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M e m o r a n d u m

Date: September 4, 2025

To: Steve Rothert
Division of Multibenefit Initiatives
Department of Water Resources

From: Kevin Marr
Environmental Scientist
Riverine Stewardship Program
Department of Water Resources

Subject: *Request Approval of DWR Determination as Lead Agency to adopt an NOE for the Geotechnical Investigations for the Sunset Weir and Pumps Fish Passage Project (Project)*

Background

Sunset Weir is a 10-foot-tall, approximately 400-foot-long boulder weir located approximately 2 miles southeast of Live Oak, California, within the Feather River. The CDFW, United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) have identified the Sunset Weir as a priority fish passage barrier for removal. Proposed removal of Sunset Weir is expected to have impacts on the hydraulic conditions upstream and downstream of the weir and may influence the water surface elevations in the river for approximately eight river miles upstream of the weir. This may potentially influence shear stress in the channel and subsequent sediment erosion and deposition processes within the weir impoundment area and downstream. The proposed Sunset Weir and Pumps Fish Passage Project also will involve the design of a new pump station and new intake structures.

The Department of Water Resources (Department), as the Lead Agency under the California Environmental Quality Act (CEQA), is preparing a Supplemental Environmental Impact Report (SEIR) according to the Notice of Preparation (NOP) adopted in July 2024 for the Sunset Weir and Pumps Fish Passage improvements (SCH No. 2024080016). The SEIR will tier from the Statewide Restoration General Order (SRGO) Program Environmental Impact Report (PEIR) for CEQA compliance. To prepare the SEIR, the Department must perform geotechnical investigations to understand the potential impacts associated with the SEIR and to inform the final Sunset Weir and Pumps Fish Passage designs. For the purposes of this memo, “the Project” refers only to the attached project description for the geotechnical investigations (attachment), not for the overall project described in the NOP.

Therefore, the primary objective of the geotechnical investigations (the Project) is to collect information needed to assess the stability of the riverbank in response to predicted changes in the water surface elevations that would be

SURNAME DWR 155 (Rev 7/11)	KM 9/4/2025	AB 9/4/2025	RB 9/15/2025	DS 9/19/2025

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produced by the proposed removal of Sunset Weir and support the development of potential bank protection measures. The geotechnical investigations will also collect information needed to provide geotechnical recommendations for the design of the new pump station and new intake structures.

Compliance with CEQA

Project Exemptions

A project qualifies as exempt under CEQA if it meets the criteria listed in section 15061(b) of the California Code of Regulations (CCR). The applicable exemptions for The Project are discussed below: CEQA Guidelines section 15262, which implements the CEQA statutory exemption set forth in Public Resources Code section 21150, the Class 6 Categorical Exemption (CEQA Guidelines section 15306), and CEQA Guidelines section 15061(b)(3) “Common Sense Exemption”.

Section 15262 (planning and feasibility studies) states that “a project involving only feasibility or planning studies for possible future actions which the agency, board or commission has not approved, adopted or funded does not require the preparation of an EIR or Negative Declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.” The geotechnical investigation is an important information-gathering step to the efficient and appropriate design of the proposed Sunset Weir and Pumps Fish Passage Project. The collection of this data by no means requires approval, permitting, and/or construction of a weir. Any potential future weir removal or replacement would be subject to an independent CEQA document.

Section 15306 (information collection exemption, Class 6) states that basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource would be exempt from CEQA. This exemption also clarifies that these activities must be strictly for information-gathering purposes or must be part of a study leading to an action that a public agency has not yet approved, adopted, or funded. All work is for the sole purpose of data collection and would not result in a serious or major disturbance to an environmental resource. The Department will use the collected data to support the full study of geotechnical considerations necessary to design a potential weir replacement in a safe and efficient manner.

Section 15061 (b)(3) (common sense exemption) states that “Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.” The geotechnical investigation has been planned to eliminate the potential for impacts to sensitive biological, cultural, and aquatic resources

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through very precise borehole and work area siting that maximizes avoidance of these resources; the investigation also includes program features such as timing of work and contingency planning for temporary demobilization if a substantive rain event is predicted. Other avoidance and minimization efforts would be implemented through BMPs incorporated into the Proposed Project design.

