

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the
**YUBA COUNTY WATER AGENCY
LOG CABIN DIVERSION DAM AND OUR HOUSE DIVERSION DAM
SEDIMENT MANAGEMENT**

SOURCES: Oregon Creek and Middle Yuba River

COUNTIES: Yuba, Sierra, and Nevada

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

1 Background and Project Description

Yuba County Water Agency (YCWA or Applicant) requests water quality certification (certification) for the Log Cabin Diversion Dam and the Our House Diversion Dam Sediment Management Plan (Project), pursuant to section 401 of the federal Clean Water Act (CWA). YCWA submitted a related request to the United States Army Corps of Engineers (USACOE), asking the USACOE to update its previously issued Letters of Permission¹ (LOP) (SPK-2014-00703 and SPK-2014-01187) to include dredging actions (mechanical removal of sediment) detailed in the Updated *Log Cabin and Our House Diversion Dams Sediment Management Plan* (Updated Sediment Management Plan), dated June 2018. Updating the Letters of Permission triggered the requirement for a new Section 401 certification action.²

1.1 Project Location

Log Cabin Diversion Dam is located in Yuba County on Oregon Creek, approximately 4.3 miles upstream of the confluence with the Middle Yuba River.

¹ On October 21, 2016, the USACOE issued LOPs (SPK-2014-00703 and SPK-2014-01187) for sluicing actions (sediment passage activities) at the Our House and Log Cabin Diversion Dams. LOPs are individual permits, which in this case require compliance with this Log Cabin and Our House Diversion Dams Sediment Management Project water quality certification.

² The State Water Board previously issued certification for sluicing activities associated with the Log Cabin and Our House Diversion Dam Sediment Management Plan on February 10, 2016.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

Access to Log Cabin Diversion Dam is provided via Log Cabin Dam Road, which branches off State Route 49. Our House Diversion Dam straddles the border between Sierra County and Nevada County on the Middle Yuba River, 12.6 miles upstream of its confluence with the North Yuba River. Access to Our House Diversion Dam is provided via Our House Dam Road, which branches off Ridge Road from State Route 49. See Figure 1 for a map of the Project area.

1.2 Previous Sediment Management Plan – May 2014

This section describes the previous sediment management plan efforts related to the Log Cabin and Our House Diversion Dams. Sediment accumulation behind the Project diversion dams is a long-standing and ongoing issue. On May 20, 2014, YCWA submitted a plan to Federal Energy Regulatory Commission (FERC) for a permanent, long-term solution for sediment control at the Log Cabin and Our House Diversion Dams, under YCWA's Yuba River Development Project, FERC Project No. 2246. The Sediment Management Plan, dated May 2014, was developed in consultation with federal, state, and local agencies, including the State Water Board. The May 2014 Sediment Management Plan has the following objectives: 1) provide for dam safety and proper functioning of diversion dam facilities, specifically the fish release and low-level outlet valves; and 2) maintain the health of the aquatic environment downstream of the diversion dams by allowing for the passage of accumulated sediment. The May 2014 Sediment Management Plan includes mechanical removal and sluicing (passage of sediment through the low-level outlets of the Diversion Dams) to achieve its objectives.

A previously issued 2014 certification for mechanical removal of accumulated sediment behind the Log Cabin and Our House Diversion Dams did not authorize sluicing and the associated USACOE Standard Permit expired on October 10, 2019. On February 10, 2016, the State Water Board issued a certification for sluicing and other sediment passage activities detailed in the Sediment Management Plan and on October 21, 2016, the USACOE issued two CWA Section 404 LOPs (SPK-2014-00703 and SPK-2014-01187) for sluicing actions at the Our House and Log Cabin Diversion Dams, respectively. The LOPs have five-year terms and expire on October 21, 2021.

1.3 Updated Sediment Management Plan – June 2018

On September 18, 2019, YCWA submitted the Updated Log Cabin and Our House Diversion Dams Sediment Management Plan (dated June 2018) (Updated Sediment Management Plan) to the USACOE and requested an amendment to LOPs SPK-2014-00703 and SPK-2014-01187. YCWA requested to include mechanical sediment removal in the LOPs. Mechanical sediment removal (dredging) is not included in the 2014 LOPs and is no longer covered by an USACOE Standard Permit. YCWA also requested the USACOE grant a 10-year extension to the LOPs, from the date of approval, so sediment management activities are covered through 2029.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

The California Department of Fish and Wildlife (CDFW) issued Lake and Streambed Alteration Agreement No. 1600-2014-0163-R2 (LSAA) for the Project on September 8, 2014. On August 29, 2019, CDFW granted an extension of the LSAA until September 8, 2024.

