swampland Commissioners to affect reclamation of swamp and overflow lands. The State Board of Swampland Commissioners established 32 districts that attempted to enclose large areas prone to flooding with natural levees. Lack of cooperation among the landowners in the districts led to chronic financial crises. When the California Legislature terminated the State Board of Swampland Commissioners in 1866, responsibility for swamps and overflowed land fell to the individual counties. Many counties offered incentives to landowners for reclaiming agriculturally unproductive land. If a landowner could certify that he or she had spent at least 2 dollars per acre in reclamation, the county would refund the purchase price of the property to the owner. Speculators took advantage of this program and a period of opportunistic and often irrational levee building followed (McGowan 1961; Thompson 1958).

In response to the flood of 1907, citizens of Yuba County formed Reclamation District 784 (RD 784). At the time of its formation, RD 784 encompassed 22,762 acres of land, much of which was owned by the Farm Land Investment Company. RD 784 built substantial levee and drainage systems to restrain floodwaters from the Bear and Feather Rivers and incorporated levees built by the Farm Land Investment Company and other landowners.

In 1911, the California Legislature established the State of California Reclamation Board to exercise jurisdiction over reclamation districts and levee plans. That year, the state approved and began implementation of the Sacramento River Flood Control Project. The ambitious project included the construction of levees, weirs, and bypasses along the river to channel floodwaters away from population centers. Under the Sacramento River Flood Control Project, new reclamation districts were created and existing districts, such as RD 784, were placed under the jurisdiction of the Reclamation Board.

In 1920, RD 784 voters approved a plan to improve levees along the Yuba, Bear, and Feather Rivers and to improve drainage near Messick lake, Plumas Lake, and other backwater marshes along the Feather River. The U.S. Anny Corps of Engineers assisted RD 784 with the construction of a levee system at the eastern boundary of the district. Reclamation efforts in RD 784 promoted settlement and development of the land between Rio Oso and Marysville.

FIELD METHODS AND RESULTS

Methodology

On January 27, 2023, the entire APE was subjected to an intensive pedestrian survey under the guidance of the *Secretary of the Interiors Standard's for the Identification of Historic Properties* by Michelle Campbell. The pedestrian survey was conducted at roughly 5-meter transect intervals paralleling the roadway where conditions allowed. All APE field conditions were fully recorded in the field notes. Coverage varied in areas with vegetation coverage.

During the survey, exposed subsurface cuts, such as those within the slough, roadway cuts, and bank cuts were examined for indications of surface or subsurface cultural resources, soil color change, and/or staining that could indicate past human activity or buried deposits.

Results

The pedestrian survey did not identify any cultural resources with the APE. Inspection of open surfaces, visible cut slopes, and drainage cut banks during the field survey revealed no evidence of subsurface artifacts, features, or other indicators of past human use (such as soil change). While surface visibility varied in areas depending on density of vegetation, overall visibility was approximately 70 percent.
STUDY FINDINGS AND CONCLUSIONS

In an effort to identify archaeological resources that might be affected by the undertaking, a pedestrian survey, background research, and consultation with individuals and organizations were conducted. A record search conducted at the NCIC indicated that there were no previously recorded resources within the APE. No archaeological resources were identified within or adjacent to the APE. The existing Ellis Road over Simmerly Slough Bridge (Bridge No. 16C-0075) is a Category 5 bridge and is as not eligible for the National Register of Historic Places (**Appendix A**).

Additionally, the subsurface sensitivity was assessed through landform analysis and opportunistic visual inspection of exposed subsurface soils within the APE during the pedestrian survey. Although the APE location is within and adjacent to the Simmerly Slough and there is the presence of Holocene aged soils, the APE has been significantly altered from agricultural practices, channel realignment, and bridge construction. As Project activities will occur primarily within the previously disturbed bridge and roadway construction areas, the potential for the Project to impact intact buried cultural resource deposits in the APE is *low*.

At this time, no further archaeological study is required unless project plans change to include areas not previously included in the surveyed area or if additional information is received from other sources or special interest groups.

Unidentified Cultural Materials

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey would be needed if project limits are extended beyond the present survey limits.

Human Remains

Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

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APPENDIX A: Record Search Results California Historical Resources Information System



California State University, Sacramento 6000 J Street, Folsom Hall, Suite 2042 Sacramento, California 95819-6100 phone: (916) 278-6217 fax: (916) 278-5162 email: ncic@csus.edu

NCIC File No.: YUB-22-27

10/3/2022

Michelle Campbell Dokken Engineering 110 Blue Ravine Road, Suite 200 Folsom, CA 95630

Re: Ellis Road Bridge Replacement Project/2943

The North Central Information Center (NCIC) received your records search request for the project area referenced above, located on the Yuba City USGS 7.5' quad. The following reflects the results of the records search for the project area and a 1-mi radius.

As indicated on the data request form, the locations of resources and reports are provided in the following format: \Box custom GIS maps \boxtimes GIS data

•				
Recorded resources within project area:	None			
Recorded resources outside project area, within radius:	P-58-1284 P-58-1372			
Known reports within project area:	8370			
Known reports outside project area, within radius:	927 12418 12551			
Resource Database Printout (list):	\boxtimes enclosed \square not requested \square nothing listed/NA			
Resource Database Printout (details):	\Box enclosed \boxtimes not requested \Box nothing listed/NA			
Resource Digital Database Records:	\Box enclosed \boxtimes not requested \Box nothing listed/NA			
<u>Report Database Printout (list):</u>	\boxtimes enclosed \square not requested \square nothing listed/NA			
<u>Report Database Printout (details):</u>	\Box enclosed \boxtimes not requested \Box nothing listed/NA			
Report Digital Database Records:	\Box enclosed \boxtimes not requested \Box nothing listed/NA			
Resource Record Copies:	\boxtimes enclosed \square not requested \square nothing listed/NA			
Report Copies:	\Box enclosed \boxtimes not requested \Box nothing listed/NA			
Built Environment Resources Directory:	\boxtimes enclosed \square not requested \square nothing listed/NA			
Archaeological Determinations of Eligibility:	\boxtimes enclosed \square not requested \square nothing listed/NA			
CA Inventory of Historic Resources (1976):	\Box enclosed \Box not requested \boxtimes nothing listed/NA			

<u>Caltrans Bridge Survey:</u>	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
Ethnographic Information:	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
Historical Literature:	\boxtimes enclosed	\Box not requested	\Box nothing listed/NA
Historical Maps:	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
Local Inventories:	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
GLO and/or Rancho Plat Maps:	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
Shipwreck Inventory:	\Box enclosed	\boxtimes not requested	\Box nothing listed/NA
<u>Soil Survey Maps:</u>	\Box enclosed	\boxtimes not requested	□ nothing listed/NA

<u>Please forward a copy of any resulting reports and resource records from this project to NCIC as soon as possible. The lead agency/authority and cultural resources consultant should coordinate sending documentation to NCIC. Digital materials are preferred and can be sent to our office via our file transfer system. Please contact NCIC for instructions. 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.</u>

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, it is possible that 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 California Historical Resources Information System (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 records search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Paul Rendes, Coordinator North Central Information Center

Resource List

Primary No.	Trinomial	Other IDs	Туре	Age	Attribute codes	Recorded by	Reports
P-58-001284	CA-YUB-001240H	Resource Name - California Northern Rail Road; Other - Northern California Line; Other - MOF-16H; Other - Southern Pacific Railroad Grade; Other - Western Pacific Railroad Spur	Structure, Object	Historic	AH07	2000 (Scott A. Williams, Anamarie Medin, and Bill Silva, Department of Transportation); 2008 (John Berg, Monica Nolte, Far Western & Par); 2009 (Melissa Montag, Stefanie Adams, U.S. Army Corps of Engineers)	008370, 009880, 010409
P-58-001372	CA-YUB-001911H	Other - Western Pacific Railroad; Resource Name - Western Pacific Railway; Other - Western Pacific Railroad Spur; Other - PA-88-75; Other - UPRR Segment over 5th Street along the Marysville Ring Levee; Other - Western Pacific Railroad Segment, APE Map Reference #16; Other - WP-1; Other - WP-2; Other - WP-N; Other - WP-N; Other - WP-S	Structure, Object, Site	Historic	AH07; HP39	1988 (N. Neuenschwander, Peak & Associates, Inc); 1994; 1997 (William A. Shapiro, and Deb Sterling, Pacific Legacy, Inc.); 2000 (Sara Atchley, Leslie Fryman, Jones & Stokes); 2004 (S. Ashkar, C. Fish, Jones and Stokes); 2007 (Richard Deis, EDAW, Inc.); 2011 (Nicole Collum, Galvin Preservation Associates, Inc)	006298, 007907, 007909, 007910, 008238, 008351, 008946, 012253

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
000927		1989	Janis K. Offerman	Negative Archaeological Survey Report for a Project Study Report for Four Intersection Turn Lanes and Two Passing Lanes on State Route 70 in Yuba County, 03-YUB-70, PM 17.41/25.49.		
008370		2002	Scott Williams, Amy Huberland, Lissa Westwood, Jarith Kraft, Denise Thomas, Erin Dwyer, and Andrew Hope	Positive Archaeological Survey Report, Marysville to Oroville Freeway Project, Yuba and Butte Counties & Historic Properties Survey Report For The Marysville to Oroville Freeway Project, Yuba and Butte Counties, California	CalTrans District 3	58-001284, 58-001285, 58-001286, 58-001287, 58-001614, 58-001615, 58-001751, 58-001752, 58-002097, 58-002095, 58-002096, 58-002097, 58-002098, 58-002099, 58-002100, 58-002101, 58-002102, 58-002103, 58-002104, 58-002105, 58-002109, 58-002107, 58-002108, 58-002109, 58-002110, 58-002111, 58-002112, 58-002113, 58-002114, 58-002115, 58-002115, 58-002116, 58-002120, 58-002121, 58-002122, 58-002123, 58-002124, 58-002125, 58-002123, 58-002124, 58-002123, 58-002124, 58-002134, 58-002132, 58-002133, 58-002134, 58-002135, 58-002136, 58-002137, 58-002138, 58-002139, 58-002140, 58-002141, 58-002142, 58-002141, 58-002142, 58-002141, 58-002142, 58-002141, 58-002142, 58-002141, 58-002142, 58-002143
008370B		2002	Scott A. Williams and Andrew Hope	Historic Properties Survey Report for the Marysville to Oroville Freeway Project, Yuba and Buttte Counties, California	Caltrans	
008370C		2002		Historic Architecture Survey Report for the Marysville-Oroville Freeway Project (Marysville Bypass) in Yuba and Butte Counties	Caltrans	
012418		2015	Mark Salopek and Mary Cargill	Yuba County PTC Sites	GPD Group, Inc.	
012551		2017	Kim Tremaine and Elizabeth Fernandez	Final Archaeological Survey Report, Yub-70 Road Widening Project, Yuba County, California	Tremaine & Associates, Inc.	58-003092, 58-003093, 58-003094



APPENDIX B: Native American Consultation

Ellis Road Bridge Project, Yuba County Native American Consultation Log

Affiliation	Name	Contact Date	Contact Type	Response		
Native American Heritage Commission (NAHC)	Pracilla Torres-Fuentes	1128/2022	Letter	NAHC response SLF NEGATIVE 12/8/2022		
· · · · · · · · · · · · · · · · · · ·		2/3/2023	Letter	No response		
Butte Tribal Council	Dennis Ramirez	5/9/2023	e-mail	Follow-up sent		
		2/3/2023	Letter	No response		
		3/30/2023	e-mail	Follow-up sent		
Estom Yumeka Maidu Tribe	Glenda Nelson	5/9/2023	e-mail	Follow-up sent		
of the Enterprise Rancheria	Chairperson	5/15/2023	e-mail	A response was received from Nelson Smith, THPO, stating that althought the project is within the aboriginal territory of the Tribe, the Tribe's files did not locate any known resources within the project boundary. The Tribe also requested to be consulted in case of late discovery.		
		2/3/2023	Letter	No response		
Maidu Nation	N/A	7/3/2023	Letter	No response		
	Gary Archuleta	2/3/2023	Letter			
Mooretown Rancheria of Maidu Indians	Matthew Hatcher, THPO	2/21/2023	Letter	Matthew Hatcher, THPO, responded via letter stating that the Tribe did not have any knowledge of resources within the project and requested notification in case of project change or late discovery.		
		2/3/2023	Letter	No response		
	Shelly Covert, Tribal Secretary	3/30/2023	e-mail	Follow-up sent		
		5/9/2023	e-mail	Follow-up sent		
	Richard Johnson, Chairman	2/3/2023	Letter	No response		
Nevada City Rancheria		3/30/2023	e-mail	Follow-up sent		
Nisenan Tribe		5/9/2023	e-mail	Follow-up sent		
	Saxon Thomas	2/3/2023	Letter	No response		
		3/30/2023	e-mail	Follow-up sent		
		5/9/2023	e-mail	Follow-up sent		
Pakan'yani Maidu of	Tine Ceeduin	2/3/2023	Letter	No response		
Strawberry Valley	l Ina Goodwin,	3/30/2023	e-mail	Follow-up sent		
Rancheria	Chairperson	5/9/2023	e-mail	Follow-up sent		
Ctrassic and Mallary	Cathu Diahan	2/3/2023	Letter	No response		
Strawberry Valley	Catny Bisnop,	3/30/2023	e-mail	Follow-up sent		
Ranchena	Chairperson	5/9/2023	e-mail	Follow-up sent		
	Croveen Conov, Cultural	2/3/2023	Letter	No response		
	Grayson Coney, Cultural	3/30/2023	e-mail	Follow-up sent		
Tei Akim Maidu	Director	5/9/2023	e-mail	Follow-up sent		
I SI AKITI Maluu		2/3/2023	Letter	No response		
	Don Ryberg	3/30/2023	e-mail	Follow-up sent		
		5/9/20203	e-mail	Follow-up sent		
United Auburn Indian	Gene Whitehouse	2/3/2023	Website	Electronic submittal of consultation letter via the UAIC website consultation page.		
Community of the Auburn Rancheria	Chairperson	7/3/2023	Website	Electronic submittal of follow-up with orginal consultation letter. No response		

Ellis Road Bridge Project, Yuba County Native American Consultation Log

Affiliation	Name	Contact Date	Contact Type	Response
	lesus Tarango	2/3/2023	Letter	No response
	Chairperson	3/30/2023	e-mail	Follow-up sent
		5/9/2023	e-mail	Follow-up sent
	Steven Hutchason, THPO	2/3/2023	Letter	No response
Wilton Rancheria		3/30/2023	e-mail	Follow-up sent
		5/9/2023	e-mail	Follow-up sent
	Dahlton Brown	2/3/2023	Letter	No response
		3/30/2023	e-mail	Follow-up sent
		5/9/20023	e-mail	Follow-up sent

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission 1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 916-373-3710 916-373-5471 – Fax nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Ellis Road Bridge Replacement Project

Email: mcampbell@dokkenengineering.com

Project Description:

Yuba County is proposing to replace the existing Ellis Road at Simmerly Slough Bridge (16C-0075). The project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California



CHAIRPERSON Laura Miranda Luiseño

VICE CHAIRPERSON Reginald Pagaling Chumash

SECRETARY **Sara Dutschke** *Miwok*

COMMISSIONER Isaac Bojorquez Ohlone-Costanoan

COMMISSIONER Buffy McQuillen Yokayo Pomo, Yuki, Nomlaki

Commissioner Wayne Nelson Luiseño

Commissioner Stanley Rodriguez Kumeyaay

Commissioner [VAVANT]

Commissioner [VACANT]

Executive Secretary Raymond C. Hitchcock Miwok/Nisenan

NAHC HEADQUARTERS

1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov

NATIVE AMERICAN HERITAGE COMMISSION

December 8, 2022

Aliana Hale Dokken Engineering

Via Email to: ahale@dokkenengineering.com

Re: Ellis Road Bridge Replacement Project, Yuba County

Dear Ms. Hale:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <u>Pricilla.Torres-Fuentes@nahc.ca.gov</u>.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes Cultural Resources Analyst

Attachment

Native American Heritage Commission Native American Contact List Yuba County 12/8/2022

Estom Yumeka Maidu Tribe of the Enterprise Rancheria

Glenda Nelson, Chairperson 2133 Monte Vista Avenue Maidu Oroville, CA, 95966 Phone: (530) 532 - 9214 Fax: (530) 532-1768 info@enterpriserancheria.org

Pakan'yani Maidu of Strawberry Valley Rancheria

Tina Goodwin, Chairperson P.O. Box 984 Maidu Marysville, CA, 95901 Miwok Phone: (617) 417 - 2166 tinagoodwin@washoetanf.org

Tsi Akim Maidu

Grayson Coney, Cultural Director P.O. Box 510 Maidu Browns Valley, CA, 95918 Phone: (530) 383 - 7234 tsi-akim-maidu@att.net

United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairperson 10720 Indian Hill Road Maidu Auburn, CA, 95603 Miwok Phone: (530) 883 - 2390 Fax: (530) 883-2380 bguth@auburnrancheria.com

Wilton Rancheria

Jesus Tarango, Chairperson 9728 Kent Street Miwok Elk Grove, CA, 95624 Phone: (916) 683 - 6000 Fax: (916) 683-6015 jtarango@wiltonrancheria-nsn.gov

Wilton Rancheria

Steven Hutchason, THPO 9728 Kent Street Miwok Elk Grove, CA, 95624 Phone: (916) 683 - 6000 Fax: (916) 863-6015 shutchason@wiltonrancheriansn.gov

Wilton Rancheria

Dahlton Brown, Director of Administration 9728 Kent Street Miwok Elk Grove, CA, 95624 Phone: (916) 683 - 6000 dbrown@wiltonrancheria-nsn.gov

Nevada City Rancheria Nisenan Tribe

Shelly Covert, Tribal Secretary P.O. Box 2226 Nisenan Nevada City, CA, 95959 Phone: (530) 570 - 0846 shelly@nevadacityrancheria.org

Nevada City Rancheria Nisenan Tribe

Richard Johnson, Chairman P.O. Box 2624 Nisenan Nevada City, CA, 95959 Phone: (530) 570 - 0846 shelly@nevadacityrancheria.org

Nevada City Rancheria Nisenan

Tribe Saxon Thomas, Tribal Council Member P.O. Box 2226 Nisenan Nevada City, CA, 95959 Phone: (530) 570 - 0846 shelly@nevadacityrancheria.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Ellis Road Bridge Replacement Project, Yuba County.