Exceptions to Categorical Exemptions

The California Code of Regulations also lists exceptions that bar the use of CEQA exemptions (CCR Tit. 14, section 15300.2) and are described below:

A. **Location.** The Class 6 exemption is qualified by consideration of where the project is to be located. A project that ordinarily has insignificant impacts on the environment may significantly impact a particularly sensitive environment. Therefore, these classes are considered to apply in all instances, except where the project may impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

B. **Cumulative Impact.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

C. **Significant Effect.** A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

D. **Scenic Highways.** A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

E. **Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

F. **Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

Location and Significant Effect

Appendix G of the State CEQA Guidelines was used to support the determination that exceptions to categorical exemptions for A. Location and C. Significant Effect do not apply to the Project for applicable environmental resource areas. The environmental resource areas discussed below are those

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that could have the potential for less than significant impacts from the proposed Project (i.e., biological resources, cultural and tribal cultural resources, air quality and greenhouse gas emissions, hazards and hazardous materials, and aesthetics). The work is confined to specific small areas within the geographical extent of the Project, is temporary, will be backfilled once the investigations are complete, and includes standard BMPs. Because standard BMPs for avoidance of hazardous materials, sediment and emissions releases would be implemented, impacts to geology and soils and hydrology and water quality are not discussed further.

The Project:

- Will not convert state designated agricultural lands to non-agricultural use, nor conflict with agricultural zoning or a Williamson Act contract;
- Is not located on forestry lands;
- Will not result in wasteful, inefficient, or unnecessary consumption of energy resources;
- Will not result in the loss of mineral resources;
- Will not exceed Sutter County general plan noise requirements;
- Will not impact population and housing;
- Will not create new traffic patterns, will have no impact on the surrounding land uses related to traffic patterns, will use existing roads, and will not impact public services;
- Does not include, nor will it increase recreation; and
- Will not impact utilities and service systems.

Therefore, the following environmental resource topics are not discussed further: agriculture and forestry resources, energy, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire.

In addition, the Project does not involve any "unusual circumstances" that would trigger the exception to the exemption. The Project uses standard procedures such as geotechnical explorations using Standard Penetration Test, Seismic Cone Penetration Test, and Cone Penetration Test collecting methods, minor vegetation removal, restoration of geotechnical investigation area, and use of material staging and laydown areas which are routine and commonly conducted in similar projects. These activities are temporary, localized, and do not result in significant environmental impacts. Therefore, based on the nature and scope of the proposed Project, it is concluded that there are no unusual circumstances present that would preclude the use of a categorical exemption under CEQA.

<u>Significant Effect: Biological Resources</u>
Environmental Science Associates (ESA) conducted biological surveys that encompass the geographical extent of the geotechnical investigations in 2024 and early 2025. Two federally protected species have the potential to be

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present in the Project area: the Valley Elderberry Longhorn Beetle (VELB, *Desmocerus californicus dimorphus*) and the Northwestern Pond Turtle (NWPT, *Actinemys marmorata*). Additionally, three anadromous fish species under the authority of NMFS and/or CDFW have the potential to be present in the Project area within the Feather River: the Central Valley spring-run, fall-run, and late-fall Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley Steelhead (*Oncorhynchus mykiss*), and the green sturgeon (*Acipenser medirostris*).

Elderberry shrubs are known to occur in the vicinity of the Project Area. Standard DWR practice is to relocate or abandon geotechnical activities if elderberry shrubs are identified by a biologist prior to the work commencing. No elderberry shrubs are located withing 20 feet of the areas where bore samples will be collected, consistent with the final Project plan developed by Geosyntec and based on previously mapped elderberry shrub locations identified by ESA biologists in a manner per the guidance published in 2017 by the US Fish and Wildlife Service (USFWS), Framework for Assessing Impacts to the VELB. No elderberry shrubs would be trimmed or removed during implementation of the Project. Furthermore, following the field survey, ESA determined upland portions of the Project area were unsuitable for turtles because the banks are steep and the adjacent riparian woodlands are densely vegetated. If a turtle happens to be basking in the river channel where the in-water work is taking place, they will be avoided by allowing them to volitionally move away, or a biological monitor, with USFWS's permission, will relocate the turtle to safety.

Adult Central Valley spring-run Chinook salmon enter the Feather River as immature adults from March to June and spawn in the fall (mid-September through early October). Spring-run Chinook salmon may migrate downstream as young-of-year, juveniles, or yearlings; peak juvenile emigration from the Feather River generally occurs from January through March. Adult fall-run Chinook salmon migrate through the Delta and into the Feather River system from June through December. Most fall-run Chinook salmon fry rear in fresh water from December through June, with outmigration as smolts occurring primarily from January through June. Steelhead spawn in the Feather River between December and March, with peak spawning occurring in late January. Feather River steelhead generally emigrate from about February through September, with peak emigration occurring from March through mid-April. Green sturgeon spawning activity is understood to be concentrated during the mid to late spring period (mid-April to mid-June). After their initial spawning run upriver, adults may hold in the upper river for up to several months before moving back downstream, or they may migrate immediately back downstream. Larval green sturgeon hatch in the late spring or summer (May through August); young green sturgeon appear to rear for the first 1 to 2 months near spawning areas before moving downstream toward the Delta and estuary.