The Updated Sediment Management Plan includes five components for the Log Cabin and Our House Diversion Dams: 1) maintenance of minimum pools; 2) passage of sediment; 3) removal of sediment due to blockage of outlets (when needed); 4) planned mechanical removal of sediment (when needed); and 5) emergency removal of sediment.

Changes to the Updated Sediment Management Plan include a new section on remedial actions for outlet blockage and improvements to protocols for passage of sediment and mechanical sediment removal. Sections on maintenance of minimum pools and emergency removal of sediment remain unchanged from the May 2014 Sediment Management Plan.

1.3.1 Sediment Passage (Sluicing)

The Updated Sediment Management Plan includes the operational actions outlined below and associated environmental triggers to maximize sediment movement through the low-level outlets and into the stream reaches below the Project dams while minimizing environmental impacts.

- 1) **Timing** – Sediment passage events will take place at least once during each year that the flow condition triggers outlined below are met. When the flow triggers are met, the sediment passage event will take place between October 1 and March 21.
- 2) **Flow Triggers** – Sediment passage events may occur when mean daily flows meet the following triggers:
 - a) **Log Cabin Diversion Dam:** Mean daily flows is estimated to be at least 540 cubic feet per second (cfs). (The mean daily flow is calculated by adding the flow at United States Geological Survey (USGS) streamflow gage no. 11409400 and the flow into the Camptonville Diversion Tunnel, and then subtracting the sum from the total the flow into Lohman Ridge Diversion Tunnel).
 - b) **Our House Diversion Dam:** Mean daily flows is estimated to be at least 1,500 cfs. (The mean daily flow is calculated by adding the flow into the Lohman Diversion Ridge Tunnel and the flow at downstream USGS gage no. 11400880.)
- 3) **Duration** – The low-level outlet valve will remain fully open for at least nine consecutive days. The valve will be closed over a two-day period to gradually reduce flow and sediment as follows: YCWA will close the low-level outlet valve for one day to approximately 50 percent (by area) of the orifice opening, and by noon on the next day, YCWA will close the low-level outlet valve entirely. YCWA may close

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

the valve during the nine-day period if mean daily inflow to the impoundment is estimated to be less than 540 cfs (for Log Cabin Diversion Dam) or 1,500 cfs (for Our House Diversion Dam) or significant reduction of flow through the valve indicates blockage.

1.3.2 Mechanical Removal of Sediment (Dredging)

YCWA's application for certification includes the actions outlined below for mechanical removal of sediment in the Project dams while minimizing environmental impacts.

- 1) **Timing** – Sediment removal will occur only when needed in the summer/early fall when inflow to the impoundment is low (i.e., inflow is less than or equal to the minimum instream flow requirement of the existing Yuba River Development Project FERC license).
- 2) **Process** – The Project dredging activities consist of mechanical removal of accumulated sediments behind the Log Cabin and Our House Diversion Dams. The dredging activities will be conducted during low flow conditions. The dredged material may be temporarily placed in an area of disturbance prior to placing it in trucks. All the dredged material will be transported to approved, upland disposal sites in accordance with *General Waste Discharge Requirements for Maintenance Dredging Operations*, Order No. R5-2009-0085.

Active controlled flow (inflows) to the impoundments will be temporarily diverted around dredging activities. Temporary water diversions will be installed and maintained in accordance with conditions of this certification. When possible YCWA will use hand tools (i.e., shovels), as opposed to mechanical removal for sediment buildup in front of the valves at the Log Cabin and Our House Diversion Dams. If mechanical excavation is needed, it will occur in nine steps: 1) YCWA will notify appropriate agencies about planned sediment removal; 2) sediment will be tested for metals; 3) mobilization; 4) diversion/control of water; 5) removal of sediment; 6) stockpiling of sediments; 7) stabilization of stockpile; 8) demobilization; and 9) issuance of a report.

- 3) **Sediment Amount** – YCWA estimates the maximum amount of sediment that would be removed at any one time from the Log Cabin Diversion Dam impoundment is 40,000 cubic yards (yd³). The maximum amount of sediment estimated to be removed from Our House Diversion Dam at any one time is 100,000 yd³. The excavated sediment will be transported to sediment disposal sites (see Figures 1 and 2). Disposal Site 1 is located on YCWA-owned land and Disposal Site 2 is located on privately-owned land. YCWA is currently obtaining the necessary approvals and permits for the use of Disposal Site 2.

1.4 Yuba River Development Project Relicensing

The Yuba River Development Project is currently undergoing FERC relicensing. Any future water quality protection requirements adopted in the certification for the Yuba River Development Project shall supersede this certification, to the extent that a conflict arises.