AIRPORT (530) 749-7800 • Cell (530) 682-1073

BUILDING (530) 749-5440 • Fax (530) 749-5616

CODE ENFORCEMENT (530) 749-5455 • Fax (530) 749-5616

ENVIRONMENTAL HEALTH • CUPA (530) 749-5450 • Fax (530) 749-5454

PLANNING • CDBG (530) 749-5470 • Fax (530) 749-5616

PUBLIC WORKS • SURVEYOR (530) 749-5420 • Fax (530) 749-5424

FINANCE AND ADMINISTRATION

The County of Yuba

Community Development & Services Agency

Michael Lee, Director Phone (530) 749-5430 • Fax (530) 749-5424 915 8th Street, Suite 123 Marysville, California 95901 www.yuba.org



EXAMPLE LETTER

February 3, 2023

Glenda Nelson Estom Yumeka Maidu Tribe of the Enterprise Rancheria 2133 Monte Vista Avenue Oroville, CA 95966

Re: Initial Consultation under Section 106 of the National Historic Preservation Act (NHPA) and Public Resources Code (PRC) 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., AB 52) for the Ellis Road Bridge Replacement Project, Yuba County

Dear Chairperson Nelson:

The California Department of Transportation (Caltrans), in conjunction with the County of Yuba (County), is proposing to replace the Ellis Road Bridge (Bridge No. 16C-0075) utilizing funds from the federal-aid Highway Bridge Program administered by the Federal Highway Administration (FHWA) through the Caltrans Local Assistance Program. The County is the lead agency under the California Environmental Quality Act (CEQA) while Caltrans is operating as the lead agency under the National Environmental Policy Act (NEPA), as delegated by the FHWA.

The Project is located in rural Yuba County, roughly 3 miles northeast of Marysville. Ellis Road connects with Route 70 to the west and Jack Slough Road to the east. The bridge is a 46-foot-long bridge, originally constructed in 1928 and consists of a three-span continuous concrete slab. Bridge inspections have determined it is structurally deficient and scour critical. The project calls for the new bridge to be built on the same location. The bridge location and project boundary are shown on the enclosed map.

Yuba County has retained Dokken Engineering to provide consultant environmental services for the Project, which includes cultural resource identification and evaluation. Dokken Engineering requested a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) which returned negative results for the project area. A records search from the North Central Information Center was also requested and no previously recorded indigenous cultural resources were identified within the Project area and a one-mile radius. However, segments of the Western Pacific Railroad has been recorded within a one-mile radius. A pedestrian survey of the project was conducted on January 27, 2023. No indigenous resources were identified.

The purpose of this letter is to initiate consultation for the project under Section 106 of the NHPA and under CEQA. Caltrans and Yuba County are seeking any information you may have regarding cultural resources within the project area. This information is needed so that all concerns may be incorporated into the planning phase of the project. All information provided will remain confidential and exempt from public disclosure.

Ellis Road Bridge Replacement Project Initial Consultation Page 2 of 2

Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email <u>sbunton@co.yuba.ca.us</u> or by phone (530)-749-5420. We respectfully request any comments, questions, or responses within 30 days of receipt of this letter.

Your time and involvement in this request is appreciated.

Sincerely,

Samuel L. Bunton Assistant Director, Yuba County Public Works Department

Enclosure: Project Location Maps







February 21, 2023

Mooretown Rancheria

#1 Alverda Drive Oroville, CA 95966 (530) 533-3625 Office (530) 533-3680 Fax

RECEIVED

FEB 272023

COMMUNITY DEVELOPMENT & SERVICES AGENCY

Mr. Samuel L. Bunton Assistant Director Yuba County Community Development 915 8th Street, Suite 123 Marysville, CA 95993

Re: Proposed (Ellis Road Bridge Replacement) Project - Marysville, Yuba Co, CA

Dear Mr. Bunton:

Thank you for your letter dated, February 3, 2023, seeking information regarding the proposed Ellis Road Bridge replacement project in Yuba County, California. Based on the information provided, the Mooretown Rancheria is not aware of any known cultural resources on this site. However, as the project progresses, if any new information or human remains are found, we do have a process to protect such important and sacred artifacts (especially near rivers or streams).

Please contact the following individuals if tribal cultural items or Native American human remains are found:

THPO Matthew.hatcher@mooretown.org

Thank you for providing us with this notice and opportunity to comment.

Sincerely.

2 Jacken Hatte

Matthew Hatcher **Tribal Historic Preservation Officer**

'Concow - Maidu''

Nelson Smith
Michelle Campbell
Glenda Nelson; Cindy Smith; Creig Marcus
RE: Section 106/AB 52 Consultation for the Ellis Road Bridge Replacement Project, Yuba County
Monday, May 15, 2023 8:23:43 AM
image001.png

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning

Thank you for submitting the Section 106/AB 52 Consultation for the Ellis Road Bridge Replacement Project, Yuba County for review. After a thorough examination of the project, we have determined that this project is within the aboriginal territory of the Estom Yumeka Maidu Tribe. Our records search failed to locate any known cultural sites within the project boundaries. However, we retain the right to consult should any post review discoveries be made.

Thanks,

Nelson Smith THPO Enterprise Rancheria 5309900063 2133 Monte Vista Ave.

From: info info <info@enterpriserancheria.org>
Sent: Tuesday, May 9, 2023 1:38 PM
To: Nelson Smith <nelsons@enterpriserancheria.org>
Subject: FW: Section 106/AB 52 Consultation for the Ellis Road Bridge Replacement Project, Yuba County

From: Michelle Campbell <<u>mcampbell@dokkenengineering.com</u>>

Sent: Tuesday, May 9, 2023 1:35 PM

To: info info <<u>info@enterpriserancheria.org</u>>

Subject: FW: Section 106/AB 52 Consultation for the Ellis Road Bridge Replacement Project, Yuba County

Chairperson Nelson,

I am reaching out today to follow up on a previous Project notification letter (see attached) sent on February 3, 2023 and email on March 30, 2023 regarding the Ellis Road Bridge Replacement Project.

On behalf of Caltrans and Yuba County, please let us know if you would like to consult on the Project.

Thank you, Michelle Campbell



Michelle Campbell, MA, RPA Senior Archaeologist | Dokken Engineering Phone: 916.858.0642 | Mobile: 916.806.2155 Email: <u>mcampbell@dokkenengineering.com</u> 110 Blue Ravine Road, Suite 200 | Folsom, CA 95630 www.dokkenengineering.com

From: Michelle Campbell
Sent: Thursday, March 30, 2023 11:34 AM
To: info@enterpriserancheria.org
Subject: Section 106/AB 52 Consultation for the Ellis Road Bridge Replacement Project, Yuba County

Chairperson Nelson,

On behalf of Caltrans and Yuba County, I am reaching out today to see if you have had an opportunity to review the attached Ellis Road Bridge Replacement Project notification letter, mailed February 3, 2023. Please let us know if you have any concerns regarding the Project and would like to consult.

Sincerely, Michelle Campbell



Michelle Campbell, MA, RPA Senior Archaeologist | Dokken Engineering Phone: 916.858.0642 | Mobile: 916.806.2155 Email: <u>mcampbell@dokkenengineering.com</u> 110 Blue Ravine Road, Suite 200 | Folsom, CA 95630 www.dokkenengineering.com

Appendix E. Historic Property Survey Report

State of California Transportation Agency			Department of Transportation		
HISTORIC PROPERTY SURVEY REPORT					
	1 UNDERTAKING DESCRIPTION AND LOCATION				
	1. UNDERTARING DESCRIPTION AND EOCATION				
		Federal Project. Number.			
District County (Prefix, Agency Code, Project No.) Location					
03	YUB	BRLO 5916(131)	Ellis Road Bridge over Simmerly Slough		

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. 327 and the Memorandum of Understanding dated May 27, 2022 and executed by FHWA and Caltrans. The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA).*

Project Description:

The existing Ellis Road Bridge over Simmerly Slough (see Attachment 1, Figures 1 & 2) has been determined to be structurally deficient and is scour critical. Therefore, Yuba County (County), in coordination with California Department of Transportation (Caltrans), proposes to construct a new bridge through implementation of the Ellis Road Bridge Replacement Project (Project). The bridge replacement will be a single span, cast-in-place slab bridge. The bridge will be 51 feet long and 24 feet wide. The project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments. Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months. For a full Project description, please see the Archaeological Survey Report in Attachment 2.

2. AREA OF POTENTIAL EFFECTS

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the Project was established in consultation with William Larson, Caltrans PQS Principal Investigator in Prehistoric Archaeology, and Bomasur Banzon, Caltrans District Local Assistance Engineer, on February 16, 2023. The APE maps are located as **Figure 3** in **Attachment 1** of this HPSR.

The horizontal APE was established as the area of direct and indirect and consists of an approximately 12-acre area. This includes all staging areas, temporary vehicle access, vegetation/tree removal, approach roadway work, bridge replacement, grading activities. The APE extends approximately 500 feet along Ellis Road from both sides of the existing bridge and approximately 300 feet east and west of the existing bridge and approximately.

The vertical APE consists of a maximum of 8 feet of depth from the existing ground surface to below ground surface (bgs) to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment work, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities.

HISTORIC PROPERTY SURVEY REPORT

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

☑ Native American Heritage Commission

A letter requesting a search of the Sacred Lands File (SLF) and a list of Native American individuals and organizations that may have knowledge of, or concerns regarding, cultural resources in the Project area was sent to the NAHC on November 2, 2022. Pricilla Torres-Fuentes, from the NAHC, responded in an email dated December 8, 2022 that a search of their records failed to identify any known sacred lands or cultural resources in their file (see Appendix B of the ASR).

☑ Native American Tribes, Groups and Individuals

On February 3, 2023, initial consultation letters were sent to the Native American individuals on the list provided by the NAHC. The letters provided a summary of the Project and requested information regarding comments or concerns the Native American community might have about the Project (see Appendix B of the ASR). For those individuals that did not reply to the letter, follow-up emails (or phone calls when no email was available) were sent on March 30, 2023 and [forthcoming]. The following summarizes the consultation efforts:

- *Butte Tribal Council, Dennis Ramirez.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Glenda Nelson, Chairperson. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. On May 15, 2023, a response was received from Nelson Smith, THPO, stating that although the project is within the aboriginal territory of the Tribe, the Tribe's files did not locate any known resources within the project boundary. The Tribe also requested to be consulted in case of late discovery.
- *Maidu Nation*. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Mooretown Rancheria of Maidu Indians, Gary Archuleta.* On February 21, 2023 a letter from Matthew Hatcher, THPO, was received stating that the Tribe did not have any knowledge of resources within the project and requested notification in case of project change or late discovery.
- Nevada City Rancheria Nisenan Tribe, Shelly Covert, Tribal Secretary. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- Nevada City Rancheria Nisenan Tribe, Richard Johnson, Chairman. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.

HISTORIC PROPERTY SURVEY REPORT

- *Nevada City Rancheria Nisenan Tribe, Saxon Thomas.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Pakan'yani Maidu of Strawberry Valley Rancheria, Tina Goodwin, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Strawberry Valley Rancheria, Cathy Bishop, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Grayson Cooney, Cultural Director.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Tsi Akim Maidu, Don Ryberg, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- United Auburn Indian Community of the Auburn Rancheria, Gene Whitehouse, Chairperson. No response to initial letter. A follow-up email occurred on March 30, 2023 and again on July 3, 2023. No response has been received to date.
- *Wilton Rancheria, Jesus Tarango, Chairperson.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Wilton Rancheria, Steven Hutchason, THPO.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.
- *Wilton Rancheria, Dahlton Brown, Director of Administration.* No response to initial letter. A follow-up email occurred on March 30, 2023 and again on May 9, 2023. No response has been received to date.

4. SUMMARY OF IDENTIFICATION EFFORTS

- ☑ National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- National Historic Landmark (NHL)
- California Historical Landmarks (CHL)
- \boxtimes Results:

- California Points of Historical Interest
- California Historical Resources Information System (CHRIS)
- ☑ Caltrans Historic Bridge Inventory
- □ Caltrans Cultural Resources Database (CCRD)

HISTORIC PROPERTY SURVEY REPORT

Dokken Engineering obtained a record search (File #YUB-22-27) for the Project area and a one-mile radius surrounding the project area from the North Central Information Center (NCIC), California State University, Sacramento on October 3, 2022. The record search was conducted by personnel from the NCIC. The search examined the Office of Historic Places (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and *California Inventory of Historical Resources*.

The record search disclosed two NCIC resources within the one-mile record search boundary, none are located within the APE (Attachment 3).

Primary/Site Number	Description	Distance from APE
P-58-001284	Western Pacific Railroad Spur	>0.5 mi W
P 58 001372	UPRR Segment over 5 th Street along the	>0.5 mi E
P-58-001372	Marysville Ring Levee	

Table 1: Previously Recorded Resources within One-Mile Radius

A total of three surveys have previously taken place within the one-mile radius and one within the APE, which resulted in an approximate 25 percent previous survey coverage. Document citations returned by the records search can be found under **Appendix A** of the **ASR**.

A pedestrian survey of the APE took place on January 27, 2023. No cultural resources were identified.

5. PROPERTIES IDENTIFIED

- Caltrans, in accordance with Section 106 PA Stipulation VIII.C.5 has determined there are cultural resources within the APE that were **previously determined not eligible** for inclusion in the NRHP with SHPO concurrence and those determinations remain valid. Copy of SHPO/Keeper correspondence is attached.
 - Bridges listed as **Category 5** (previously determined not eligible for listing in the NRHP) in the Caltrans Historic Bridge Inventory are present within the APE and those determinations remain valid. Appropriate pages from the Caltrans Historic Bridge Inventory are attached.
 - Bridge No. 16C-0075 Ellis Road at Simmerly Slough Bridge

6. FINDING FOR THE UNDERTAKING

☑ Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking because there are no historic properties within the APE.

State of California Transportation Agency

HISTORIC PROPERTY SURVEY REPORT

7. CEQA CONSIDERATIONS

 \times Not applicable; Caltrans is not the lead agency under CEQA.

8. LIST OF ATTACHED DOCUMENTATION

- Project Vicinity, Location, and APE Maps (see Attachment 1, Figures 1-3) \mathbf{X}
- Caltrans Historic Bridge Inventory Sheet (see Attachment 3) \mathbf{X}
- Archaeological Survey Report (ASR, see Attachment 2) \mathbf{X} Campbell 2023
- \times Other
 - NCIC Record Search Results (see Appendix A of the ASR)
 - Native American Consultation (see Appendix B of the ASR)

9. HPSR PREPARATION AND CALTRANS APPROVAL

Prepared by: Michelle Campbell	7/3/2023
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		-
Approval	by:	

Thalsena Bhattal

Date

7/20/23

Thaleena Bhattal District 3

Acting Branch Chief, M-1

Appendix F. Hazardous Waste Initial Site Assessment

ELLIS ROAD BRIDGE REPLACEMENT PROJECT

HAZARDOUS WASTE INITIAL SITE ASSESSMENT

FOR THE

ELLIS ROAD BRIDGE REPLACEMENT PROJECT Yuba County, California 03-YUB-County of Yuba

Federal Project Number: BRLO-5916(131)



Prepared by:

Dokken Engineering 110 Blue Ravine Road, Suite 200 Folsom, CA 95630

June 2023

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Summary

This report presents the results of a Phase I Initial Site Assessment (ISA) for the properties associated with the Ellis Road Bridge Replacement Project (Project); this report will reference the properties associated with this Project as Subject Properties. This ISA was prepared in accordance with the standard practice set forth in American Society of Testing and Materials (ASTM) Designation E 1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The purpose of this ISA was to identify Recognized Environmental Conditions (RECs) associated with the Subject Properties. RECs are defined in ASTM Designation E 1527-21 as "the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

Yuba County Department of Public Works (County), in cooperation with the California Department of Transportation (Caltrans), proposes to replace the existing Ellis Road Bridge over Simmerly Slough (State Br. No. 56C-0020). The Ellis Road Bridge is located in the Yuba County, California. Simmerly Slough is the only surface water feature within the Project area. This Project is federally funded and therefore requires compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The lead agency for CEQA is the County and the lead agency for NEPA is Caltrans.

The properties assessed for this ISA (Subject Properties) include existing County right-of-way, as well as adjacent agricultural properties within the Project area.

Based on the results of the ISA evaluation, **Table 1.1- Summary Table** describes evidence of the potential for RECs or Activity and Use Limitations (AULs) on the Subject Properties.

	Location	Description of REC Evidence Found	Description of Associated AUL
1	Ellis Road Bridge (No. 16C-0075)	The structural elements of the bridge, including concrete, was potentially formed with asbestos containing material (ACMs), if it was constructed before 1989. As the structure within the Project area predates 1989, any structural concrete to be disturbed by the Project would require testing for ACMs.	None Found
2	Ellis Road Bridge (No. 16C-0075)	The bridge to be disturbed may have been built using lead-containing paint. Any paint to be disturbed would require testing for hazardous levels of lead.	None Found

Table 1.1 - Summary Table

The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review and visual site survey, the following actions are recommended to verify the presence/extent of RECs and evaluate the potential for remediation during the Plans, Specifications & Estimate (PS&E) phase of the Project:

- A preliminary site investigation is recommended to conduct testing for ACMs and leadbased paints in the bridge that have been disturbed before construction or will be disturbed during construction. This investigation should be implemented before construction and documented as part of the Phase II ISA.
- As is the case for any Project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. Contaminated soils can be encountered at any depth of excavation. If soils contaminated by hazardous waste are discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed. The specific methods and protocol for determining if a soil is contaminated are contained in Appendix D Caltrans Hazardous Procedures for Construction.