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In-water drilling work for the Project is proposed during a specific work window (July 15–September 30) between the hours of sunrise and sunset. No work is proposed in October when incubating spring-run Chinook salmon eggs are most likely to be present. The in-water work window (July 15–September 30) does not overlap with the primary migration and rearing seasons of juvenile salmonids or peak upstream migration season of adult green sturgeon. The standard BMPs implemented by DWR in the Project Description attached to the NOE avoid and minimize potential turbidity and other water quality impacts that may affect listed anadromous fish species individuals during the geotechnical exploration activities. With implementation of the standard BMPs, potential water quality effects of in-water work would be limited to temporary, local increases in turbidity, suspended sediment, and noise during barge operations and exploration activities, and these effects will dissipate rapidly, and conditions will return to baseline levels shortly after cessation of activities. Therefore, effects of the in-water geotechnical investigations on listed anadromous fish are expected to be insignificant based on the brief duration, low intensity, and small areas affected.

In summary, no environmental resource of critical concern is designated, precisely mapped, or officially adopted pursuant to law by federal, state, or local agencies in the area where the Project work is proposed.

Cultural and Tribal Resources

In February 2022, ESA requested a California Historical Resources Information System (CHRIS) cultural resources records search for the proposed Sunset Weir and Pumps Fish Passage Project and a surrounding 0.5-mile buffer area (records search area). The CHRIS records search did not reveal any previously recorded cultural resources in the Area of Potential Effect (APE), which encompasses the exploration activities associated with the Project. While a total of eight previously recorded resources were plotted within the records search area, only seven were near the APE. In 2022, ESA conducted a reconnaissance survey at various locations within the Project area, including around the pump station. In June 2023, ESA submitted requests to the Native American Heritage Commission (NAHC) for searches of the Sacred Lands File and contact lists for potentially traditionally and culturally affiliated Native American Tribes for the area surrounding the Sunset Weir. On August 9 and 11, 2023, DWR notified Native American representatives from the NAHC contact list and DWR's Request for Notification List via email and certified mail, including an invitation to consult and attend a virtual pre-consultation informational meeting on August 24, 2023. In response, the Konkow Valley Band of Maidu (Konkow), United Auburn Indian Community (UAIC), Mooretown Rancheria (Mooretown), and the Estom Yumeka Maidu Tribe of the Enterprise Rancheria (Enterprise) requested consultation with DWR under AB 52 and Public Resources Code Section 21080.3.1(b). The archaeological and built environment investigations have resulted in the identification of cultural

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resources with boundaries that abut or overlap the Project area. A confidential technical memorandum entitled “Cultural Resources Analysis for the Sunset Weir and Pumps Fish Passage Project Geotechnical Field Investigations” was prepared by ESA for DWR. With the standard cultural and Tribal cultural resources BMPs listed in the Project Description attached to the NOE, the proposed Project does not have the potential to result in impacts to cultural or Tribal cultural resources and will not cause a substantial adverse change in the significance of a historical resource.

Air Quality and Greenhouse Gas Emissions

The geotechnical investigations would result in limited vehicle trips to and from the project site during construction. Because the project construction would be temporary, no significant vehicle emissions would occur, nor would long-term emissions or work-related stationary source emissions from energy consumption occur.

Due to the short duration of the Project work period and relatively minimal equipment being used, greenhouse gas emissions associated with geotechnical investigations would not exceed adopted significance thresholds by the Feather River Air Quality Management District for regulated pollutants or greenhouse gas (GHG) emissions.

Cumulative Impacts

The evaluation of cumulative impacts considers the locations of potential impacts of the proposed geotechnical investigations to the geographic extent of other past, present, and reasonably foreseeable future projects with which it may be combined. No other similar projects in the Project Area were identified as past, present, and reasonably foreseeable future projects. While construction and operation of potential future projects in the Project Area could result in a cumulatively significant impact, considering the limited scope and scale of the proposed geotechnical investigations and the surrounding environment, the proposed geotechnical investigations along with the standard BMPs discussed above, would reduce the contribution of the proposed geotechnical investigations to cumulative impacts to less than cumulatively considerable, and cumulative impacts would be less than significant.

Other Environmental Resource Topics

Land uses in the area surrounding the geotechnical investigations include agricultural land, riparian forest, disturbed areas, and riverine habitat. There are no hazardous materials sites within 0.5 mile of the geotechnical investigations according to the State Water Resources Control Board GeoTracker, accessed December 17, 2024. The geotechnical investigations are not visible from or located in proximity to a highway officially designated as a state scenic highway according to the California State Scenic Highway System Map, accessed December 17, 2024; therefore, the project does not have the potential to impact any scenic resources, including but not limited to, trees, historic buildings, rock

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outcroppings, or similar resources, within a highway officially designated as a state scenic highway.