2 Regulatory Authority and Permits

2.1 Water Quality Certification and Related Authorities

The CWA (33 U.S.C. §§ 1251-1387) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. § 1251(a).) Section 101 of the CWA (33 U.S.C. § 1251 (g)) requires federal agencies to “co-operate with the State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.”

Section 401 of the CWA (33 U.S.C. §1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that a project will be in compliance with specified provisions of the CWA, including water quality standards and implementation plans promulgated pursuant to section 303 of the CWA (33 U.S.C. § 1313). CWA section 401 directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the CWA and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project. The State Water Board is designated as the state water pollution control agency for all purposes stated in the CWA and any other federal act. (Wat. Code, § 13160.) The State Water Board’s Executive Director is authorized to issue a decision on a certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 provides the State Water Board with the authority to “establish monitoring, inspection, entry, reporting and recordkeeping requirements and [require] other information as may reasonably be required” for activities subject to certification under section 401 of the CWA that involve the diversion of water for beneficial use. The State Water Board delegated this authority to the Deputy Director, as provided for in State Water Board Resolution No. 2012-0029. In the memo Redelegation of Authorities Pursuant to Resolution No. 2012-0029, issued by the Deputy Director on October 19, 2017, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights.

Project Water Quality Certification Background

The application for certification was received on September 20, 2019. The State Water Board provided public notice of the application pursuant to California Code of

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

Regulations, title 23, section 3858, by posting information describing the Project on the State Water Board's website and notifying e-mail list subscribers on November 26, 2019. The State Water Board denied the certification application without prejudice on December 16, 2019 because YCWA had not yet completed its lead agency responsibilities under the California Environmental Quality (i.e., YCWA had not issued a draft or final environmental document for the Project). YCWA submitted a new application for the Project on January 13, 2020. The State Water Board provided notice of receipt of a complete application for the Project to applicable parties pursuant to California Code of Regulations, title 23, section 3835, subdivision (c) on February 11, 2020. No comments were received.

State Water Board staff forwarded the draft Project certification and portions of the application that have the potential to cause adverse water quality impacts to the Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board) on April 3, 2020. (See Cal. Code Regs., tit. 23, § 53855, subd. (b)(2)(B).) No comments were received.

2.2 Water Quality Control Plans and Related Authorities

The California Regional Water Quality Control Boards (Regional Water Boards) have primary responsibility for the formulation and adoption of water quality control plans (basin plans) for their respective regions. The basin plans are subject to approval by the State Water Board and United States Environmental Protection Agency (USEPA), as appropriate. (Wat. Code, § 13240 et seq.) The State Water Board may also adopt water quality control plans, which supersede regional water quality control plans for the same waters to the extent of any conflict. (*Id.*, § 13170.) For a specified area, the water quality control plans designate the beneficial uses of waters to be protected, water quality objectives established for the reasonable protection of those beneficial uses or the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (*Id.*, §§ 13241, 13050, subd. (h), (j).) The beneficial uses together with the water quality objectives that are contained in the water quality control plans, and state and federal anti-degradation requirements constitute California water quality standards.

The Central Valley Regional Water Board adopted, and the State Water Board and the USEPA approved, the *Water Quality Control Plan for the Central Valley-Sacramento and San Joaquin River Region* (Basin Plan). The Basin Plan identifies existing beneficial uses for the Yuba River and its tributaries above Englebright Reservoir (including Oregon Creek) as: municipal and domestic supply; irrigation; stock watering; hydropower; cold freshwater habitat; cold spawning habitat; wildlife habitat; contact recreation; non-contact recreation; and canoeing and rafting.

2.3 Construction General Permit

The State Water Board adopted a Construction General Permit³, which is required for activities that disturb one or more acres of soil or projects that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.

2.4 Maintenance Dredging Operations General Order

The Central Valley Regional Water Board adopted *General Waste Discharge Requirements for Maintenance Dredging Operations*, Order No. R5-2009-0085 (General Order). This General Order specifies waste discharge requirements for maintenance dredging and/or placement projects that remove or place up to 100,000 yd³ of sediments. The removal, transport, and placement of dredged sediments are the primary components of the dredging process. Discharges from dredging operations may contain constituents of concern at the dredging site and upland placement of dredged material may impact groundwater or erode into surface waters. This General Order addresses the need for regular maintenance dredging as well as the need for dredged sediment to be reused in a manner which protects water quality.