For any previously unknown hazardous waste/material encountered during construction, the procedures outlined in the appropriate ASTM standard shall be followed.

If the Project area is anticipated to change (due to a change in the proposed Project or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised Project limits. The Project area is not anticipated to change; therefore, additional searches are not anticipated at this time for the proposed Project.

I declare that to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 Code of Federal Regulations, Part 312.

Eric Espinoza, P.E.



Professional Registration

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APPENDICES

Appendix A	EDR Records Review
Appendix B	Site Reconnaissance Photographs
Appendix C	Caltrans Initial Site Assessment (ISA) Checklist
Appendix D	Caltrans Hazardous Procedures for Construction

ACRONYMS AND ABBREVIATIONS

AAI	All Appropriate Inquiries
AASHTO	American Association of State Highway and Transportation Officials
ACM	Asbestos Containing Material
ADL	Aerially Deposited Lead
ASTM	American Society of Testing and Materials
AUL	Activity and Use Limitation
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
County	Yuba County
CVFPB	Central Valley Flood Protection Board
EDR	Environmental Data Resources, Inc.
FEMA	Federal Emergency Management Agency
ISA	Initial Site Assessment
MTIP	Metropolitan Transportation Improvement Program
NEPA	National Environmental Policy Act
NOA	Naturally Occurring Asbestos
Project	Ellis Road Bridge Replacement Project
PS&E	Plans, Specifications & Estimate
REC	Recognized Environmental Condition
USGS	United States Geological Survey
1 Introduction

1.1 Existing Conditions

The Project is located in western Yuba County (see Figure 1. Project Vicinity and Figure 2. **Project Location**). The topography within the Project limits is relatively flat, with slopes ranging from 0 to 1 percent. Soil within the Project area consists mostly of loams. Land use in the Project Area is designated as Agriculture. The Project area is considered part of the Jack Slough watershed. Simmerly Slough is the only water feature within the Project area.

1.2 Project Description

Yuba County Department of Public Works (County), in cooperation with Caltrans, proposes to replace the existing Ellis Road bridge. The Project is located on Ellis Road approximately 2 miles north of Marysville in Yuba County, California (**Figure 1. Project Vicinity and Figure 2. Project Location**).

The existing 44-foot-long, 20-foot wide bridge was originally constructed in 1928 and consists of a three-span continuous concrete slab supported on board formed diaphragm type abutments and square pier bents, both on shallow foundations. It crosses over Simmerly Slough, which originates north of Woodruff Lane, flows southerly, and ultimately outfalls to Jack Slough, a tributary of the Feather River. The channel collects runoff from a 4-square mile watershed comprised primarily of agricultural land and is regulated by the Central Valley Flood Protection Board (CVFPB). During 100-year storm events, the watershed generates approximately 1,160 cubic feet per second of flow at the Ellis Road crossing, resulting in the channel and bridge being overtopped. As such, the Ellis Road Bridge is documented by Federal Emergency Management Agency (FEMA) to be within the 100-year floodplain (special flood hazard Zone AE).

Purpose

The purpose of the Project is to:

- Provide a structure that meets current design standards
- Improve the safety and operation of the facility

Need

The Ellis Road Bridge over Simmerly Slough was built in 1928 and is structurally deficient and scour critical. The scour sustained by the bridge has begun to undermine the structural integrity of the bridge, which has caused a 10-ton limit to be imposed on the structure. Improvements are needed to meet current design standards and to provide improved safety and operations of the facility.

Build Alternative

The bridge replacement will be a single span, cast-in-place slab bridge. The bridge will be 51 feet long and 24 feet wide (**Figure 3. Project Features**). The design will meet current American Association of State Highway and Transportation Officials (AASHTO) standards and Yuba County requirements. The Project is expected to involve minor grading of the streambed immediately adjacent to the bridge and rock slope protection will be installed to protect the bridge embankments.

It is anticipated that excavators, dozers, dump trucks, concrete trucks, drill rigs, and concrete pumps will be required to construct the new bridge. Temporary stream diversions may be required during construction. Utility relocation is not anticipated. Temporary right of way acquisition will be required for construction. During construction, the road will be closed to accommodate construction on alignment and a detour may be utilized. Construction will start as early as 2024 and is anticipated to last 6 months.

No Build Alternative

Under the no-build alternative, the bridge will not be replaced. The bridge will remain structurally deficient and scour critical and public safety and access will not be improved.

This Project is included in the 2023-2026 Metropolitan Transportation Improvement Program (MTIP). The Project will be primarily funded through Federal Highway Bridge Program. As such, the Project requires compliance with both NEPA and CEQA. The lead agency for NEPA compliance is Caltrans and the lead agency for CEQA compliance is the County.







7	5	150	225	300





1.3 Purpose of the Initial Site Assessment

This ISA was prepared in general accordance with "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", which is presented in the ASTM International Standard E-1527¹. This document is intended to be in general compliance with the US Environmental Protection Agency's "Standards and Practice for All Appropriate Inquires (AAI)"².

The purpose of an ISA is to evaluate the Subject Properties, parcels that are within the Project area, for the presence of RECs and/or AULs, which are:

REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."¹

AUL: "...legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or ground water on the property, or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment."¹

Opinions given in this ISA report, relative to the potential for hazardous materials to exist within the Project area, are based upon the information derived from the site reconnaissance conducted on February 6, 2023, and from other information sources described herein. Certain indicators of the presence of hazardous materials or petroleum hydrocarbons not readily observable during the reconnaissance may become observable at a later date. Readily available public information sources were reviewed as providing complete and accurate information, without independent verification. The findings and conclusions in this report are based solely on the limited scope of an ISA, which includes records reviews, reconnaissance surveys, findings of potential hazardous sites, and recommendations to address potential hazardous waste impacts. Because the scope of an ISA is necessarily limited and based in part on third party sources and significant assumptions, it is not warranted that the Subject Properties do not include hazardous material releases in areas not identified in this report.

¹ ASTM International E-1527-21.

² 40 Code of Federal Regulations, Part 312.

2 Subject Properties and Site Settings

The Project area includes portions of the parcels listed below in **Table 2.1- Parcel Identification** (**Figure 3. Project Features**). Temporary construction easements are likely needed on a limited basis to accommodate the construction of the proposed improvements. No permanent right of way acquisition would be required for construction of the Project.

APN	Zoning		
006-050-008	Exclusive Agricultural District		
006-050-010	Exclusive Agricultural District		
006-050-011	Exclusive Agricultural District		
006-060-019	Exclusive Agricultural District		
006-060-020	Exclusive Agricultural District		
Source: Yuba County GIS Data Catalog, 2018 – Zoning			

Table 2.1 - Parcel Identification

2.1 Topography

The topography within the Project area is relative flat, with slopes ranging from 0 to 1 percent and an elevation ranging from approximately 30 to 130 feet above mean sea level. The Project area is located within the Jack Slough watershed. Simmerly Slough is the only water feature within the Project area.

2.2 Current Land Use

Land use in the Project area is designated as Cropland. More specifically, the cropland surrounding the Project area are rice fields. According to the Yuba County General Plan, cropland provides for growing, processing, transporting, and selling cultivated crops, dairies, and other types of agricultural and agriculture - related uses (Yuba County, 2011). The main features of the Project area are Ellis Road bridge, Simmerly Slough, and the surrounding rice fields.

Given that the surrounding land use is designated as Cropland and rice fields surround the Project limits, as observed on the February 2023 site visit, pesticide/herbicide usage may occur or may have historically occurred on privately owned lands adjacent to the Project. However, no significant disturbance is anticipated in these areas where pesticides/herbicides are applied since construction will only occur within the existing Ellis Road and bridge alignment. The primary concern with pesticide/herbicides usage is residual arsenical (copper arsenate) pesticides, which are not contained in current used applications.

2.3 Surface Water

The Project area spans over Simmerly Slough and is the only water feature within the Project area. Simmerly Slough originates approximately 2 miles north of the Project and outfalls into Jack Slough, approximately 1.5 miles south of the Project area.

Data obtained from FEMA Flood Map Service Center designates the majority of the Project area as Zone AE (**Figure 4. FEMA Map**). Zone AE indicates a high-risk area. High risk areas have at least a 1% annual chance of flooding.



3 Property Information

For properties that are intended to be acquired for the Project, this ISA addresses certain usersupplied information, including intended property use and readily available title documentation. A property appraisal of the subject properties was beyond the scope of this ISA.

The intended use is to replace the existing Ellis Road bridge. A total of 5 parcels (Subject Properties) are within the Project area.

4 Records Review

The following required public records as defined in the ASTM International Standard E-1527³ were reviewed:

Standard Environmental Record Sources	Standard Environmental Record Sources Approximate Minimum Search Distance (miles)
Federal NPL site list	1.0
Federal Delisted NPL site list	0.5
Federal CERCLIS list	0.5
Federal CERCLIS NFRAP site list	0.5
Federal RCRA CORRACTS facilities list	1.0
Federal RCRA non-CORRACTS TSD facilities list	0.5
Federal RCRA generators list	property and adjoining properties
Federal institutional control/engineering control registries	property only
Federal ERNS list	property only
State and tribal-equivalent NPL	1.0
State and tribal-equivalent CERCLIS	0.5
State and tribal landfill and/or solid waste disposal site lists	0.5
State and tribal leaking storage tank lists	0.5
State and tribal registered storage tank lists	property and adjoining properties
State and tribal institutional control/engineering control registries	property only
State and tribal voluntary cleanup sites	0.5
State and tribal Brownfield sites	0.5

Table 4.1 - Reviewed Public Records

4.1 Government Records Search

A summary of the published lists of known hazardous substance sites was provided by EDR, a copy of the report is included in Appendix A. EDR reviewed standard federal, state, and local listings of known sites and did not identify sites within 1 mile of the Project area.

4.2 Historic Topographic Maps

Dokken Engineering obtained the United States Geological Survey (USGS) Marysville and Yuba City quadrangles for years 1888, 1891, 1894, 1895, 1911, 1952, 1973, 2012, 2015, and 2018 from EDR (see Appendix A). A review of the 1888 through 2015 topographic maps indicate that the

³ ASTM International E-1527-21.

land surrounding the Project area is similar to the current setting, a rural area used for agriculture purposes.

Features shown in the historic topographic maps include the Southern and Western Pacific Railroad, Ellis Road, and Simmerly Slough. The Southern Pacific Railroad, located east of the Project area, is present in the 1888 topographic map and is last shown in 1973 topographic map. Current records indicate that the Southern Pacific Railroad track is abandoned. Rails and ties associated with this track have been removed. The Western Pacific Railroad, located west of the Project area, is shown in the 1911 map and is present in the most recent 2018 topographic map. Ellis Road is present in the 1952 map and its alignment has not been altered. Simmerly Slough is present in all topographic maps and its alignment has not been altered. However, a review of historic aerials indicate that Simmerly Slough was realigned in the 1990's. See section 4.3.1 for more information on historic aerials.

Table 4.2 – Property Features lists property features within and immediately adjacent to the Project area identified on the 2018 USGS map.

Feature	On Subject Properties?	On Adjacent Properties?
Roads/Pavement	\boxtimes	\boxtimes
Railroad Tracks		\boxtimes
Buildings		
Wells	\boxtimes	\boxtimes
Tanks		
Man-made Lakes and Levees		\boxtimes
Streams/Rivers/Coastal Features	\boxtimes	\boxtimes
Landfills/Disposal Operations		
Mines/Tailing Piles/Mine Dump		
Wetlands (Marsh/Swamp/Bog)	\boxtimes	\boxtimes
Vegetation	\boxtimes	\boxtimes

Table 4.2 - Property Features

4.3 Non-Standard Source Review

Various supplemental environmental-related databases are maintained by federal, state, and local agencies that identify generation, storage, use, releases, and disposal of regulated or potentially hazardous substances and "pointers" that identify other databases that may contain more detail. ASTM provides for the use of additional environmental records sources when they are readily available. The additional environmental records that were reviewed for the ISA are shown in **Table 4.3 – Non-Standard Sources**.

Non-Standard Source	Reviewed for this ISA	Source Reference
Historical Aerial Photographs	\boxtimes	EDR Aerial Photographs
Fire Insurance Maps	\boxtimes	Sanborn Library, LLC
Local Street Directories		
Soil Surveys	\boxtimes	NRCS – Web Soil Survey
Geologic Maps		
Oil and Gas Production Maps		
Naturally-Occurring Asbestos Maps	\boxtimes	CGS, Open File Report 2000-19
Groundwater Maps		
Groundwater Databases		
Building Department Records		
Zoning/Land Use Records		
Historical Society Records		
Personal Interviews		
Regulatory Agency Files		
Other (describe):		Department of Toxic Substances Control, EnviroStor Database; State of California Regional Water Quality Control Board, Geotracker Database

Table 4.3 - Non-Standard Sources

4.3.1 Historic Aerial Photography

A review of the readily available historical aerial photographs indicates that land use within the Project area, and that of surrounding properties, has been rural and used for agricultural purposes for multiple decades. **Table 4.4** – **Significant Aerial Photograph Changes** provides a summary of the significant features/changes observed on the subject aerial photographs:

Year	Observations	Source: Scale
1937	The Project area consists primarily of Simmerly Slough and adjacent undeveloped land. Ellis Road and bridge are present and used for through traffic. The Western Pacific Railroad and agricultural fields are present west of the Project area.	USDA: 1"=500'
1947	Land use appeared unchanged since the 1937 photograph.	USGS: 1"=500'
1952	The land within the western portion of the Project area has been converted into rice fields. Apart from this, land use appeared unchanged since the 1947 photograph.	USDA: 1"=500'
1962	Land use appeared unchanged since the 1959 photograph.	Cartwright: 1"=500'
1973	All land adjacent to the existing bridge has now been converted into rice fields. Apart from this, land use appears unchanged since the 1962 photograph.	USGS: 1"=500'
1977	Land use appeared unchanged since the 1973 photograph.	USGS: 1"=500'
1984	Land use appeared unchanged since the 1977 photograph.	USDA: 1"=500'
1999	Simmerly Slough is now realigned south of the existing bridge. Apart from this, land use appears unchanged since the 1984 photograph.	USGS/DOQQ: 1"=500'
2006	Land use appeared unchanged since the 1999 photograph.	USDA/NAIP: 1"=500'
2009	Land use appeared unchanged since the 2006 photograph.	USDA/NAIP: 1"=500'
2012	Land use appeared unchanged since the 2009 photograph.	USDA/NAIP: 1"=500'
2016	Land use appeared unchanged since the 2016 photograph.	USDA/NAIP: 1"=500'

Table 4.4 - Significant Aerial Photograph Changes

The EDR Aerial Photo Decade Package of aerial photographs provided by EDR is presented in Appendix A.

4.3.2 Sanborn Fire Insurance Map

A search of the Sanborn Map files by EDR indicated that no fire insurance maps of the subject Project area were available.

4.3.3 Naturally Occurring Asbestos Maps

Naturally Occurring Asbestos (NOA) can occur in serpentine rock. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. A review of the "General Location Guide for Ultramafic Rocks in California – Areas likely to Contain Naturally Occurring Asbestos" (CGS Open-file Report 2000-19, 2000) indicated that NOA was not mapped on, or in the near vicinity of the Project area.

4.3.4 Aerially Deposited Lead

Aerially deposited lead (ADL) is known to be present within soils near major roadways in operation prior to 1980, when lead was discontinued as a gasoline additive in the State of California. Ellis Road has been in place at the current location since the late 1930s, according to historic aerial photography. Concentrations of ADL in excess of regulatory limits are not likely due to the lower

classification of Ellis Road and evidence of disking, grading, and other soil movement activities associated with farming near the road. No impacts to ADL are anticipated. No further analysis or testing for ADL is recommended.

4.3.5 Groundwater Data Information

The Project is located within the Sacramento Valley groundwater basin and the North Yuba subbasin. Historically, groundwater flows from the eastern boundary of Yuba County toward the western boundary of the County. Groundwater levels in the North Yuba Subbasin range from approximately 50 feet msl near the City of Marysville to 130 feet msl near the Yuba River. Groundwater levels are about 70 feet msl near the center of the subbasin (Yuba County, 2011). The proposed improvements will be designed to have a negligible effect on the existing ground water table.

4.3.6 Department of Toxic Substances Control, EnviroStor Database

A review of the Department of Toxic Substances Control EnviroStor Database indicated that there were no sites within or adjacent to the Project area.

4.3.7 State of California Regional Water Quality Control Board, Geotracker Database

A review of the State of California Regional Water Quality Control Board Geotracker Database indicated that there were no sites on or within 1 mile of the Project area.

5 Reconnaissance of the Subject Properties and Vicinity

Dokken Engineering conducted the site reconnaissance on February 6, 2023. The weather on that day was a clear sky in the morning, which did not limit the observations of potential REC's.

Dokken Engineering walked all accessible areas within the Project boundaries to look for evidence of RECs and structures that may include ACMs. Photographs documenting the reconnaissance are included in Appendix B and a copy of the Caltrans ISA Checklist is presented in Appendix C. Based on the reconnaissance, **Table 5.1** – **Subject Property Observations** summarizes the observations of the Subject Properties within the Project area.

Observation	Observed on Subject Properties	Location
Bare Soil with Stains		
Soil Stockpile or Imported Fill		
Pavement with Stains		
Loading Docks		
Rail Line/Spur		
Hazardous Materials Storage		
Petroleum Hydrocarbon Storage		
Aboveground Tanks		
Underground Tanks		
Solid Waste Storage		
Liquid Waste Storage		
Air Emission Controls		
On-Site Disposal (non-sewage)		
On-Site Sewage Disposal		
Municipal Water Supply Connection		
Domestic Well		
Industrial Well		
Agricultural Well		
Groundwater Monitoring Well	\square	Located southwest of Project area, outside of Project boundaries
Odor		
Building with Potential for Asbestos or Lead Based Paint		
Bridge with Potential ACM's or Lead Based Paint	\square	Ellis Road Bridge
Other (describe):		

 Table 5.1 - Subject Property Observations

Based on the site reconnaissance, potential REC's within the Project boundaries include the

following:

• Potential for Ellis Road Bridge to contain structural concrete containing asbestos and lead based paint.