Recommended Action
CEQA requires public agencies, such as DWR, to make determinations when approving a proposed project as to whether the project is exempt from the law. Based upon my evaluation of the documents describing the Project's plans, goals and objectives, this project qualifies for the categorical exemptions listed in CEQA Guidelines for planning and feasibility studies, information collection, and as a common sense exemption listed in Sections 15262, 15306, and 15061(b)(3), respectively, of the CEQA Guidelines without exceptions. I recommend that the Department as the Lead Agency approve the attached NOE, which cites the CEQA Guidelines sections 15306, 15262 and 15061b(3) Class 6 exemptions, as justification for the Project's categorical exemption from CEQA per Section 15061(b) of the CCR.

Next Steps: Upon approval, I will submit the NOE to the State Clearinghouse for posting and save this decision memo and signed NOE in the Project File.

Approval of DWR NOE

by Steve Rothert Date: 9/22/2025

Steve Rothert, Division Manager
Division of Multibenefit Initiatives
Department of Water Resources

Approved for legal form

David Steffenson

David Steffenson
Attorney V
Office of General Counsel

9/19/2025
Date

Attachment(s):

- Notice of Exemption, Project Description

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Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: _____

From: (Public Agency): California Department of Water Resources
1416 Ninth Street, PO Box 942836
Sacramento, CA 94236-0001
(Address)

Project Title: Geotechnical Investigations for the Sunset Weir and Pumps Fish Passage Project

Project Applicant: California Department of Water Resources

Project Location - Specific:
The Project is located in and along the Feather Riverbordered by Mahaugh Road to the north, just south of Paseo Road to the south on the west side of Feather River, and one location is along a farm access road connected to Boyer Road on the east side of Feather River.

Project Location - City: Live Oak Project Location - County: Sutter

Description of Nature, Purpose and Beneficiaries of Project:

See Attachment A - Project Description

Name of Public Agency Approving Project: California Department of Water Resources

Name of Person or Agency Carrying Out Project: California Department of Water Resources

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Class 6, Section 15306; 15262, 15061b3
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The geotechnical investigation meets the criteria for a CEQA categorical exemption as planning and feasibility study consistent with the provisions of CEQA Guidelines Section 15262 (planning and feasibility studies), as an investigation that would inform another action, consistent with the provisions of CEQA Guidelines Section 15306, and as a common sense exemption under CEQA Guidelines Section 15061 (b)(3) given that the project would not have a significant effect on the environment.

Lead Agency Contact Person: Rachel Ballanti Area Code/Telephone/Extension: (916) 460-0402

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Steve Rothert Date: 9/22/2025 Title: Manager, DMI

▪ Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Revised 2011

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NOE Attachment A. Project Description

Geotechnical Investigations for the Sunset Weir and Pumps Fish Passage Project

Background

The California Department of Water Resources (DWR) is proposing to remove Sunset Weir, which is a 10-foot-tall, approximately 400-foot-long boulder weir located approximately 2 miles southeast of Live Oak, California, within the Feather River. The California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) have identified the Sunset Weir as a priority fish passage barrier for removal. Proposed removal of Sunset Weir is expected to have impacts on the hydraulic conditions upstream and downstream of the weir and may influence the water surface elevations in the river for approximately eight river miles upstream of the weir. This may potentially influence shear stress in the channel and subsequent sediment erosion and deposition processes within the weir impoundment area and downstream.

Therefore, the primary objective of the geotechnical investigations is to collect information needed to assess the stability of the riverbank in response to predicted changes in the water surface elevations that would be produced by the proposed removal of Sunset Weir and thus support the development of potential bank protection measures. The geotechnical investigations will also collect information needed to provide geotechnical recommendations for the design of the new pump station and new intake structures.

Project Location

The geotechnical investigations will be located along a reach of the Feather River around and upstream of the existing Sunset Weir (**Figures 1 and 2**). The area includes the geotechnical exploration locations within the Feather River channel as well as those located along the river levees and near the Sunset Weir Pump Station as depicted in Figure 2. Locations are bordered by Mahaugh Road to the north, just south of Paseo Road to the south on the west side of Feather River, and one location is along a farm access road connected to Boyer Road on the east side of Feather River. Most sites occur in Sutter County, west of the Feather River, with two sites located in Yuba County just east of the river.

Project Description

The geotechnical investigations would involve performing nine geotechnical explorations to better characterize the subsurface conditions at the location of the pump station and at select locations along the Feather River (Figure 2). At seven locations, Mud Rotary drilling methods will be used, with Standard Penetration Tests (SPT) performed and high-quality samples collected for material characterization and advanced laboratory strength testing. The number and type of samples and tests will be based on field observations. Seismic Cone

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Penetration Test (SCPT) will be performed at the other two borings. Cone Penetration Test (CPT) push samples may also be collected adjacent to the SCPT soundings if desired based on field observations.