Based on site reconnaissance, **Table 5.2 – Adjacent Property Observations** summarizes the observations of properties adjacent to the Subject Properties:

Observation	Observed on Adjacent Property	Location
Bare Soil with Stains		
Soil Stockpile or Imported Fill		
Pavement with Stains		
Loading Docks		
Rail Line/Spur	\boxtimes	On adjacent parcel west of the Project area
Hazardous Materials Storage		
Petroleum Hydrocarbon Storage		
Aboveground Tanks		
Underground Tanks		
Solid Waste Storage		
Liquid Waste Storage		
Air Emission Controls		
On-Site Disposal (non-sewage)		
On-Site Sewage Disposal		
Municipal Water Supply Connection		
Domestic Well		
Industrial Well		
Agricultural Well		
Groundwater Monitoring Well		
Odor		
Building with Potential for Asbestos or Lead Based Paint		
Bridge with Potential ACM's or Lead Based Paint		
Other (describe): Treated Wood Debris		

 Table 5.2 - Adjacent Property Observations

Although the Western Pacific Railroad is adjacent to the Project boundaries, it is approximately 0.2 miles west of the Project area and will not be disturbed by Project activities. Therefore, there are no potential REC's adjacent to the Project boundaries.

6 Initial Site Assessment Findings and Conclusions

This report presents results of the ISA for properties associated with the Project. This ISA was prepared in general accordance with the ASTM International Standard E 1527-21. Based on this ISA, no evidence of RECs or AULs within the Project boundaries were found, except those described in **Table 6.1 – REC or AUL Evidence**.

	Location	Description of REC Evidence Found	Description of Associated AUL
1	Ellis Road Bridge (No. 16C-0075)	The structural elements of the bridge, including concrete, was potentially formed with asbestos containing material (ACMs), if it was constructed before 1989. As the structure within the Project area predates 1989, any structural concrete to be disturbed by the Project would require testing for ACMs.	None Found
2	Ellis Road Bridge (No. 16C-0075)	The bridge to be disturbed may have been built using lead- containing paint. Any paint to be disturbed would require testing for hazardous levels of lead.	None Found

Table 6.1 -	REC	or AUL	Evidence

7 Recommendations

The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. Based on the governmental records search, aerial photograph and topographic map review and visual site survey, the following actions are recommended to verify the presence/extent of RECs and evaluate the potential for remediation during the Plans, Specifications & Estimate (PS&E) phase of the Project:

- A preliminary site investigation is recommended to conduct testing for ACMs and leadbased paints in the bridge that have been disturbed before construction or will be disturbed during construction. This investigation should be implemented before construction and documented as part of the Phase II ISA.
- As is the case for any Project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. Contaminated soils can be encountered at any depth of excavation. If soils contaminated by hazardous waste are discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed. The specific methods and protocol for determining if a soil is contaminated are contained in Appendix D Caltrans Hazardous Procedures for Construction.

If the Project Area is anticipated to change (due to a change in the proposed Project or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised Project limits.

8 Limitations

During the performance of the ISA for this Project, all readily available materials pertaining to the Project site were collected and reviewed to prepare this document. This assessment is not a full-scale environmental site investigation to prove that the Project site is environmentally devoid of hazardous or toxic materials. Information and data were provided by presumably competent third parties with knowledge about the site and surrounding areas. The presence of radioactive materials and biological hazards was not specifically investigated.

This ISA consists of professional opinions and recommendations made in accordance with generally accepted environmental principles and practices. The conclusions are based upon an evaluation of the information gathered and general observations of conditions prevalent at the Project site during the site visit. This ISA does not otherwise provide any implied or expressed guarantees regarding the characteristics or conditions of environmental media at the Project site.

9 References

American Society for Testing and Materials (ASTM), 2021, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

California Department of Toxic Substances Control, 2022, EnviroStor Database, http://www.envirostor.dtsc.ca.gov/. (Accessed November 3, 2022)

California Department of Transportation, 2006, Construction Manual, Environmental Rules and Requirements, Table 7-1.1, Unknown Hazardous Procedures, December, 2006.

California Department of Water Resources, 2022, Geotracker Database, <u>http://geotracker.waterboards.ca.gov</u>. (Accessed November 3, 2022)

California Geological Survey, 2000, General Location Guide for Ultramafic Rocks in California – Areas Likely to Contain Naturally Occurring Asbestos, CGS Open-file Report 2000-19.

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Yuba County, 2011, Yuba County 2030 General Plan, https://www.yuba.org/departments/community_development/planning_department/general_plan.php

Yuba County, 2011, Yuba County 2030 General Plan Environmental Impact Report, https://www.yuba.org/departments/community_development/planning_department/general_plan.php

APPENDIX A Records Review

EDR Radius Map EDR Sanborn Map EDR Historic Aerials EDR Historic Topo Maps EDR City Directory Geotracker and Envirostor Results Ellis Road Bridge Replacement Project

Ellis Road Marysville, CA 95901

Inquiry Number: 7165124.2s October 31, 2022

The EDR Radius Map[™] Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

FORM-LBC-KKT

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Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

ELLIS ROAD MARYSVILLE, CA 95901

COORDINATES

Latitude (North):	39.1980660 - 39 11' 53.03"
Longitude (West):	121.5781370 - 121 34' 41.29"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	622783.3
UTM Y (Meters):	4339511.0
Elevation:	67 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: Version Date: 12016181 YUBA CITY, CA 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: Source: 20140725 USDA DATABASE ACRONYMS

Target Property Address: ELLIS ROAD MARYSVILLE, CA 95901

Click on Map ID to see full detail.

MAP ID

SITE NAME

ADDRESS

NO MAPPED SITES FOUND

7165124.2s Page 2

DIST (ft. & mi.) DIRECTION

RELATIVE

ELEVATION

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL_____ National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY______ Federal Facility Site Information listing SEMS______ Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE_____ Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS..... Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity
	Generators)

Federal institutional controls / engineering controls registries

LUCIS...... Land Use Control Information System

US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROLS	Institutional Controls Sites List

Federal ERNS list

ERNS_____ Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE..... State Response Sites

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR EnviroStor Database

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

LUST	Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
CPS-SLIC	Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST	Underground Storage Tank Listing
UST	Active UST Facilities
AST	Aboveground Petroleum Storage Tank Facilities
INDIAN UST	Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT	Waste Management Unit Database
SWRCY	Recycler Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations

ODI	Open Dump Inventory
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL HIST Cal-Sites	Delisted National Clandestine Laboratory Register Historical Calsites Database
SCH.	School Property Evaluation Program
CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE	CERS HAZ WASTE
US CDL	National Clandestine Laboratory Register
PFAS	PFAS Contamination Site Location Listing
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing

Local Lists of Registered Storage Tanks

SWEEPS UST	SWEEPS UST Listing
HIST UST	Hazardous Substance Storage Container Database
CA FID UST	Facility Inventory Database
CERS TANKS	California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA - Non Generators / No Longer Regulated
Formerly Used Defense Sites
Department of Defense Sites
State Coalition for Remediation of Drycleaners Listing
Financial Assurance Information
EPA WATCH LIST
2020 Corrective Action Program List
Toxic Substances Control Act
Toxic Chemical Release Inventory System
Section 7 Tracking Systems
Records Of Decision
Risk Management Plans
RCRA Administrative Action Tracking System
Potentially Responsible Parties
PCB Activity Database System
Integrated Compliance Information System
FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide
Act)/TSCA (Toxic Substances Control Act)

MLIS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
	DCP Transformer Registration Database
	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
	Superfund (CEPCLA) Concent Decrees
	Superiuliu (CERCLA) Consent Declees
	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
	Aerometric Information Petrieval System Eacility Subsystem
	Misse Mester lader File
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS.	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
	Unevaleded Ordnenee Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUDA Listings	
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
	Facility and Marifact Data
	Facility and Manifest Data
ICE	. ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
H\\/T	Registered Hazardous Waste Transporter Database
MINICO	Mines Site Leastion Listing
WIINES	Mines Sile Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify GE	Dropposition 65 Deports
	Proposition 65 Records
UIC	UIC Listing
UIC GEO	. UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WID	Wall Investigation Brogrom Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	. PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWOS	California Integrated Water Quality System
CEDS	
NUN-CASE INFO	
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
	Well Stimulation Project (GEOTDACKED)
	Winerel Deseurees Date Susters
	willeral Resources Data System
HWTS	. Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

Unmappable (orphan) sites are not considered in the foregoing analysis.

There were no unmapped sites in this report.

OVERVIEW MAP - 7165124.2S



NAME.	LIIIS NOAU DHUYE NEPIACEMENI FIOJECI	ULIENT.	DOKKEN ENg
RESS:	Ellis Road	CONTACT:	Aliana Hale
	Marysville CA 95901	INQUIRY #:	7165124.2s
LONG:	39.198066 / 121.578137	DATE:	October 31,

LAT/

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 7165124.2S



Marysville CA 95901

39.198066 / 121.578137

LAT/LONG:

DATE:	October 31, 2022 6:54 pm	
	Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.	

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	ITAL RECORDS							
Lists of Federal NPL (S	uperfund) site	s						
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Lists of Federal Deliste	d NPL sites							
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites su CERCLA removals and	ubject to CERCLA orde	rs						
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Lists of Federal CERCL	A sites with N	FRAP						
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA i undergoing Corrective	facilities Action							
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA	TSD facilities							
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA	generators							
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional co engineering controls re	ntrols / gistries							
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and triba (Superfund) equivalent	l sites							
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and triba hazardous waste facilit	l ies							
ENVIROSTOR	1.000		0	0	0	0	NR	0
Lists of state and tribal and solid waste dispose	landfills al facilities							
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and triba	l leaking stora	ge tanks						
LUST INDIAN LUST CPS-SLIC	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Lists of state and triba	l registered sto	orage tanks						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
Lists of state and triba	l voluntary clea	anup sites						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Lists of state and triba	l brownfield sit	tes						
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONME	ENTAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Waste Disposal Sites	' Solid							
WMUDS/SWAT SWRCY HAULERS INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.001 0.500 0.500 0.500 0.500		0 0 0 0 0 0	0 0 NR 0 0 0 0	0 0 NR 0 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Hazardo Contaminated Sites	us waste /							
US HIST CDL HIST Cal-Sites SCH CDL Toxic Pits CERS HAZ WASTE US CDL PFAS AQUEOUS FOAM	0.001 1.000 0.250 0.001 1.000 0.250 0.001 0.500 TP		0 0 0 0 0 0 0 0 0 NR	NR 0 NR 0 NR 0 NR	NR 0 NR 0 NR 0 NR 0 NR	NR 0 NR 0 NR NR NR NR	NR NR NR NR NR NR NR NR	0 0 0 0 0 0 0 0
Local Lists of Register	ed Storage Tai	nks						
SWEEPS UST HIST UST CA FID UST	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS LIENS 2 DEED	0.001 0.001 0.500		0 0 0	NR NR 0	NR NR 0	NR NR NR	NR NR NR	0 0 0
Records of Emergency I	Release Repo	orts						
HMIRS CHMIRS LDS MCS SPILLS 90	0.001 0.001 0.001 0.001 0.001		0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE	0.250 1.000 1.000 0.500 0.001 0.250 0.001 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 NR 0 NR NR 0 NR NR NR NR NR NR NR NR NR NR NR NR NR	NR 0 0 NR NR NR NR NR NR NR NR NR NR NR NR NR	NR 0 NR NR NR NR NR NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR NR NR NR NR NR N	
COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS DOCKET HWC UXO	0.500 0.500 0.001 0.001 1.000 1.000 1.000 0.500 0.001 0.250 0.250 0.250 0.001 0.001 1.000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 NR NR NR 0 0 0 0 NR 0 0 NR 0 NR 0 NR	0 NR NR NR 0 0 0 0 NR NR NR NR NR NR NR 0 0	NR NR NR NR NR NR NR NR NR NR NR NR NR N	NR NR NR NR NR NR NR NR NR NR NR NR NR N	
US MINES ABANDONED MINES FINDS DOCKET HWC UXO ECHO	0.250 0.250 0.001 0.001 1.000 0.001		0 0 0 0 0	0 0 NR NR 0 NR	NR NR NR 0 NR	NR NR NR 0 NR	NR NR NR NR NR NR	

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		Õ	Õ	0	0	NR	õ
Cortese	0.500		Ő	Ő	Õ	NR	NR	Ő
CUPA Listings	0.250		Õ	Ő	NR	NR	NR	õ
DRYCLEANERS	0.250		õ	õ	NR	NR	NR	õ
EMI	0.001		0	NR	NR	NR	NR	õ
ENIE	0.001		0	NR	NR	NR	NR	0
Einancial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
	0.001		0	NR	NR	NR	NR	0
	0.500		0			NR	NR	0
HW/P	1 000		0	0	0		NR	0
	0.250		0	0			NR	0
MINES	0.250		0	0	NR	NR	NR	0
	0.250		0	0	NR	NR	NR	0
NPDES	0.200		0		NR	NR	NR	0
DESTIC	0.001		0			NP	ND	0
PROC	0.500		0			NR	NR	0
Notify 65	1 000		0	0	0		ND	0
	0.001		0				NR	0
	0.001		0		NP	NP	ND	0
	0.001		0			NP	ND	0
WDS	0.000		0					0
	0.001		0			NP	ND	0
	0.230		0			NP	ND	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDP	0.001		0			NP	ND	0
CIWOS	0.001		0			NP	ND	0
CERS	0.001		0	NR	NR	NR	NR	0
	0.001		0	NP	NP	NP	ND	0
	0.001		0			NP	ND	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
	0.001		0	NR	NR	NR	NR	0
	0.001		0	NR	NR	NR	NR	0
MINES MEDS	0.001		0	NR	NR	NR	NR	0
HW/TS	TP			NR	NR	NR	NR	0
								0
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		Ō	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		Ő	NR	NR	NR	NR	0
EDR RECOVERED GOVERN	MENT ARCHI	VES						
Exclusive Recovered Go	vt. Archives							
RGA LF	0.001		0	NR	NR	NR	NR	0
RGALUST	0.001		Õ	NR	NR	NR	NR	Õ
	0.001		Ŭ					v
- Totals		0	0	0	0	0	0	0

MAP FINDINGS SUMMARY

	Search							
	Distance	Target						Total
Database	(Miles)	Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Database(s) E

EDR ID Number EPA ID Number

NO SITES FOUND

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)

NO SITES FOUND

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20 Source: EPA Telephone: N/A Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC) Telephone: 202-564-7333

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665 EPA Region 6 Telephone: 214-655-6659

EPA Region 7 Telephone: 913-551-7247

EPA Region 8 Telephone: 303-312-6774

EPA Region 9 Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20 Source: EPA Telephone: N/A Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994 Number of Days to Update: 56 Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20

Source: EPA Telephone: N/A Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021	Source
Date Data Arrived at EDR: 06/24/2021	Teleph
Date Made Active in Reports: 09/20/2021	Last E
Number of Days to Update: 88	Next S

Source: Environmental Protection Agency Telephone: 703-603-8704 Last EDR Contact: 09/06/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/20/2022	Source: EPA
Date Data Arrived at EDR: 06/21/2022	Telephone: 800-424-9346
Date Made Active in Reports: 06/28/2022	Last EDR Contact: 09/19/2022
Number of Days to Update: 7	Next Scheduled EDR Contact: 01/02/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022 Number of Days to Update: 7 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022 Number of Days to Update: 7 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022 Number of Days to Update: 7 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators) RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022 Number of Days to Update: 7 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/16/2022Source: Department of the NavyDate Data Arrived at EDR: 08/22/2022Telephone: 843-820-7326Date Made Active in Reports: 10/24/2022Last EDR Contact: 08/03/2022Number of Days to Update: 63Next Scheduled EDR Contact: 11/21/2022Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/15/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/17/2022	Telephone: 703-603-0695
Date Made Active in Reports: 10/24/2022	Last EDR Contact: 08/17/2022
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/05/2022
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/15/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 10/24/2022 Number of Days to Update: 68 Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 08/17/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 06/21/2022 Number of Days to Update: 6 Source: National Response Center, United States Coast Guard Telephone: 202-267-2180 Last EDR Contact: 09/20/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/25/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/25/2022	Telephone: 916-323-3400
Date Made Active in Reports: 10/05/2022	Last EDR Contact: 10/24/2022
Number of Days to Update: 72	Next Scheduled EDR Contact: 02/06/2023
	Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022 Number of Days to Update: 72 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 10/24/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/20/2022 Number of Days to Update: 73 Source: Department of Resources Recycling and Recovery Telephone: 916-341-6320 Last EDR Contact: 08/08/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 3: Leaking Underground Storage Tank Leaking Underground Storage Tank locations.	Database Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.
Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003 Number of Days to Update: 14	Source: California Regional Water Quality Control Board Central Coast Region (3) Telephone: 805-542-4786 Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned
LUST REG 4: Underground Storage Tank Leak List Los Angeles, Ventura counties. For more curre Board's LUST database.	t ent information, please refer to the State Water Resources Control
Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004 Number of Days to Update: 35	Source: California Regional Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6710 Last EDR Contact: 09/06/2011 Next Scheduled EDR Contact: 12/19/2011 Data Release Frequency: No Update Planned
LUST REG 5: Leaking Underground Storage Tank Leaking Underground Storage Tank locations. Dorado, Fresno, Glenn, Kern, Kings, Lake, Las Sacramento, San Joaquin, Shasta, Solano, St	Database Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El ssen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, anislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.
Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008 Number of Days to Update: 9	Source: California Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-4834 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned
LUST REG 7: Leaking Underground Storage Tank Leaking Underground Storage Tank locations.	Case Listing Imperial, Riverside, San Diego, Santa Barbara counties.
Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004 Number of Days to Update: 27	Source: California Regional Water Quality Control Board Colorado River Basin Region (7) Telephone: 760-776-8943 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned
LUST REG 8: Leaking Underground Storage Tanks California Regional Water Quality Control Boa to the State Water Resources Control Board's	rd Santa Ana Region (8). For more current information, please refer LUST database.
Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005 Number of Days to Update: 41	Source: California Regional Water Quality Control Board Santa Ana Region (8) Telephone: 909-782-4496 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned
LUST REG 2: Fuel Leak List Leaking Underground Storage Tank locations. Clara, Solano, Sonoma counties.	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa
Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004 Number of Days to Update: 30	Source: California Regional Water Quality Control Board San Francisco Bay Region (2) Telephone: 510-622-2433 Last EDR Contact: 09/19/2011 Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database. Date of Government Version: 02/01/2001 Source: California Regional Water Quality Control Board North Coast (1) Date Data Arrived at EDR: 02/28/2001 Telephone: 707-570-3769 Last EDR Contact: 08/01/2011 Date Made Active in Reports: 03/29/2001 Number of Days to Update: 29 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned LUST REG 6V: Leaking Underground Storage Tank Case Listing Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties. Date of Government Version: 06/07/2005 Source: California Regional Water Quality Control Board Victorville Branch Office (6) Date Data Arrived at EDR: 06/07/2005 Telephone: 760-241-7365 Date Made Active in Reports: 06/29/2005 Last EDR Contact: 09/12/2011 Number of Days to Update: 22 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned LUST: Leaking Underground Fuel Tank Report (GEOTRACKER) Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: see region list
Date Made Active in Reports: 05/24/2022	Last EDR Contact: 08/31/2022
Number of Days to Update: 1	Next Scheduled EDR Contact: 12/19/2022
	Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date Data Arrived at EDR: 09/10/2003 Telephone: 530-542-5572 Date Made Active in Reports: 10/07/2003 Last EDR Contact: 09/12/2011 Number of Days to Update: 27 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003 Number of Days to Update: 27	Source: California Regional Water Quality Control Board Lahontan Region (6) Telephone: 530-542-5572 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned
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LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/13/2022	Telephone: 415-972-3372
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 10/17/2022
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