The geotechnical explorations will be between approximately 40 and 120 feet in depth, depending on the location. In-river exploration sites will temporarily disturb an area of approximately 1 square foot. Such work is limited to two sampling points using a barge-mounted drill rig launched from the Live Oak boat ramp; the barge may be temporarily anchored to prevent the vessel from drifting while the work is being performed. The rest of the exploration sites will take place in upland areas. Only minor vegetation removal may be required to facilitate vehicle access. The geotechnical investigation may take up to approximately 30 working days depending on site conditions; a typical working day will be approximately 12 hours long.

The geotechnical investigations are anticipated to be started and completed in 2025, upon receipt of regulatory and permit approvals. The exact timing of the explorations will be dependent on the flow conditions in the Feather River. Temporary demobilization will occur if a substantive rain event is predicted during the geotechnical investigations. Upon completion of drilling and sampling activities, boreholes will be backfilled with cement-bentonite grout to the ground surface. Although not expected to be present, if roadway pavement has been disturbed, the borehole will be topped with cold patch asphalt having a thickness equal to that of the roadway. Restoration of the geotechnical investigation area will be monitored by a supervising engineer or qualified geologist.

A materials staging area and equipment laydown area will be established prior to mobilization of work equipment, materials, and drill rigs. At the completion of each work shift, all equipment will be stored or anchored in the approved area prior to leaving the work site. A stockpile area for drilling spoils will be established near the equipment laydown area. Drilling spoils will remain on-site.

Typical equipment required for mud-rotary borings with SCPT includes a drill rig, which will be positioned above the proposed drilling location, a mud tank, and sampling equipment. The typical borehole diameter is approximately 8 to 10 inches. Typical equipment required for SCPT (or CPT) includes a truck- or track-mounted unit equipped with push rods, a thrust mechanism, a reaction frame, and an instrumented cylindrical steel probe with a conical tip. In addition to the standard load cells for measuring tip resistance and sleeve resistance, the SCPTs used in this investigation will be instrumented with pore pressure transducers and geophones/accelerometers. SCPT hole diameters are typically less than 2 inches.

Standard Best Management Practices

Through experience gained from conducting maintenance, operation and development of its facilities, DWR has developed and implements standard best management practices (BMPs) with all its routine geotechnical work to comply

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with applicable regulatory requirements. These practices will be implemented during the proposed geotechnical investigations and include the following BMPs:

BMPs for Avoidance of Hazardous Materials, Sediment, and Emissions Releases

- Drill rigs will be managed by maintaining spill containment beneath the equipment. A spill containment kit will also be maintained on site.
- A perimeter containment berm will be established around each drill rig setup during operation and will remain in place outside of working hours.
- Containment systems will be constructed on-site with wood and plastic tarps.
- A Health and Safety Plan in accordance with all local, state, and federal requirements will be established.
- Safety measures such as utilizing casing advancer drilling to advance the rotary wash drilling and monitoring fluid pressures, drilling spoils, drilling mud weights, and grout volumes will be implemented.
- An experienced and trained driller will monitor the drilling and backfilling operations.
- Open boreholes and excavations will not be left unattended for more than 24 hours.
- Should an emergency or unexpected outcome be observed during drilling operations, operations would stop immediately, and the Project team would contact the U.S. Army Corps of Engineers (USACE) immediately.

Biological Resources BMPs

- Boreholes that are awaiting backfill shall be covered to prevent entry by small animals.
- Fencing/Flagging. All elderberry shrubs within the project area with branches or stems that are ≥ 1 inch in diameter will be fenced and/or flagged.
- Avoidance area. All geotechnical investigations will maintain an avoidance area of at least 6 meters (20 feet) from the drip-line of elderberry shrubs.
- Worker education – Terrestrial Species. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging elderberry shrubs, and possible penalties for noncompliance.
- Construction monitoring. A qualified biologist will monitor the work area at appropriate intervals to ensure that all avoidance and minimization measures are implemented.
- Conduct a pre-construction survey for northwestern pond turtle (*Actinemys marmorata*). Preconstruction surveys for northwestern pond turtle shall be conducted within 48 hours prior to any ground-disturbance activities. If any

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turtles are observed on land during the pre-construction survey, to avoid potential nests, suitable upland habitat within 100 feet of aquatic habitat shall be flagged and avoided, where feasible.