	Date of Government Version: 04/28/2021 Date Data Arrived at EDR: 06/11/2021 Date Made Active in Reports: 09/07/2021 Number of Days to Update: 88	Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDI	AN LUST R7: Leaking Underground Storage Ta LUSTs on Indian land in Iowa, Kansas, and Nel	nks on Indian Land braska	
	Date of Government Version: 04/14/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDI	INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.		
	Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64	Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDI	AN LUST R10: Leaking Underground Storage T LUSTs on Indian land in Alaska, Idaho, Oregon	anks on Indian Land and Washington.	
	Date of Government Version: 04/20/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDI	AN LUST R6: Leaking Underground Storage Ta LUSTs on Indian land in New Mexico and Oklal	nks on Indian Land noma.	
	Date of Government Version: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64	Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.			
	Date of Government Version: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022 Number of Days to Update: 79	Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies	
INDI	AN LUST R5: Leaking Underground Storage Ta Leaking underground storage tanks located on	nks on Indian Land Indian Land in Michigan, Minnesota and Wisconsin.	
	Date of Government Version: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64	Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023	

Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

	Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 05/24/2022 Number of Days to Update: 1	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies
SLIC	REG 1: Active Toxic Site Investigations The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	anup) program is designed to protect and restore water quality
	Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003 Number of Days to Update: 18	Source: California Regional Water Quality Control Board, North Coast Region (1) Telephone: 707-576-2220 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned
SLIC	REG 2: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing anup) program is designed to protect and restore water quality
	Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004 Number of Days to Update: 30	Source: Regional Water Quality Control Board San Francisco Bay Region (2) Telephone: 510-286-0457 Last EDR Contact: 09/19/2011 Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned
SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
	Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006 Number of Days to Update: 28	Source: California Regional Water Quality Control Board Central Coast Region (3) Telephone: 805-549-3147 Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned
SLIC	REG 4: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing anup) program is designed to protect and restore water quality
	Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 47	Source: Region Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6600 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned
SLIC	REG 5: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing anup) program is designed to protect and restore water quality
	Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 16	Source: Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-3291 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005 Number of Days to Update: 22	Source: Regional Water Quality Control Board, Victorville Branch Telephone: 619-241-6583 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	
SLIC REG 6L: SLIC Sites The SLIC (Spills, Leaks, Investigations and Cl from spills, leaks, and similar discharges.	eanup) program is designed to protect and restore water quality	
Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004 Number of Days to Update: 35	Source: California Regional Water Quality Control Board, Lahontan Region Telephone: 530-542-5574 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	
SLIC REG 7: SLIC List The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 36	Source: California Regional Quality Control Board, Colorado River Basin Region Telephone: 760-346-7491 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008 Number of Days to Update: 11	Source: California Region Water Quality Control Board Santa Ana Region (8) Telephone: 951-782-3298 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	
SLIC REG 9: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cl from spills, leaks, and similar discharges.	o Cost Recovery Listing eanup) program is designed to protect and restore water quality	
Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007 Number of Days to Update: 17	Source: California Regional Water Quality Control Board San Diego Region (9) Telephone: 858-467-2980 Last EDR Contact: 08/08/2011 Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: No Update Planned	
Lists of state and tribal registered storage tanks		
FEMA UST: Underground Storage Tank Listing A listing of all FEMA owned underground store	age tanks.	

Date of Government Version: 10/14/2021	Source: FEMA
Date Data Arrived at EDR: 11/05/2021	Telephone: 202-646-5797
Date Made Active in Reports: 02/01/2022	Last EDR Contact: 09/27/2022
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 06/01/2022 Date Data Arrived at EDR: 06/09/2022 Date Made Active in Reports: 08/26/2022 Number of Days to Update: 78 Source: State Water Resources Control Board Telephone: 916-327-7844 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/06/2022	Source: SWRCB
Date Data Arrived at EDR: 06/07/2022	Telephone: 916-341-5851
Date Made Active in Reports: 08/24/2022	Last EDR Contact: 08/31/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 12/19/2022
	Data Release Frequency: Semi-Annually

MILITARY UST SITES: Military UST Sites (GEOTRACKER) Military ust sites

Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 09/07/2022
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/26/2022
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 06/02/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/31/2022 Number of Days to Update: 79 Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022	Source: EPA Region 10
Date Data Arrived at EDR: 06/13/2022	Telephone: 206-553-2857
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 10/17/2022
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/14/2022	Sourc
Date Data Arrived at EDR: 06/13/2022	Telepl
Date Made Active in Reports: 08/16/2022	Last E
Number of Days to Update: 64	Next S

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2022	Source: EPA Region 8
Date Data Arrived at EDR: 06/13/2022	Telephone: 303-312-6137
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 10/17/2022
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64 Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/07/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64 Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/28/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2022 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/16/2022 Number of Days to Update: 64 Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 07/08/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/13/2022
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/02/2023
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/25/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022 Number of Days to Update: 72 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 10/24/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/21/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 09/08/2022 Number of Days to Update: 79 Source: State Water Resources Control Board Telephone: 916-323-7905 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022 Date Data Arrived at EDR: 03/10/2022 Date Made Active in Reports: 03/10/2022 Number of Days to Update: 0 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 09/09/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

	Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000 Number of Days to Update: 30	Source: State Water Resources Control Board Telephone: 916-227-4448 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: No Update Planned
SWF	CY: Recycler Database A listing of recycling facilities in California.	
	Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/23/2022 Number of Days to Update: 77	Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly
HAU	LERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.	
	Date of Government Version: 08/12/2022 Date Data Arrived at EDR: 08/16/2022 Date Made Active in Reports: 08/26/2022 Number of Days to Update: 10	Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 08/16/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Varies
INDI	AN ODI: Report on the Status of Open Dumps of Location of open dumps on Indian land.	on Indian Lands
	Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008 Number of Days to Update: 52	Source: Environmental Protection Agency Telephone: 703-308-8245 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies
ODI:	Open Dump Inventory An open dump is defined as a disposal facility t Subtitle D Criteria.	that does not comply with one or more of the Part 257 or Part 258
	Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004 Number of Days to Update: 39	Source: Environmental Protection Agency Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned
DEB	RIS REGION 9: Torres Martinez Reservation III A listing of illegal dump sites location on the To County and northern Imperial County, Californi	legal Dump Site Locations rres Martinez Indian Reservation located in eastern Riverside a.
	Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009 Number of Days to Update: 137	Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land A listing of all open dumps located on Indian Land in the United States Date of Government Version: 04/01/2014 Source: Department of Health & Human Serivces, Indian Health Service Date Data Arrived at EDR: 08/06/2014 Telephone: 301-443-1452 Date Made Active in Reports: 01/29/2015 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 02/06/2023 Number of Days to Update: 176 Data Release Frequency: Varies Local Lists of Hazardous waste / Contaminated Sites US HIST CDL: National Clandestine Laboratory Register A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register. Date of Government Version: 07/29/2022 Source: Drug Enforcement Administration Date Data Arrived at EDR: 08/18/2022 Telephone: 202-307-1000 Date Made Active in Reports: 10/24/2022 Last EDR Contact: 08/18/2022 Number of Days to Update: 67 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: No Update Planned HIST CAL-SITES: Calsites Database The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR. Date of Government Version: 08/08/2005 Source: Department of Toxic Substance Control Date Data Arrived at EDR: 08/03/2006 Telephone: 916-323-3400 Date Made Active in Reports: 08/24/2006 Last EDR Contact: 02/23/2009 Number of Days to Update: 21 Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned SCH: School Property Evaluation Program This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose. Date of Government Version: 07/25/2022 Source: Department of Toxic Substances Control Date Data Arrived at EDR: 07/25/2022 Telephone: 916-323-3400 Last EDR Contact: 10/24/2022 Date Made Active in Reports: 10/05/2022 Number of Days to Update: 72 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly CDL: Clandestine Drug Labs A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work. Date of Government Version: 12/31/2019 Source: Department of Toxic Substances Control Date Data Arrived at EDR: 01/20/2021 Telephone: 916-255-6504 Date Made Active in Reports: 04/08/2021 Last EDR Contact: 09/27/2022 Number of Days to Update: 78 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies TOXIC PITS: Toxic Pits Cleanup Act Sites Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. Date of Government Version: 07/01/1995 Source: State Water Resources Control Board Date Data Arrived at EDR: 08/30/1995 Telephone: 916-227-4364 Date Made Active in Reports: 09/26/1995 Last EDR Contact: 01/26/2009 Number of Days to Update: 27 Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/18/2022	Source: CalEPA
Date Data Arrived at EDR: 07/18/2022	Telephone: 916-323-2514
Date Made Active in Reports: 09/30/2022	Last EDR Contact: 10/17/2022
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/29/2022 Date Data Arrived at EDR: 08/18/2022 Date Made Active in Reports: 10/24/2022 Number of Days to Update: 67 Source: Drug Enforcement Administration Telephone: 202-307-1000 Last EDR Contact: 08/18/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 09/06/2022 Date Data Arrived at EDR: 09/06/2022 Date Made Active in Reports: 10/26/2022 Number of Days to Update: 50 Source: State Water Resources Control Board Telephone: 916-341-5455 Last EDR Contact: 09/06/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/24/2022 Number of Days to Update: 78 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994Source: State Water Resources Control BoardDate Data Arrived at EDR: 07/07/2005Telephone: N/ADate Made Active in Reports: 08/11/2005Last EDR Contact: 06/03/2005Number of Days to Update: 35Next Scheduled EDR Contact: N/AData Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.		
Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991 Number of Days to Update: 18	Source: State Water Resources Control Board Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned	
SAN FRANCISCO AST: Aboveground Storage Tank Site Listing Aboveground storage tank sites		
Date of Government Version: 08/04/2022 Date Data Arrived at EDR: 08/04/2022 Date Made Active in Reports: 10/20/2022 Number of Days to Update: 77	Source: San Francisco County Department of Public Health Telephone: 415-252-3896 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies	
CA FID UST: Facility Inventory Database The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.		
Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995 Number of Days to Update: 24	Source: California Environmental Protection Agency Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned	
CERS TANKS: California Environmental Reporting System (CERS) Tanks List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.		
Date of Government Version: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 74	Source: California Environmental Protection Agency Telephone: 916-323-2514 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Quarterly	
Local Land Records		
LIENS: Environmental Liens Listing A listing of property locations with environmental liens for California where DTSC is a lien holder.		

Date of Government Version: 05/25/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/26/2022	Telephone: 916-323-3400
Date Made Active in Reports: 08/11/2022	Last EDR Contact: 08/23/2022
Number of Days to Update: 77	Next Scheduled EDR Contact: 12/12/2022
	Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/26/2022Source: Environmental Protection AgencyDate Data Arrived at EDR: 08/02/2022Telephone: 202-564-6023Date Made Active in Reports: 08/22/2022Last EDR Contact: 10/05/2022Number of Days to Update: 20Next Scheduled EDR Contact: 01/09/2023Data Release Frequency: Semi-Annually

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DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/31/2022 Date Data Arrived at EDR: 05/31/2022 Date Made Active in Reports: 08/18/2022 Number of Days to Update: 79 Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 08/25/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/19/2022	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/19/2022	Telephone: 202-366-4555
Date Made Active in Reports: 09/30/2022	Last EDR Contact: 09/19/2022
Number of Days to Update: 11	Next Scheduled EDR Contact: 01/02/2023
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 74 Source: Office of Emergency Services Telephone: 916-845-8400 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022	Source: State Water Qualilty Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 05/24/2022	Last EDR Contact: 08/31/2022
Number of Days to Update: 1	Next Scheduled EDR Contact: 12/19/2022
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 05/24/2022 Number of Days to Update: 1 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012Source: FirstSearchDate Data Arrived at EDR: 01/03/2013Telephone: N/ADate Made Active in Reports: 02/22/2013Last EDR Contact: 01/03/2013Number of Days to Update: 50Next Scheduled EDR Contact: N/AData Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 06/28/2022 Number of Days to Update: 7 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 50 Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 08/11/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021	Source: USGS
Date Data Arrived at EDR: 07/13/2021	Telephone: 888-275-8747
Date Made Active in Reports: 03/09/2022	Last EDR Contact: 10/13/2022
Number of Days to Update: 239	Next Scheduled EDR Contact: 01/23/2023
	Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	
Date Data Arrived at EDR: 04/11/2018	
Date Made Active in Reports: 11/06/2019	
Number of Days to Update: 574	

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/03/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 63 Source: Environmental Protection Agency Telephone: 615-532-8599 Last EDR Contact: 08/03/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/20/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 08/31/2022 Number of Days to Update: 71 Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 09/20/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88 Source: Environmental Protection Agency Telephone: 617-520-3000 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018 Number of Days to Update: 73 Source: Environmental Protection Agency Telephone: 703-308-4044 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/17/2020 Date Made Active in Reports: 09/10/2020 Number of Days to Update: 85 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 09/12/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 08/14/2020 Date Made Active in Reports: 11/04/2020 Number of Days to Update: 82 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 08/11/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 07/29/2022 Number of Days to Update: 11 Source: EPA Telephone: 202-564-4203 Last EDR Contact: 10/18/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20

Source: EPA Telephone: 703-416-0223 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022 Date Data Arrived at EDR: 05/04/2022 Date Made Active in Reports: 05/10/2022 Number of Days to Update: 6 Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 10/27/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties A listing of verified Potentially Responsible Parties Date of Government Version: 07/26/2022 Source: EPA Date Data Arrived at EDR: 08/02/2022 Telephone: 202-564-6023 Date Made Active in Reports: 08/31/2022 Last EDR Contact: 10/05/2022 Number of Days to Update: 29 Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Quarterly PADS: PCB Activity Database System PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities. Source: EPA Date of Government Version: 01/20/2022 Date Data Arrived at EDR: 01/20/2022 Telephone: 202-566-0500 Date Made Active in Reports: 03/25/2022 Last EDR Contact: 10/06/2022 Number of Days to Update: 64 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Annually ICIS: Integrated Compliance Information System The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program. Date of Government Version: 11/18/2016 Source: Environmental Protection Agency Date Data Arrived at EDR: 11/23/2016 Telephone: 202-564-2501 Date Made Active in Reports: 02/10/2017 Last EDR Contact: 09/27/2022 Number of Days to Update: 79 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis. Date of Government Version: 04/09/2009 Source: EPA/Office of Prevention, Pesticides and Toxic Substances Date Data Arrived at EDR: 04/16/2009 Telephone: 202-566-1667 Last EDR Contact: 08/18/2017 Date Made Active in Reports: 05/11/2009 Number of Days to Update: 25 Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements. Date of Government Version: 04/09/2009 Source: EPA Date Data Arrived at EDR: 04/16/2009 Telephone: 202-566-1667 Date Made Active in Reports: 05/11/2009 Last EDR Contact: 08/18/2017 Number of Days to Update: 25 Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned MLTS: Material Licensing Tracking System MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis. Date of Government Version: 06/10/2022 Source: Nuclear Regulatory Commission Date Data Arrived at EDR: 06/14/2022 Telephone: 301-415-7169 Date Made Active in Reports: 08/22/2022 Last EDR Contact: 10/11/2022 Number of Days to Update: 69 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020	Source: Department of Energy
Date Data Arrived at EDR: 11/30/2021	Telephone: 202-586-8719
Date Made Active in Reports: 02/22/2022	Last EDR Contact: 08/25/2022
Number of Days to Update: 84	Next Scheduled EDR Contact: 12/12/2022
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 08/25/2022
Number of Days to Update: 251	Next Scheduled EDR Contact: 12/12/2022
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 08/04/2022
Number of Days to Update: 96	Next Scheduled EDR Contact: 11/14/2022
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 84

Source: Environmental Protection Agency Telephone: 202-343-9775 Last EDR Contact: 09/21/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

	Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40	Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2008 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned	
DOT	OPS: Incident and Accident Data Department of Transporation, Office of Pipeline	Safety Incident and Accident data.	
	Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020 Number of Days to Update: 80	Source: Department of Transporation, Office of Pipeline Safety Telephone: 202-366-4595 Last EDR Contact: 10/24/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly	
CON	ONSENT: Superfund (CERCLA) Consent Decrees Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.		
	Date of Government Version: 06/30/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 71	Source: Department of Justice, Consent Decree Library Telephone: Varies Last EDR Contact: 09/27/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies	
BRS	RS: Biennial Reporting System The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.		
	Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 03/02/2022 Date Made Active in Reports: 03/25/2022 Number of Days to Update: 23	Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Biennially	
INDIAN RESERV: Indian Reservations This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.			
	Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017 Number of Days to Update: 546	Source: USGS Telephone: 202-208-3710 Last EDR Contact: 10/06/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually	
FUSI	FUSRAP: Formerly Utilized Sites Remedial Action Program DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations		
	Date of Government Version: 07/26/2021 Date Data Arrived at EDR: 07/27/2021 Date Made Active in Reports: 10/22/2021 Number of Days to Update: 87	Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 10/27/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies	
имт	RA: Uranium Mill Tailings Sites		

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020 Number of Days to Update: 74	Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 08/24/2022 Next Scheduled EDR Contact: 11/28/2022	
	Data Release Frequency: Varies	
LEAD SMELTER 1: Lead Smelter Sites A listing of former lead smelter site locations.		
Date of Government Version: 07/26/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 20	Source: Environmental Protection Agency Telephone: 703-603-8787 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Varies	
LEAD SMELTER 2: Lead Smelter Sites A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These site may pose a threat to public health through ingestion or inhalation of contaminated soil or dust		
Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010 Number of Days to Update: 36	Source: American Journal of Public Health Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned	
JS AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS) The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.		
Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 100	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 09/26/2017 Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually	
US AIRS MINOR: Air Facility System Data A listing of minor source facilities.		
Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 100	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 09/26/2017 Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually	
MINES VIOLATIONS: MSHA Violation Assessment Data Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.		
Date of Government Version: 08/01/2022 Date Data Arrived at EDR: 08/02/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 59	Source: DOL, Mine Safety & Health Admi Telephone: 202-693-9424 Last EDR Contact: 10/04/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Quarterly	
US MINES: Mines Master Index File		

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/03/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 08/31/2022 Number of Days to Update: 14 Source: Department of Labor, Mine Safety and Health Administration Telephone: 303-231-5959 Last EDR Contact: 08/17/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020	Source: USGS
Date Data Arrived at EDR: 05/27/2020	Telephone: 703-648-7709
Date Made Active in Reports: 08/13/2020	Last EDR Contact: 08/17/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 12/05/2022
	Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97 Source: USGS Telephone: 703-648-7709 Last EDR Contact: 08/17/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 08/22/2022 Number of Days to Update: 68 Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/13/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/03/2022 Date Data Arrived at EDR: 08/25/2022 Date Made Active in Reports: 10/24/2022 Number of Days to Update: 60 Source: EPA Telephone: (415) 947-8000 Last EDR Contact: 08/25/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/25/2022 Date Data Arrived at EDR: 07/01/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 91 Source: Environmental Protection Agency Telephone: 202-564-2280 Last EDR Contact: 09/30/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.			
Date of Government Version: 05/06/2021 Date Data Arrived at EDR: 05/21/2021 Date Made Active in Reports: 08/11/2021 Number of Days to Update: 82	Source: Environmental Protection Agency Telephone: 202-564-0527 Last EDR Contact: 08/22/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies		
UXO: Unexploded Ordnance Sites A listing of unexploded ordnance site locations			
Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 01/11/2022 Date Made Active in Reports: 02/14/2022 Number of Days to Update: 34	Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies		
FUELS PROGRAM: EPA Fuels Program Registered Listing This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.			
Date of Government Version: 08/11/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 50	Source: EPA Telephone: 800-385-6164 Last EDR Contact: 08/11/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Quarterly		
CA BOND EXP. PLAN: Bond Expenditure Plan Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.			
Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994 Number of Days to Update: 6	Source: Department of Health Services Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned		
CORTESE: "Cortese" Hazardous Waste & Substances Sites List The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).			
Date of Government Version: 06/21/2022 Date Data Arrived at EDR: 06/21/2022 Date Made Active in Reports: 09/08/2022 Number of Days to Update: 79	Source: CAL EPA/Office of Emergency Information Telephone: 916-323-3400 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly		
CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing list of facilities associated with the various CUPA programs in Livermore-Pleasanton			
Date of Government Version: 12/07/2021 Date Data Arrived at EDR: 05/09/2022 Date Made Active in Reports: 05/17/2022 Number of Days to Update: 8	Source: Livermore-Pleasanton Fire Department Telephone: 925-454-2361 Last EDR Contact: 08/11/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Varies		

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/20/2022		
Date Data Arrived at EDR: 05/20/2022		
Date Made Active in Reports: 08/09/2022		
Number of Days to Update: 81		

Source: South Coast Air Quality Management District Telephone: 909-396-3211 Last EDR Contact: 08/16/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021 Date Data Arrived at EDR: 09/01/2021 Date Made Active in Reports: 11/19/2021 Number of Days to Update: 79 Source: Department of Toxic Substance Control Telephone: 916-327-4498 Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/25/2022	Source: Antelope Valley Air Quality Management District
Date Data Arrived at EDR: 05/26/2022	Telephone: 661-723-8070
Date Made Active in Reports: 08/11/2022	Last EDR Contact: 08/23/2022
Number of Days to Update: 77	Next Scheduled EDR Contact: 12/12/2022
	Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 06/13/2022 Date Made Active in Reports: 08/30/2022 Number of Days to Update: 78 Source: California Air Resources Board Telephone: 916-322-2990 Last EDR Contact: 09/16/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/12/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/29/2022 Number of Days to Update: 73 Source: State Water Resoruces Control Board Telephone: 916-445-9379 Last EDR Contact: 10/19/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing Financial Assurance information

Date of Government Version: 07/06/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/21/2022	Telephone: 916-255-3628
Date Made Active in Reports: 10/03/2022	Last EDR Contact: 10/11/2022
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/09/2022 Date Data Arrived at EDR: 08/10/2022 Date Made Active in Reports: 08/30/2022 Number of Days to Update: 20 Source: California Integrated Waste Management Board Telephone: 916-341-6066 Last EDR Contact: 08/02/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021Source: California Environmental Protection AgencyDate Data Arrived at EDR: 07/05/2022Telephone: 916-255-1136Date Made Active in Reports: 09/19/2022Last EDR Contact: 09/27/2022Number of Days to Update: 76Next Scheduled EDR Contact: 01/16/2023Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/11/2022	Source: Department of Toxic Subsances Control
Date Data Arrived at EDR: 08/11/2022	Telephone: 877-786-9427
Date Made Active in Reports: 10/28/2022	Last EDR Contact: 08/11/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/28/2022
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009 Number of Days to Update: 76 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/11/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/11/2022	Telephone: 916-323-3400
Date Made Active in Reports: 10/28/2022	Last EDR Contact: 08/11/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/28/2022
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/05/2022 Date Data Arrived at EDR: 07/05/2022 Date Made Active in Reports: 09/19/2022 Number of Days to Update: 76 Source: Department of Toxic Substances Control Telephone: 916-440-7145 Last EDR Contact: 10/03/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Quarterly

MINES: Mines Site Location Listing A listing of mine site locations from the Office of Mine Reclamation.		
Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/23/2022 Number of Days to Update: 77	Source: Department of Conservation Telephone: 916-322-1080 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly	
MWMP: Medical Waste Management Program Listing The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by pe and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.		
Date of Government Version: 05/06/2022 Date Data Arrived at EDR: 05/31/2022 Date Made Active in Reports: 08/18/2022 Number of Days to Update: 79	Source: Department of Public Health Telephone: 916-558-1784 Last EDR Contact: 08/25/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Varies	
NPDES: NPDES Permits Listing A listing of NPDES permits, including stormwater.		
Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/08/2022 Date Made Active in Reports: 10/20/2022 Number of Days to Update: 73	Source: State Water Resources Control Board Telephone: 916-445-9379 Last EDR Contact: 08/08/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: Quarterly	
PEST LIC: Pesticide Regulation Licenses Listing A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.		
Date of Government Version: 05/31/2022 Date Data Arrived at EDR: 05/31/2022 Date Made Active in Reports: 08/18/2022 Number of Days to Update: 79	Source: Department of Pesticide Regulation Telephone: 916-445-4038 Last EDR Contact: 08/25/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Quarterly	
PROC: Certified Processors Database A listing of certified processors.		
Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/23/2022 Number of Days to Update: 77	Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly	
NOTIFY 65: Proposition 65 Records Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer undeted by the reporting account		
Date of Government Version: 06/10/2022 Date Data Arrived at EDR: 06/10/2022 Date Made Active in Reports: 08/26/2022 Number of Days to Update: 77	Source: State Water Resources Control Board Telephone: 916-445-3846 Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/26/2022	

Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/23/2022 Number of Days to Update: 77 Source: Deaprtment of Conservation Telephone: 916-445-2408 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER) Underground control injection sites

Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10 Source: State Water Resource Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021 Date Data Arrived at EDR: 07/01/2021 Date Made Active in Reports: 09/29/2021 Number of Days to Update: 90 Source: RWQCB, Central Valley Region Telephone: 559-445-5577 Last EDR Contact: 10/06/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 08/09/2022
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/28/2022
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 09/13/2022
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/02/2023
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER) Military privatized sites

Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER) Projects sites
Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/06/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/24/2022 Number of Days to Update: 78 Source: State Water Resources Control Board Telephone: 916-341-5810 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/16/2022 Date Data Arrived at EDR: 08/17/2022 Date Made Active in Reports: 08/18/2022 Number of Days to Update: 1 Source: State Water Resources Control Board Telephone: 866-794-4977 Last EDR Contact: 08/17/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/18/2022 Date Data Arrived at EDR: 07/18/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 74 Source: California Environmental Protection Agency Telephone: 916-323-2514 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER) Non-Case Information sites

Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER) Other Oil & Gas Projects sites

Date of Government Version: 05/23/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/23/2022	Telephone: 866-480-1028
Date Made Active in Reports: 06/02/2022	Last EDR Contact: 08/31/2022
Number of Days to Update: 10	Next Scheduled EDR Contact: 12/19/2022
	Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER) Produced water ponds sites		
Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies	
SAMPLING POINT: Sampling Point ? Public Sites (Sampling point - public sites	(GEOTRACKER)	
Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies	
WELL STIM PROJ: Well Stimulation Project (GEOT Includes areas of groundwater monitoring plar and subsurface characteristics of the oilfield ar wells, water supply wells, etc?) being monitore	TRACKER) ns, a depiction of the monitoring network, and the facilities, boundaries, nd the features (oil and gas wells, produced water ponds, UIC ed	
Date of Government Version: 05/23/2022 Date Data Arrived at EDR: 05/23/2022 Date Made Active in Reports: 06/02/2022 Number of Days to Update: 10	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Varies	
PCS INACTIVE: Listing of Inactive PCS Permits An inactive permit is a facility that has shut do	wn or is no longer discharging.	
Date of Government Version: 11/05/2014 Date Data Arrived at EDR: 01/06/2015 Date Made Active in Reports: 05/06/2015 Number of Days to Update: 120	Source: EPA Telephone: 202-564-2496 Last EDR Contact: 09/28/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually	
PCS ENF: Enforcement data No description is available for this data		
Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 02/05/2015 Date Made Active in Reports: 03/06/2015 Number of Days to Update: 29	Source: EPA Telephone: 202-564-2497 Last EDR Contact: 09/28/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies	
HWTS: Hazardous Waste Tracking System DTSC maintains the Hazardous Waste Trackin manifest data since 1993. The system collects	ng System that stores ID number information since the early 1980s and soth manifest copies from the generator and destination facility.	
Date of Government Version: 04/05/2022 Date Data Arrived at EDR: 04/05/2022 Date Made Active in Reports: 04/26/2022 Number of Days to Update: 21	Source: Department of Toxic Substances Control Telephone: 916-324-2444 Last EDR Contact: 10/03/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Varies	

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 3 Source: USGS Telephone: 703-648-6533 Last EDR Contact: 08/17/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011 Date Data Arrived at EDR: 08/05/2011 Date Made Active in Reports: 09/29/2011 Number of Days to Update: 55 Source: EPA, Office of Water Telephone: 202-564-2496 Last EDR Contact: 09/28/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014 Number of Days to Update: 196 Source: Department of Resources Recycling and Recovery Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013 Number of Days to Update: 182 Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019 Date Data Arrived at EDR: 01/11/2019 Date Made Active in Reports: 03/05/2019 Number of Days to Update: 53 Source: Alameda County Environmental Health Services Telephone: 510-567-6700 Last EDR Contact: 09/27/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/29/2022	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 06/29/2022	Telephone: 510-567-6700
Date Made Active in Reports: 07/21/2022	Last EDR Contact: 09/27/2022
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/16/2023
	Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List Cupa Facility List

> Date of Government Version: 07/22/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 08/01/2022 Number of Days to Update: 5

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

> Date of Government Version: 04/21/2017 Date Data Arrived at EDR: 04/25/2017 Date Made Active in Reports: 08/09/2017 Number of Days to Update: 106

Source: Amador County Environmental Health Telephone: 209-223-6439 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 09/27/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

> Date of Government Version: 06/14/2022 Date Data Arrived at EDR: 06/15/2022 Date Made Active in Reports: 09/02/2022 Number of Days to Update: 79

Source: Calveras County Environmental Health Telephone: 209-754-6399 Last EDR Contact: 09/27/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

> Date of Government Version: 04/06/2020 Date Data Arrived at EDR: 04/23/2020 Date Made Active in Reports: 07/10/2020 Number of Days to Update: 78

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/20/2022 Date Data Arrived at EDR: 07/20/2022 Date Made Active in Reports: 10/03/2022 Number of Days to Update: 75 Source: Contra Costa Health Services Department Telephone: 925-646-2286 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 05/04/2022 Date Data Arrived at EDR: 05/06/2022 Date Made Active in Reports: 07/28/2022 Number of Days to Update: 83

Source: Del Norte County Environmental Health Division Telephone: 707-465-0426 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

> Date of Government Version: 08/08/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 09/01/2022 Number of Days to Update: 23

Source: El Dorado County Environmental Management Department Telephone: 530-621-6623 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021 Date Data Arrived at EDR: 12/21/2021 Date Made Active in Reports: 03/03/2022 Number of Days to Update: 72 Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 09/30/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List Cupa facility list

> Date of Government Version: 01/22/2018 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 03/14/2018 Number of Days to Update: 49

Source: Glenn County Air Pollution Control District Telephone: 830-934-6500 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

> Date of Government Version: 08/12/2021 Date Data Arrived at EDR: 08/12/2021 Date Made Active in Reports: 11/08/2021 Number of Days to Update: 88

Source: Humboldt County Environmental Health Telephone: N/A Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

> Date of Government Version: 07/13/2022 Date Data Arrived at EDR: 07/14/2022 Date Made Active in Reports: 09/29/2022 Number of Days to Update: 77

Source: San Diego Border Field Office Telephone: 760-339-2777 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

> Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/03/2018 Date Made Active in Reports: 06/14/2018 Number of Days to Update: 72

Source: Inyo County Environmental Health Services Telephone: 760-878-0238 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 05/06/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022 Number of Days to Update: 81 Source: Kern County Public Health Telephone: 661-321-3000 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/06/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 08/01/2022 Number of Days to Update: 81 Source: Kern County Environment Health Services Department Telephone: 661-862-8700 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020 Date Data Arrived at EDR: 01/26/2021 Date Made Active in Reports: 04/14/2021 Number of Days to Update: 78 Source: Kings County Department of Public Health Telephone: 559-584-1411 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 07/22/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 10/05/2022 Number of Days to Update: 72 Source: Lake County Environmental Health Telephone: 707-263-1164 Last EDR Contact: 10/04/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List Cupa facility list

> Date of Government Version: 07/31/2020 Date Data Arrived at EDR: 08/21/2020 Date Made Active in Reports: 11/09/2020 Number of Days to Update: 80

Source: Lassen County Environmental Health Telephone: 530-251-8528 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009 Number of Days to Update: 206 Source: N/A Telephone: N/A Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2022 Date Data Arrived at EDR: 07/07/2022 Date Made Active in Reports: 09/21/2022 Number of Days to Update: 76 Source: Department of Public Works Telephone: 626-458-3517 Last EDR Contact: 09/27/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 07/11/2022 Date Data Arrived at EDR: 07/11/2022 Date Made Active in Reports: 09/23/2022 Number of Days to Update: 74

Source: La County Department of Public Works Telephone: 818-458-5185 Last EDR Contact: 10/07/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022	Source: Engineering & Construction Division
Date Data Arrived at EDR: 01/21/2022	Telephone: 213-473-7869
Date Made Active in Reports: 04/11/2022	Last EDR Contact: 10/04/2022
Number of Days to Update: 80	Next Scheduled EDR Contact: 01/23/2023
	Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019 Number of Days to Update: 58 Source: Los Angeles Fire Department Telephone: 213-978-3800 Last EDR Contact: 09/19/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 01/12/2022	Telephone: 626-458-6973
Date Made Active in Reports: 04/04/2022	Last EDR Contact: 10/04/2022
Number of Days to Update: 82	Next Scheduled EDR Contact: 01/23/2023
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 01/13/2022	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 03/21/2022	Telephone: 213-978-3800
Date Made Active in Reports: 06/15/2022	Last EDR Contact: 09/20/2022
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/02/2023
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 03/22/2022 Date Data Arrived at EDR: 06/24/2022 Date Made Active in Reports: 09/08/2022 Number of Days to Update: 76 Source: Los Angeles Fire Department Telephone: 213-978-3800 Last EDR Contact: 09/20/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021	Source:
Date Data Arrived at EDR: 07/09/2021	Telephon
Date Made Active in Reports: 09/29/2021	Last EDR
Number of Days to Update: 82	Next Sch

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/04/2022
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/23/2023
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/27/2019 Number of Days to Update: 65 Source: City of Long Beach Fire Department Telephone: 562-570-2563 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/22/2022	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/19/2022	Telephone: 310-618-2973
Date Made Active in Reports: 09/30/2022	Last EDR Contact: 10/11/2022
Number of Days to Update: 73	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020 Date Data Arrived at EDR: 08/12/2020 Date Made Active in Reports: 10/23/2020 Number of Days to Update: 72 Source: Madera County Environmental Health Telephone: 559-675-7823 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/02/2018 Number of Days to Update: 29

Source: Public Works Department Waste Management Telephone: 415-473-6647 Last EDR Contact: 09/21/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021 Date Data Arrived at EDR: 11/18/2021 Date Made Active in Reports: 11/22/2021 Number of Days to Update: 4

Source: Department of Public Health Telephone: 707-463-4466 Last EDR Contact: 08/16/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List CUPA facility list.