- Turtle avoidance and relocation. If any northwestern pond turtle are observed during drilling, work shall stop until the turtle moves away from the construction zone on its own accord. If the turtle does not move on its own volition, then a biological monitor may request permission from USFWS to relocate the turtle to suitable aquatic habitat out of harm's way.
- Vehicle checks. Equipment/vehicles parked overnight on-site shall be checked for the presence of northwestern pond turtle that may be taking shelter under the equipment/vehicles before the equipment/vehicles are moved.
- Speed limits. Along access roads, vehicle speed shall be limited to 15 miles per hour. Speed limits overland shall be limited to 5 miles per hour. Drivers shall look for turtles on the roadways and overland areas.
- Worker education. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the life history and status of the northwestern pond turtle, the need to avoid the northwestern pond turtle, and the possible penalties for noncompliance.
- The in-water work window for geotechnical sampling will be July 15–September 30.
- In-water work hours will be limited to the period of day between sunrise and sunset.
- Worker education – Aquatic Species. All personnel conducting in-water work will be educated by a qualified biologist on important timing windows for listed anadromous fish species (i.e., timing of fish migration, spawning, and rearing). The training will also cover the legal requirements for avoidance and protection of these fish species, the applicable BMPs regarding avoidance of hazardous materials, sediment, and emissions releases that are protective of these fish species and their habitats, and the possible penalties for noncompliance.
- Trash. Trash will not be left on site; all trash will be removed from the work site at the end of each day to minimize attractions to animals.

<u>Cultural Resources and Tribal Cultural Resources BMPs</u>

- Tribal representative(s) from the consulting Tribes will be invited to participate in meetings and pre-activity field visits associated with the boring locations.
- Cultural sensitivity training by an archaeologist and a Tribal representative will be provided for the environmental monitors and individuals conducting the field activities and geological analysis to ensure awareness about cultural

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resources, including identification of and proper protocol for handling any unexpected finds.

- Tribal consultation and Tribal and/or archaeological monitoring may be conducted. A Monitoring and Communication Plan shall be prepared prior to the initiation of cultural resources and/or Native American monitoring work.
- All buildings and structures surrounding the bore locations must be avoided and machine access must be done with methods that will not permanently disturb any landscaping or cause ground disturbance below the surface vegetation.
- Based on the general sensitivity of the region and the proximity of large precontact archaeological sites to portion of the work, archaeological and Tribal monitors will be present during all geotechnical explorations on land and will be provided the opportunity to view the extracted samples.
- Tribal representatives will be consulted regarding disposition of sediment samples after the geological analysis has been completed.
- If a suitable location within adjacent areas that would avoid significant archaeological or tribal cultural resources cannot be identified, then the soil investigation at that location would not be conducted.
- Should any unanticipated cultural resources or resources of Tribal importance be exposed during geotechnical investigation activities, all work would immediately stop in the immediate vicinity (e.g., 50 feet [15 meters]) of the find until it can be evaluated by a qualified archaeologist and an appropriate plan of action can be determined in consultation with the USACE, DWR, State Office of Historic Preservation, and consulting Tribes, as necessary.
- If the resource is associated with Native American contexts or is a potential Tribal cultural resource, consulting Tribes will be consulted to produce an appropriate plan of action.
- Should human remains be discovered during the course of project activities, all work will stop immediately in the vicinity (e.g., 100 feet [30 meters]) of the finds until they can be verified. The appropriate county coroner would be contacted in accordance with Health and Safety Code Section 7050.5(b). Protocol and requirements outlined in Health and Safety Code Sections 7050.5(b) and 7050.5(c) as well as Public Resources Code Section 5097.98 will be followed.

Impacts of Geotechnical Investigations

The impacts from the geotechnical investigations are anticipated to be minimal, as the geotechnical investigations will have a limited, straight-forward scope of work with a limited disturbance area, no permanent impacts, and a construction duration of approximately 30 working days. In-water drilling for the geotechnical investigations is proposed during a specific work window (July 15–September 30) between the hours of sunrise and sunset. No geotechnical investigations are

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proposed in October when incubating spring-run Chinook salmon eggs may be present. The in-water geotechnical investigations work window (July 15–September 30) does not overlap with the primary migration and rearing seasons of juvenile salmonids or peak upstream migration season of adult green sturgeon. The standard BMPs implemented by DWR during geotechnical activities described above avoid and minimize potential turbidity and other water quality impacts that may affect listed anadromous fish species individuals during the geotechnical exploration activities. With implementation of the standard BMPs, potential water quality effects of in-water geotechnical explorations will be limited to temporary, local increases in turbidity, suspended sediment, and noise during barge operations and exploration activities and will dissipate rapidly and return to baseline conditions shortly after cessation of activities. Thus, effects of the in-water geotechnical investigations on listed anadromous fish are expected to be insignificant based on the brief duration, low intensity, and small areas affected.

Elderberry shrubs are known to occur in the vicinity of the geotechnical investigations. Standard DWR practice is to relocate or abandon geotechnical activities if elderberry shrubs are identified by a biologist prior to the work commencing. No elderberry shrubs are located withing 20 feet of the areas where bore samples will be collected and no elderberry shrubs will be trimmed or removed during implementation of the geotechnical investigations.