Date of Government Version: 02/15/2022 Date Data Arrived at EDR: 02/17/2022 Date Made Active in Reports: 05/11/2022 Number of Days to Update: 83 Source: Merced County Environmental Health Telephone: 209-381-1094 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List CUPA Facility List

> Date of Government Version: 02/22/2021 Date Data Arrived at EDR: 03/02/2021 Date Made Active in Reports: 05/19/2021 Number of Days to Update: 78

Source: Mono County Health Department Telephone: 760-932-5580 Last EDR Contact: 08/15/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021 Date Data Arrived at EDR: 10/06/2021 Date Made Active in Reports: 12/29/2021 Number of Days to Update: 84

Source: Monterey County Health Department Telephone: 831-796-1297 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 03/02/2017 Number of Days to Update: 50 Source: Napa County Department of Environmental Management Telephone: 707-253-4269 Last EDR Contact: 08/15/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2022
Next Scheduled EDR Contact: 12/05/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 07/21/2022 Date Data Arrived at EDR: 07/25/2022 Date Made Active in Reports: 07/28/2022 Number of Days to Update: 3 Source: Community Development Agency Telephone: 530-265-1467 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

> Date of Government Version: 05/24/2022 Date Data Arrived at EDR: 08/09/2022 Date Made Active in Reports: 10/28/2022 Number of Days to Update: 80

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 07/29/2022 Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2022
Next Scheduled EDR Contact: 11/14/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/24/2022 Date Data Arrived at EDR: 08/01/2022 Date Made Active in Reports: 10/20/2022 Number of Days to Update: 80 Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/01/2022 Next Scheduled EDR Contact: 11/14/2022 Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2022 Date Data Arrived at EDR: 05/26/2022 Date Made Active in Reports: 06/01/2022 Number of Days to Update: 6 Source: Placer County Health and Human Services Telephone: 530-745-2363 Last EDR Contact: 08/23/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List Plumas County CUPA Program facilities.

> Date of Government Version: 03/31/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/26/2019 Number of Days to Update: 64

Source: Plumas County Environmental Health Telephone: 530-283-6355 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIE Riverside (DE: Listing of Underground Tank Cle County Underground Storage Tank C	anup Sites Ieanup Sites (LUST).
Date of Go Date Data Date Made Number of	vernment Version: 07/07/2022 Arrived at EDR: 07/08/2022 Active in Reports: 09/21/2022 Days to Update: 75	Source: Department of Environmental Health Telephone: 951-358-5055 Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Quarterly
UST RIVERSIDE Undergrou	E: Underground Storage Tank Tank nd storage tank sites located in River	List rside county.
Date of Go Date Data Date Made Number of	vernment Version: 07/07/2022 Arrived at EDR: 07/08/2022 Active in Reports: 09/21/2022 Days to Update: 75	Source: Department of Environmental Health Telephone: 951-358-5055 Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Quarterly
SACRAMENTO	COUNTY:	
CS SACRAMEN List of sites	TO: Toxic Site Clean-Up List where unauthorized releases of pot	entially hazardous materials have occurred.
Date of Go Date Data Date Made Number of	vernment Version: 06/18/2021 Arrived at EDR: 09/28/2021 Active in Reports: 12/14/2021 Days to Update: 77	Source: Sacramento County Environmental Management Telephone: 916-875-8406 Last EDR Contact: 09/30/2022 Next Scheduled EDR Contact: 01/09/2023 Data Release Frequency: Quarterly
ML SACRAMEN Any busine waste gene	TO: Master Hazardous Materials Fa ess that has hazardous materials on s erators.	cility List site - hazardous material storage sites, underground storage tanks,
Date of Go Date Data Date Made Number of	vernment Version: 05/04/2022 Arrived at EDR: 06/30/2022 Active in Reports: 07/05/2022 Days to Update: 5	Source: Sacramento County Environmental Management Telephone: 916-875-8406 Last EDR Contact: 09/26/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Quarterly
SAN BENITO CO	OUNTY:	
CUPA SAN BEN Cupa facili	IITO: CUPA Facility List ty list	

Date of Government Version: 07/27/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 10/11/2022 Number of Days to Update: 76 Source: San Benito County Environmental Health Telephone: N/A Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/12/2022 Date Data Arrived at EDR: 05/12/2022 Date Made Active in Reports: 05/18/2022 Number of Days to Update: 6 Source: San Bernardino County Fire Department Hazardous Materials Division Telephone: 909-387-3041 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/31/2022	Source: Hazardous Materials Management Division
Date Data Arrived at EDR: 05/31/2022	Telephone: 619-338-2268
Date Made Active in Reports: 08/18/2022	Last EDR Contact: 08/25/2022
Number of Days to Update: 79	Next Scheduled EDR Contact: 12/12/2022
	Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities San Diego County Solid Waste Facilities.

> Date of Government Version: 10/27/2021 Date Data Arrived at EDR: 03/04/2022 Date Made Active in Reports: 05/31/2022 Number of Days to Update: 88

Source: Department of Health Services Telephone: 619-338-2209 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021 Date Data Arrived at EDR: 10/19/2021 Date Made Active in Reports: 01/13/2022 Number of Days to Update: 86 Source: Department of Environmental Health Telephone: 858-505-6874 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010 Number of Days to Update: 24 Source: San Diego County Department of Environmental Health Telephone: 619-338-2371 Last EDR Contact: 08/23/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing Cupa facilities

Date of Government Version: 08/04/2022 Date Data Arrived at EDR: 08/04/2022 Date Made Active in Reports: 10/20/2022 Number of Days to Update: 77 Source: San Francisco County Department of Environmental Health Telephone: 415-252-3896 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 10/26/2022
Number of Days to Update: 10	Next Scheduled EDR Contact: 02/16/2023
	Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/04/2022Source: Department of Public HealthDate Data Arrived at EDR: 08/04/2022Telephone: 415-252-3920Date Made Active in Reports: 10/20/2022Last EDR Contact: 10/26/2022Number of Days to Update: 77Next Scheduled EDR Contact: 02/16/2023Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 01/18/2022 Date Data Arrived at EDR: 01/20/2022 Date Made Active in Reports: 04/27/2022 Number of Days to Update: 97

Source: San Francisco Planning Telephone: 628-652-7483 Last EDR Contact: 10/07/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 07/11/2018 Number of Days to Update: 15 Source: Environmental Health Department Telephone: N/A Last EDR Contact: 09/07/2022 Next Scheduled EDR Contact: 12/26/2022 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

> Date of Government Version: 08/10/2022 Date Data Arrived at EDR: 08/11/2022 Date Made Active in Reports: 10/28/2022 Number of Days to Update: 78

Source: San Luis Obispo County Public Health Department Telephone: 805-781-5596 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 04/24/2020 Number of Days to Update: 64 Source: San Mateo County Environmental Health Services Division Telephone: 650-363-1921 Last EDR Contact: 09/09/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 03/29/2019	Telephone: 650-363-1921
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 08/29/2022
Number of Days to Update: 61	Next Scheduled EDR Contact: 12/19/2022
	Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011	Source: Santa Barbara County Public Health Department
Date Data Arrived at EDR: 09/09/2011	Telephone: 805-686-8167
Date Made Active in Reports: 10/07/2011	Last EDR Contact: 08/09/2022
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/28/2022
	Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List Cupa facility list

Date of Government Version: 05/16/2022	Source: Department of Environmental Health
Date Data Arrived at EDR: 05/18/2022	Telephone: 408-918-1973
Date Made Active in Reports: 08/04/2022	Last EDR Contact: 08/09/2022
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/28/2022
	Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 22 Source: Santa Clara Valley Water District Telephone: 408-265-2600 Last EDR Contact: 03/23/2009 Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014 Number of Days to Update: 13 Source: Department of Environmental Health Telephone: 408-918-3417 Last EDR Contact: 08/15/2022 Next Scheduled EDR Contact: 12/05/2022 Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020 Date Data Arrived at EDR: 11/05/2020 Date Made Active in Reports: 01/26/2021 Number of Days to Update: 82 Source: City of San Jose Fire Department Telephone: 408-535-7694 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

> Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/23/2017 Number of Days to Update: 90

Source: Santa Cruz County Environmental Health Telephone: 831-464-2761 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

> Date of Government Version: 06/15/2017 Date Data Arrived at EDR: 06/19/2017 Date Made Active in Reports: 08/09/2017 Number of Days to Update: 51

Source: Shasta County Department of Resource Management Telephone: 530-225-5789 Last EDR Contact: 08/09/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 08/13/2019 Number of Days to Update: 68 Source: Solano County Department of Environmental Management Telephone: 707-784-6770 Last EDR Contact: 08/23/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021 Date Data Arrived at EDR: 09/16/2021 Date Made Active in Reports: 12/09/2021 Number of Days to Update: 84 Source: Solano County Department of Environmental Management Telephone: 707-784-6770 Last EDR Contact: 08/23/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

	Date of Government Version: 07/02/2021 Date Data Arrived at EDR: 07/06/2021 Date Made Active in Reports: 07/14/2021 Number of Days to Update: 8	Source: County of Sonoma Fire & Emergency Services Department Telephone: 707-565-1174 Last EDR Contact: 09/13/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Varies
LUS	T SONOMA: Leaking Underground Storage Tar A listing of leaking underground storage tank si	nk Sites tes located in Sonoma county.
	Date of Government Version: 06/30/2021 Date Data Arrived at EDR: 06/30/2021 Date Made Active in Reports: 09/24/2021 Number of Days to Update: 86	Source: Department of Health Services Telephone: 707-565-6565 Last EDR Contact: 09/13/2022 Next Scheduled EDR Contact: 01/02/2023 Data Release Frequency: Quarterly
STA	NISLAUS COUNTY:	
CUP	A STANISLAUS: CUPA Facility List Cupa facility list	
	Date of Government Version: 02/08/2022 Date Data Arrived at EDR: 02/10/2022 Date Made Active in Reports: 05/04/2022 Number of Days to Update: 83	Source: Stanislaus County Department of Ennvironmental Protection Telephone: 209-525-6751 Last EDR Contact: 10/04/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Varies
SUT	TER COUNTY:	
UST	SUTTER: Underground Storage Tanks Underground storage tank sites located in Sutte	er county.
	Date of Government Version: 05/03/2022 Date Data Arrived at EDR: 05/27/2022 Date Made Active in Reports: 08/11/2022 Number of Days to Update: 76	Source: Sutter County Environmental Health Services Telephone: 530-822-7500 Last EDR Contact: 08/23/2022 Next Scheduled EDR Contact: 12/12/2022 Data Release Frequency: Semi-Annually
тен	AMA COUNTY:	
CUP	A TEHAMA: CUPA Facility List Cupa facilities	
	Date of Government Version: 07/27/2022 Date Data Arrived at EDR: 07/27/2022 Date Made Active in Reports: 10/11/2022 Number of Days to Update: 76	Source: Tehama County Department of Environmental Health Telephone: 530-527-8020 Last EDR Contact: 10/26/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies
TRIN	ITY COUNTY:	
CUP	A TRINITY: CUPA Facility List Cupa facility list	
	Date of Government Version: 07/13/2022 Date Data Arrived at EDR: 07/14/2022 Date Made Active in Reports: 09/29/2022 Number of Days to Update: 77	Source: Department of Toxic Substances Control Telephone: 760-352-0381 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 04/26/2021 Date Data Arrived at EDR: 04/28/2021 Date Made Active in Reports: 07/13/2021 Number of Days to Update: 76 Source: Tulare County Environmental Health Services Division Telephone: 559-624-7400 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 02/16/2023 Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

> Date of Government Version: 04/23/2018 Date Data Arrived at EDR: 04/25/2018 Date Made Active in Reports: 06/25/2018 Number of Days to Update: 61

Source: Divison of Environmental Health Telephone: 209-533-5633 Last EDR Contact: 10/11/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/26/2022 Date Data Arrived at EDR: 07/21/2022 Date Made Active in Reports: 09/30/2022 Number of Days to Update: 71 Source: Ventura County Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 10/17/2022 Next Scheduled EDR Contact: 01/30/2023 Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 09/21/2022
Number of Days to Update: 49	Next Scheduled EDR Contact: 01/10/2023
	Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 08/02/2022
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/21/2022
	Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/26/2022	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 07/25/2022	Telephone: 805-654-2813
Date Made Active in Reports: 10/05/2022	Last EDR Contact: 10/17/2022
Number of Days to Update: 72	Next Scheduled EDR Contact: 01/30/2023
	Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2022 Date Data Arrived at EDR: 06/07/2022 Date Made Active in Reports: 08/24/2022 Number of Days to Update: 78 Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 08/31/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 06/22/2022 Date Data Arrived at EDR: 06/30/2022 Date Made Active in Reports: 09/14/2022 Number of Days to Update: 76 Source: Yolo County Department of Health Telephone: 530-666-8646 Last EDR Contact: 09/21/2022 Next Scheduled EDR Contact: 01/10/2023 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List CUPA facility listing for Yuba County.

> Date of Government Version: 05/03/2022 Date Data Arrived at EDR: 05/05/2022 Date Made Active in Reports: 07/28/2022 Number of Days to Update: 84

Source: Yuba County Environmental Health Department Telephone: 530-749-7523 Last EDR Contact: 10/20/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/08/2022
Date Made Active in Reports: 10/21/2022
Number of Days to Update: 74

Source: Department of Energy & Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 08/08/2022 Next Scheduled EDR Contact: 11/21/2022 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019 Number of Days to Update: 36 Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 10/03/2022 Next Scheduled EDR Contact: 01/16/2023 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 10/29/2021 Date Made Active in Reports: 01/19/2022 Number of Days to Update: 82

PA MANIFEST: Manifest Information Hazardous waste manifest information.

> Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019 Number of Days to Update: 53

RI MANIFEST: Manifest information Hazardous waste manifest information

> Date of Government Version: 12/31/2020 Date Data Arrived at EDR: 11/30/2021 Date Made Active in Reports: 02/18/2022 Number of Days to Update: 80

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019 Number of Days to Update: 76 Source: Department of Environmental Conservation Telephone: 518-402-8651 Last EDR Contact: 10/28/2022 Next Scheduled EDR Contact: 02/06/2023 Data Release Frequency: Quarterly

Source: Department of Environmental Protection Telephone: 717-783-8990 Last EDR Contact: 10/05/2022 Next Scheduled EDR Contact: 01/23/2023 Data Release Frequency: Annually

Source: Department of Environmental Management Telephone: 401-222-2797 Last EDR Contact: 08/10/2022 Next Scheduled EDR Contact: 11/28/2022 Data Release Frequency: Annually

Source: Department of Natural Resources Telephone: N/A Last EDR Contact: 08/29/2022 Next Scheduled EDR Contact: 12/19/2022 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals. Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes Source: National Institutes of Health Telephone: 301-594-6248 Information on Medicare and Medicaid certified nursing homes in the United States. **Public Schools** Source: National Center for Education Statistics Telephone: 202-502-7300 The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states. **Private Schools** Source: National Center for Education Statistics Telephone: 202-502-7300 The National Center for Education Statistics' primary database on private school locations in the United States. **Daycare Centers: Licensed Facilities** Source: Department of Social Services Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA Telephone: 877-336-2627 Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish and Wildlife Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

ELLIS ROAD BRIDGE REPLACEMENT PROJECT ELLIS ROAD MARYSVILLE, CA 95901

TARGET PROPERTY COORDINATES

Latitude (North):	39.198066 - 39 11' 53.04"
Longitude (West):	121.578137 - 121 34' 41.29"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	622783.3
UTM Y (Meters):	4339511.0
Elevation:	67 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12016181 YUBA CITY, CA
Version Date:	2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06115C0330D	FEMA FIRM Flood data
Additional Panels in search area:	FEMA Source Type
06115C0335D 06115C0340D	FEMA FIRM Flood data FEMA FIRM Flood data
NATIONAL WETLAND INVENTORY	
<u>NWI Quad at Target Property</u> YUBA CITY	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:				
Search Radius:	1.25 miles			
Status:	Not found			

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID Not Reported LOCATION FROM TP GENERAL DIRECTION GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: System:	Cenozoic Quaternary	Category:	Stratifed Sequence
Series: Code:	Quaternary Q (decoded above as Era, System & Se	eries)	

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).