Upland portions of the geotechnical investigations are suitable for potentially occurring northwestern pond turtle because the banks are steep and the adjacent riparian woodlands are density vegetated. If a turtle happens to be basking in the river channel where the in-water geotechnical investigations are taking place, they will be avoided by allowing them to volitionally move away, or a biological monitor, with USFWS's permission, will relocate the turtle out of harm's way.

The archaeological and built environment investigations resulted in the identification of cultural resources with boundaries that abut or overlap the geotechnical investigations. With the standard cultural and Tribal cultural resources BMPs described above, the proposed geotechnical investigations do not have the potential to result in impacts to cultural or Tribal cultural resources and will not cause a substantial adverse change in the significance of a historical resource.

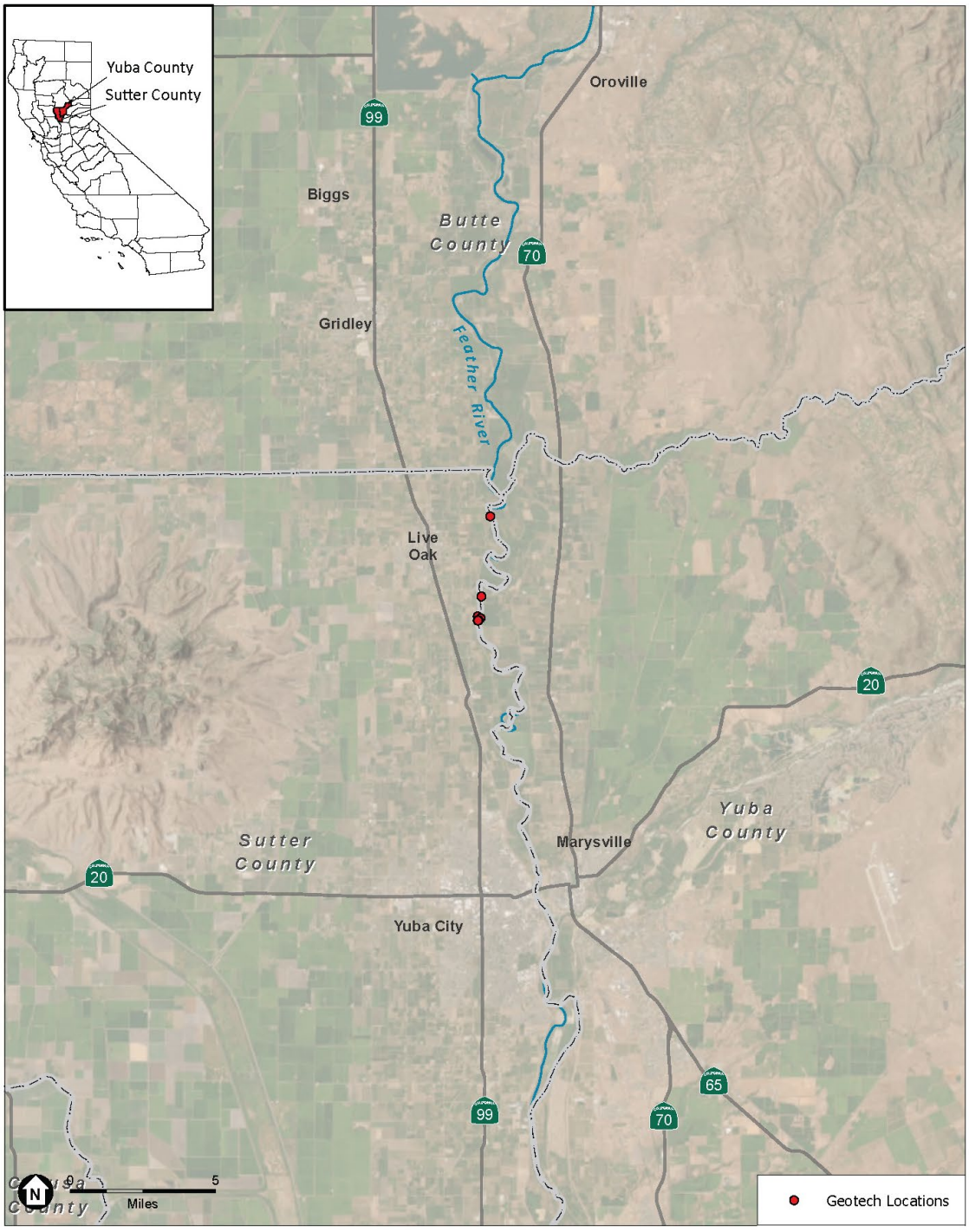
Due to the short duration of the geotechnical investigations and relatively minimal equipment being used, greenhouse gas emissions associated with the geotechnical investigations would not exceed adopted significance thresholds by the Feather River Air Quality Management District for regulated pollutants or greenhouse gas emissions.