SITE NAME: ADDRESS:	Ellis Road Bridge Replacement Project Ellis Road
	Marysville CA 95901
LAT/LONG:	39.198066 / 121.578137

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1	
Soil Component Name:	TRAINER
Soil Surface Texture:	loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Somewhat poorly drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	High
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Bou	indary		Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	9 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9
2	9 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9
3	35 inches	66 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name:	SAN JOAQUIN
Soil Surface Texture:	loam
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Well drained
Hydric Status: Partially hydric	
Corrosion Potential - Uncoated Steel:	Moderate
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

	Soil Layer Information						
	Βοι	indary		Classification	n Saturated		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	16 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 7.8 Min: 5.6
2	16 inches	25 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 7.8 Min: 5.6

Soil Map ID: 3	
Soil Component Name:	SAN JOAQUIN
Soil Surface Texture:	loam
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information						
	Bou	Indary		Classi	fication	Saturated	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	16 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 7.8 Min: 6.1
2	16 inches	25 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 7.8 Min: 6.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
B7	USGS40000192394	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADPR0000004738	1/8 - 1/4 Mile WSW
2	CADWR9000041630	1/4 - 1/2 Mile WNW
A3	CADWR9000041632	1/2 - 1 Mile WNW
A4	CADWR0000018028	1/2 - 1 Mile WNW
5	CADWR9000041621	1/2 - 1 Mile West
B6	CAUSGSN00001345	1/2 - 1 Mile West
8	CAGAMA00000823	1/2 - 1 Mile SW

PHYSICAL SETTING SOURCE MAP - 7165124.2s



SITE NAME: ADDRESS: LAT/LONG:	Ellis Road Bridge Replacement Project Ellis Road Marysville CA 95901 39.198066 / 121.578137	CLIENT: CONTACT: INQUIRY #: DATE:	Dokken Engineering Aliana Hale 7165124.2s October 31, 2022 6:54 pm
		Copyrig	ht © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction				
Elevation			Database	EDR ID Number
1 WSW 1/8 - 1/4 Mile Higher			CA WELLS	CADPR0000004738
Well ID:	111882 Description of Description Description	Well Type:	UNK	
Source: Other Name: Groundwater Quality Data: GeoTracker Data:	Department of Pesticide Regulation 111882 https://gamagroundwater.waterboard date=&global_id=&assigned_name= Not Reported	GAMA PFAS Testing: s.ca.gov/gama/gamamap/ 111882&store_num=	Not R /public/GamaDa	Reported taDisplay.asp?dataset=DPR&samp
2 WNW 1/4 - 1/2 Mile Higher			CA WELLS	CADWR9000041630
State Well #: Well Name: Well Use: Well Depth:	16N03E36G001M Not Reported Irrigation 0	Station ID: Basin Name: Well Type: Well Completion Rpt #:	1629 North Unkn Not R	8 i Yuba own Reported
A3 WNW 1/2 - 1 Mile Higher			CA WELLS	CADWR9000041632
State Well #: Well Name: Well Use: Well Depth:	16N03E36E002M 16N03E36 Unknown 0	Station ID: Basin Name: Well Type: Well Completion Rpt #:	5457 North Singl Not R	1 Yuba e Well Reported
A4 WNW 1/2 - 1 Mile Higher			CA WELLS	CADWR0000018028
Well ID:	16N03E36E002M	Well Type:	UNK	
Other Name: Groundwater Quality Data: GeoTracker Data:	16N03E36E002M https://gamagroundwater.waterboard date=&global_id=&assigned_name= Not Reported	GAMA PFAS Testing: ls.ca.gov/gama/gamamap/ 16N03E36E002M&store_r	Not R /public/GamaDa num=	Reported taDisplay.asp?dataset=DWR&samp
5 West 1/2 - 1 Mile Higher			CA WELLS	CADWR9000041621
State Well #: Well Name: Well Use:	16N03E36M001M YCWA-01 Observation	Station ID: Basin Name: Well Type:	1629 North Single	9 i Yuba e Well

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth:	160	Well Completion Rpt #:	E010	6743
B6 West 1/2 - 1 Mile Higher		C	A WELLS	CAUSGSN00001345
Well ID: Source: Other Name: Groundwater Quality Data: GeoTracker Data:	USGS-391200121353501 United States Geological Survey USGS-391200121353501 https://gamagroundwater.waterboar amp_date=&global_id=&assigned_r Not Reported	Well Type: GAMA PFAS Testing: rds.ca.gov/gama/gamamap/pub name=USGS-39120012135350	UNK Not R blic/GamaDat 1&store_nur	eported aDisplay.asp?dataset=USGSNEW&s n=
B7 West 1/2 - 1 Mile Higher		FE	ED USGS	USGS40000192394
Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Science Ce 016N003E36E002M Not Reported Not Reported Central Valley aquifer system Not Reported 19631219 ft ft	nter Type: HUC: Drainage Area Units: Contrib Drainage Area Unts Aquifer Type: Well Depth: Well Hole Depth:	Well 18020 Not R S: Not R Not R 80 86	0106 leported leported
Ground water levels,Number Feet below surface: Note:	of Measurements: 1 22.00 Not Reported	Level reading date: Feet to sea level:	1963- Not R	12-19 eported
8 SW 1/2 - 1 Mile Higher		C	A WELLS	CAGAMA00000823
Well ID: Source: Other Name: Groundwater Quality Data: GeoTracker Data:	YUB 277 Groundwater Ambient Monitoring ar Saddleback Drive https://gamagroundwater.waterboar _date=&global_id=&assigned_name Not Reported	Well Type: nd Assessment Program GAMA PFAS Testing: rds.ca.gov/gama/gamamap/pub e=YUB 277&store_num=	DOMI Not R lic/GamaDat	ESTIC leported aDisplay.asp?dataset=YUBA&samp

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95901	20	0

Federal EPA Radon Zone for YUBA County: 2

```
Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.
```

Federal Area Radon Information for Zip Code: 95901

Number of sites tested: 9

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.689 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.600 pCi/L	100%	0%	0%

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA Telephone: 877-336-2627 Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.
LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database Source: Department of Water Resources Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division Telephone: 916-323-1779 Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon Source: Department of Public Health Telephone: 916-210-8558 Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information Source: USGS Telephone: 703-356-4020 The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones Source: EPA Telephone: 703-356-4020 Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Ellis Road Bridge Replacement Project Ellis Road Marysville, CA 95901

Inquiry Number: 7165124.5 November 03, 2022

The EDR-City Directory Image Report



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com

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City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Brad street. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	Cross Street	<u>Source</u>
2017	\checkmark		EDR Digital Archive
2014	\checkmark		EDR Digital Archive
2010	\checkmark		EDR Digital Archive
2005	\checkmark		EDR Digital Archive
2000	\checkmark		EDR Digital Archive
1995	\checkmark		EDR Digital Archive
1992	\checkmark		EDR Digital Archive
1988	\checkmark		POLK DIRECTORY CO
1984			POLK DIRECTORY CO
1979			POLK DIRECTORY CO
1974			POLK DIRECTORY CO
1969			POLK DIRECTORY CO
1964			POLK DIRECTORY CO
1960			POLK DIRECTORY CO

<u>Year</u>

Target Street Cross Street

<u>Source</u>

FINDINGS

TARGET PROPERTY STREET

Ellis Road Marysville, CA 95901

<u>Year</u>	<u>CD Image</u>	<u>Source</u>	
ELLIS RD			
2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	pg A5	EDR Digital Archive	
1995	pg A6	EDR Digital Archive	
1992	pg A7	EDR Digital Archive	
1988	pg 0	POLK DIRECTORY CO	Street not listed in Source
1984	-	POLK DIRECTORY CO	Street not listed in Source
1979	-	POLK DIRECTORY CO	Street not listed in Source
1974	-	POLK DIRECTORY CO	Street not listed in Source
1969	-	POLK DIRECTORY CO	Street not listed in Source
1964	-	POLK DIRECTORY CO	Street not listed in Source
1960	-	POLK DIRECTORY CO	Street not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images



-

Source EDR Digital Archive

- 647 SHOUP, MARY H
- 701 SCHRADER, DONALD L
- 707 OSEGUERA, OSCAR
- 714 SANDOVAL, PEDRO B
- 715 GINGRICH, STEVE S
- 721 MALETTA, PETER J



-

Source EDR Digital Archive

- 645 HARRIS, SCOTT J
- 647 SHOUP, DEBORAH J
- 701 SCHRADER, DONALD L
- 707 OSEGUERA, OSCAR
- 714 SANDOVAL, PEDRO B
- 715 GINGRICH, STEVE S
- 716 PURCELL, JACOB
- 719 OCCUPANT UNKNOWN,
- 721 MALETTA, PETER J
- 781 SEARANTER, DON



-

Source EDR Digital Archive

- 645 SHOUP, DEBORAH J
- 647 SHOUP, Z
- 701 SCHRADER, DONALD L
- 707 LONG, M W
- 714 SANDOVAL, PEDRO B
- 715 GINGRICH, STEVE S
- 721 MCGRATH, ANTHONY M
- 781 SEARANTER, DON



-

Source EDR Digital Archive

- 647 DIPINO, TONY R
- 701 SCHRADER SCALE CO
- SCHRADER, DONALD L
- 707 WALDEN, RONALD G
- 715 GINGRICH, STEVE S
- 716 MIRASSOU, ALDINE F
- 721 MCGRATH, ANTHONY M



-

Source EDR Digital Archive

- 645 FRANDRUP, AL
- 647 DIPINO, ANTHONY R
- 701 SCHRADER SCALES
- SCHRADER, DONALD L
- 714 OCCUPANT UNKNOWN,
- 715 GINGRICH, HOWARD S
- 716 MIRASSOU, ALDINE F
- POTTING BARN
- 719 SANDOVAL, PEDRO



-

- 645 FRANDRUP, AL 647 OCCUPANT UNKNOWNN 701 SCHRADER SCALES SCHRADER, DONALD L 707 OCCUPANT UNKNOWNN 714 OCCUPANT UNKNOWNN 715 OCCUPANT UNKNOWNN BELL, LYLE 716 719 PEDRAZA, JACINTO
- 721 MCGRATH, ANTHONY M
- 1253 MEZA, VALENTI



-

Source EDR Digital Archive

ELLIS RD 1992

645	FRANDRUP, AL
701	SCHRADER DONALD L
	SCHRADER, DONALD L

716 MIRASSOU, R A

1253 MEZA, V

Ellis Road Bridge Replacement Project

Ellis Road Marysville, CA 95901

Inquiry Number: 7165124.8 November 03, 2022

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Site Name:

Client Name:

11/03/22

Ellis Road Bridge Replacement Ellis Road Marysville, CA 95901 EDR Inquiry # 7165124.8 Dokken Engineering 110 Blue Ravine Road Suite 200 Folsom, CA 95630-0000 Contact: Aliana Hale



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Scale	Details	Source	
1"=500'	Flight Year: 2016	USDA/NAIP	
1"=500'	Flight Year: 2012	USDA/NAIP	
1"=500'	Flight Year: 2009	USDA/NAIP	
1"=500'	Flight Year: 2006	USDA/NAIP	
1"=500'	Acquisition Date: July 28, 1999	USGS/DOQQ	
1"=500'	Flight Date: June 29, 1984	USDA	
1"=500'	Flight Date: June 23, 1977	USGS	
1"=500'	Flight Date: July 01, 1973	USGS	
1"=500'	Flight Date: January 01, 1962	Cartwright	
1"=500'	Flight Date: June 26, 1952	USDA	
1"=500'	Flight Date: February 01, 1947	USGS	
1"=500'	Flight Date: August 30, 1937	USDA	
	Scale 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500' 1"=500'	Scale Details 1"=500' Flight Year: 2016 1"=500' Flight Year: 2012 1"=500' Flight Year: 2009 1"=500' Flight Year: 2006 1"=500' Flight Year: 2006 1"=500' Acquisition Date: July 28, 1999 1"=500' Flight Date: June 29, 1984 1"=500' Flight Date: June 23, 1977 1"=500' Flight Date: July 01, 1973 1"=500' Flight Date: June 26, 1952 1"=500' Flight Date: June 26, 1952 1"=500' Flight Date: February 01, 1947 1"=500' Flight Date: August 30, 1937	ScaleDetailsSource1"=500'Flight Year: 2016USDA/NAIP1"=500'Flight Year: 2012USDA/NAIP1"=500'Flight Year: 2009USDA/NAIP1"=500'Flight Year: 2006USDA/NAIP1"=500'Acquisition Date: July 28, 1999USGS/DOQQ1"=500'Flight Date: June 29, 1984USDA1"=500'Flight Date: June 23, 1977USGS1"=500'Flight Date: June 23, 1977USGS1"=500'Flight Date: June 26, 1952USDA1"=500'Flight Date: June 26, 1952USDA1"=500'Flight Date: February 01, 1947USGS1"=500'Flight Date: February 01, 1947USGS1"=500'Flight Date: February 01, 1947USGS1"=500'Flight Date: August 30, 1937USDA

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Subject boundary not shown because it exceeds image extent or image is not georeferenced.







Ellis Road Bridge Replacement Project Ellis Road Marysville, CA 95901

Inquiry Number: 7165124.4 October 31, 2022

EDR Historical Topo Map Report with QuadMatch™



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

EDR Historical Topo Map Report	

Site Name:

Ellis Road

Marysville, CA 95901

EDR Inquiry # 7165124.4

Ellis Road Bridge Replacement

Client Name:

Dokken Engineering 110 Blue Ravine Road Suite 200 Folsom, CA 95630-0000 Contact: Aliana Hale



10/31/22

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Dokken Engineering were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		Coordinates:	
P.O.#	NA	Latitude:	39.198066 39° 11' 53" North
Project:	Ellis Road Bridge Replacement	Longitude:	-121.578137 -121° 34' 41" West
-	0	UTM Zone:	Zone 10 North
		UTM X Meters:	622780.17
		UTM Y Meters:	4339719.50
		Elevation:	67.00' above sea level
Maps Provided	:		
2018	1891		
2015	1888		
2012	1000		
1973			
1952			
1911			
1895			
1894			

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Yuba City 2018 7.5-minute, 24000

2015 Source Sheets



Yuba City 2015 7.5-minute, 24000

2012 Source Sheets



Yuba City 2012 7.5-minute, 24000

1973 Source Sheets



Yuba City 1973 7.5-minute, 24000 Aerial Photo Revised 1973

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1952 Source Sheets



Yuba City 1952 7.5-minute, 24000 Aerial Photo Revised 1949

1911 Source Sheets



Yuba City 1911 7.5-minute, 31680

1895 Source Sheets



Marysville 1895 30-minute, 125000

1894 Source Sheets



Marysville 1894 30-minute, 125000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1891 Source Sheets



Marysville 1891 30-minute, 125000

1888 Source Sheets



Marysville 1888 30-minute, 125000



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7165124 - 4 page 7







7165124 - 4 page 10



SW

S

SE

7165124 - 4 page 11

















SITE NAME:	Ellis Road Bridge Replacement Project
ADDRESS:	Ellis Road
	Marysville, CA 95901
CLIENT:	Dokken Engineering







Ellis Road Bridge Replacement Project Ellis Road Marysville, CA 95901

Inquiry Number: 7165124.3 October 31, 2022

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

Site Name:

Ellis Road Bridge Replacement Ellis Road Marysville, CA 95901 EDR Inquiry # 7165124.3

Client Name:

Dokken Engineering 110 Blue Ravine Road Suite 200 Folsom, CA 95630-0000 Contact: Aliana Hale



10/31/22

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 29EC-410A-9816

NA

PO #

Project Ellis Road Bridge Replacement

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results Certification #: 29EC-410A-9816

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress	
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University Publications of America

EDR Private Collection

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11/1/22, 2:38 PM

EnviroStor Database



⊟ GeoTracker

earch for a Project





https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=39.198036%2C+-121.578204

APPENDIX B

Site Reconnaissance Site Photographs



Photo 1. Representative view of existing bridge which may contain ACMs and lead based paint, and Ellis Road, facing east.



Photo 2. Representative view of vegetation adjacent to Ellis Road and flooded rice fields within Project boundaries, facing northwest.



Photo 3. Representative view of existing bridge and vegetation along Simmerly Slough, facing southwest.



Photo 4. Representative view of Simmerly Slough and vegetation surrounding Simmerly Slough, facing south.

APPENDIX C

Caltrans Initial Site Assessment (ISA) Checklist

Initial Site Assessment (ISA) Checklist

Project Information

District <u>3</u> County <u>Yuba</u> Route <u>N/A</u> Post Mile <u>N/A</u> EA <u>N/A</u>

Description: The project proposes to replace the existing Ellis Road over Simmerly Slough Bridge (Bridge No. 16C-0075) with a new bridge structure to provide improved safety and operations on the facility.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? <u>No</u>

Project Manager <u>Sam Bunton, P.E</u> phone # (530) 749-5649

Project Engineer <u>Aaron Taylor, E.I.T</u> phone # (530) 749-5477

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential HW sites identified.

- 1.
 Project Features: New R/W? <u>No</u> Excavation? <u>Yes</u> Railroad Involvement? <u>No</u>

 Structure demolition/modification? <u>Yes</u> Subsurface utility relocation? <u>No</u>
- 2. Project Setting: <u>The Project is located in Yuba County, approximately 2 miles north of Marysville.</u>

Rural or Urban <u>Rural</u>

Current land uses Agriculture

Adjacent land uses Agriculture

- 3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.
- 4. Conduct Field Inspection: Date February 6, 2023 Use the attached map to locate potential or known HW sites.

STORAGE STRU	<u>CTURES / PIPELINES:</u>			
Underground ta	nks Not Observed		Surface tanks	Not Observed
Sumps	Not Observed	_ Ponds _	Not O	bserved
Drums	Not Observed	_ Basins	Not O	bserved
Transformers	Observed		Landfill	Not Observed
Other				

Initial Site Assessment (ISA) Checklist

(continued)

<u>CONTAMINATION</u>	<u>ı:</u> (spills, leaks, illegal c	lumping, etc.)		
Surface staining <u>Not Observed</u> Oil sheen <u>Not Observed</u>				
Odors	Not Detected	Vegetation damage	Not Observed	
Other			_	
<u>Hazardous Ma</u>	TERIALS: (asbestos, lead	d, etc.)		
Buildings	N/A	Spray-on fireproofing	N/A	
Pipe wrap	N/A Fri	able tile <u>N/A</u>		
Acoustical plaste	er <u>N/A</u>	Serpentine	N/A	
Paint	Paint on bridge barrie	rs		
Other:				
Other:				

- 5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.
- 6. Other comments and/or observations: <u>Prior to construction the structure will be tested for asbestos</u> <u>containing material and lead based paint.</u>

ISA Determination

Does the project have potential hazardous waste involvement? <u>Yes</u> If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? <u>No</u> If "YES," explain; then give an estimate of additional time required:

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted	Aaron Taylor, E.I.T	Date	
---------------	---------------------	------	--

Signature	
0	

APPENDIX D

Caltrans Hazardous Procedures for Construction

Table 7-1.1 Unknown Hazards Procedures



California Department of Transportation • Construction Manual • December 2006

Environmental Rules and Requirements