The geotechnical investigations will not: (1) have a significant environmental impact on a particularly sensitive environment; (2) have a significant cumulative impact; (3) have a significant effect on the environment due to unusual circumstances; (4) result in damage to scenic resources; (5) be located on a site

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included on any hazardous materials list compiled pursuant to state law; or (6) cause a substantial adverse change in the significance of a historical resource.

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SOURCE: Esri, 2024; ESA, 2024

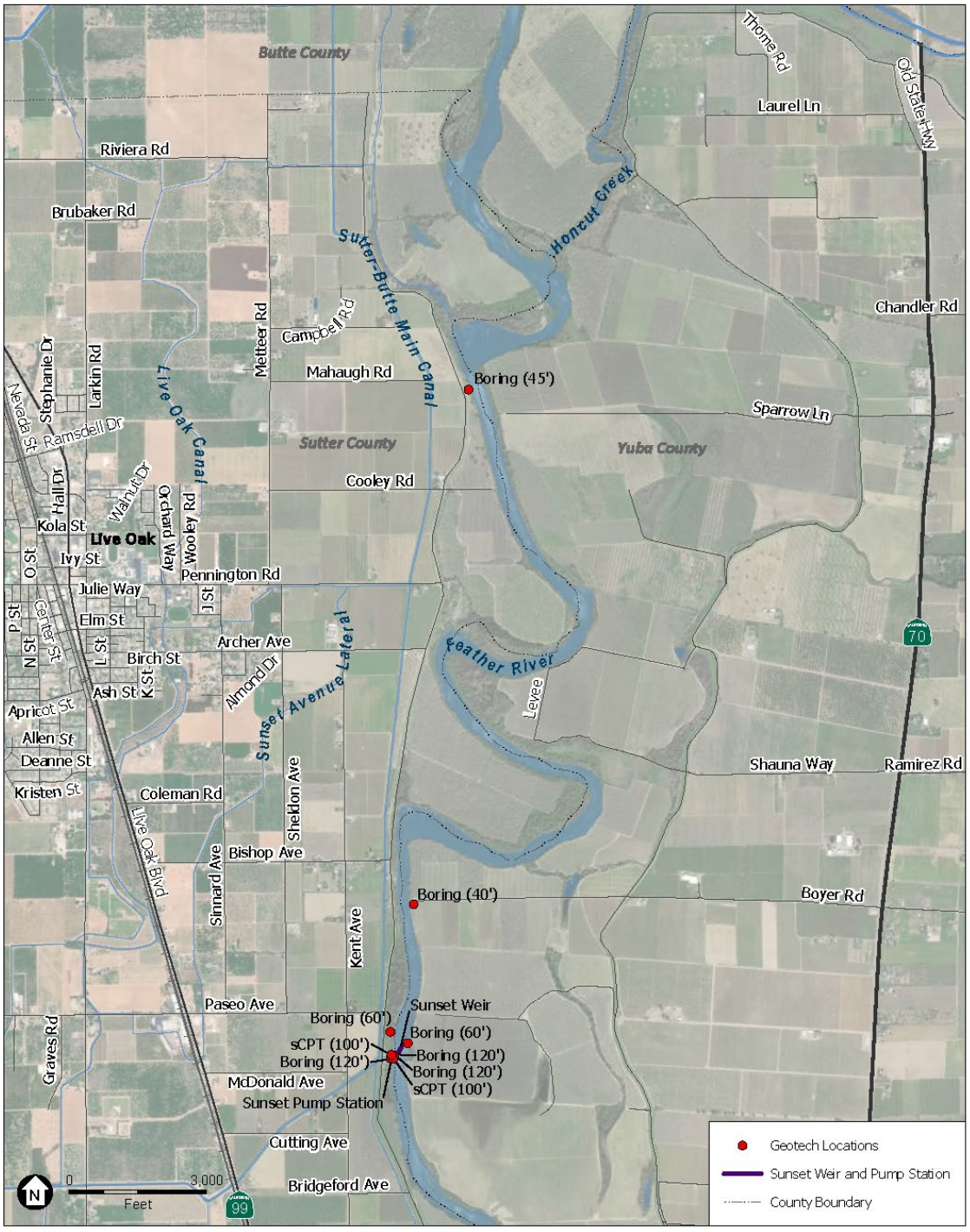
Geotechnical Investigations for the Sunset Weir and Pumps Fish Passage Project

Figure 1
Regional Location

ESA

Figure 1. Regional location map of the Project area near Live Oak, CA.

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SOURCE: Esri, 2024; ESA, 2024

Geotechnical Investigations for the Sunset Weir and Pumps Fish Passage Project

Figure 2
Project Vicinity

ESA

Figure 2. Vicinity map of the proposed geotechnical investigation borings for the Project.