2.5 California Environmental Quality Act

YCWA is the lead agency for the purpose of California Environmental Quality Act (CEQA) (Cal. Pub. Resources Code, § 21000 et seq.) compliance. The State Water Board is a responsible agency under CEQA. YCWA circulated an Initial Study/Mitigated Negative Declaration (IS/MND) for public comment on December 17, 2019. YCWA issued a Notice of Determination (NOD) for the IS/MND on January 21, 2020 (State Clearinghouse No. 2019129049).

The MND includes mitigation monitoring and reporting program (MMRP) measures to avoid or substantially reduce significant environmental impacts from the Project. Water quality protection measures and associated mitigation, monitoring, and reporting requirements were incorporated into conditions of this certification in accordance with California Code of Regulations title 23, section 3859, subdivision (a). Table A identifies resources areas within the State Water Board's purview for which the MND identified potential impacts and the associated certification conditions with water quality protection, monitoring, or reporting requirements.

³ Water Quality Order 2009-0009-DWQ and National Pollutant Discharge Elimination System No. CAS000002, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ, and any amendments thereto.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management
Water Quality Certification

Table A. IS/MND Resource Areas, Potential Impacts, and Corresponding Certification Conditions

IS/MND Resource Area and Section	IS/MND Potential Impacts	Applicable Certification Condition(s)*
Biological Resources: Minimizing Footprint (BIO-1)	Disturbed areas outside of approved Project boundary	Condition 23
Biological Resources: Biological Monitoring (BIO-2)	Adverse effects on sensitive biological resources	Conditions 9, 10, and 11
Biological Resources: Restoration (BIO-3)	Disturbed or exposed Project areas	Condition 21
Biological Resources: Invasive Species (BIO-4)	Introduction of invasive species	Conditions 9 and 10
Biological Resources: Flagging Sensitive Resources (BIO-5)	Adverse effects on sensitive resources	Condition 9
Biological Resources: Minimization of Vegetation Removal (BIO-6)	Disturbance to vegetation	Condition 23
Biological Resources: Construction Best Management Practices (BIO-7)	Degradation of on-site and off-site features	Conditions 21 and 23
Biological Resources: Vehicular Best Management Practices (BIO-8)	Degradation of water quality	Conditions 18 and 19
Biological Resources: Stranded/Entrained Aquatic Species Rescue and Salvage (BIO-9)	Adverse effects on aquatic species	Conditions 9, 10, and 11
Biological Resources: Special-status Semi-Aquatic Species Protections (BIO-10)	Adverse effects on special-status semi-aquatic species or their associated habitat	Conditions 9, 10, and 11
Biological Resources: Exclusion Devices (BIO-11)	Adverse effects on aquatic species	Conditions 11 and 22

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management
Water Quality Certification

IS/MND Resource Area and Section	IS/MND Potential Impacts	Applicable Certification Condition(s)*
Biological Resources: Avoid Work in Flowing Water (BIO-12)	Degradation of water quality	Conditions 11 and 22
Biological Resources: No Net Loss of Sensitive Communities (BIO-17)	Adverse effects on sensitive communities	Condition 25
Hydrological Resources: Monitoring (WQ-1)	Degradation of water quality	Conditions 5, 6, 7, 8 and 11

* Monitoring and reporting requirements are included in the referenced certification condition(s) and Project Activity Completion Reports will be completed by YCWA to document compliance with each condition.

The State Water Board reviewed and considered the information in the IS/MND in making its determination on the Project. The State Water Board will file a Notice of Determination with the State Clearinghouse within five days of issuance of this certification. All documents and other information that constitute the public record for this Project are maintained and available for public review at the State Water Board, Division of Water Rights, 1001 I Street, Sacramento, California 95814.

3 Discussion and Findings

When considering the application and developing this certification and its conditions, State Water Board staff reviewed and considered a wide range of information including the: certification application, including subsequent submissions; IS/MND; Basin Plan; existing water quality conditions; Project-related controllable factors; and other information in the record.

In order to ensure that the Project operates to meet water quality standards as anticipated, and to ensure that the Project will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, this water quality certification imposes conditions regarding monitoring, enforcement, and potential future revisions. Additionally, California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all water quality certifications, which are included in this water quality certification. The State Water Board has found that, with the conditions and limitations imposed under this water quality certification, the Project will be protective of state water quality standards and other appropriate requirements of state law.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE YUBA COUNTY WATER AGENCY LOG CABIN DIVERSION DAM AND OUR HOUSE DIVERSION DAM SEDIMENT MANAGEMENT PROJECT (PROJECT) will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if Yuba County Water Agency (Applicant) complies with the following terms and conditions during the Project activities certified herein.

CONDITION 1. All proposed conditions described in the application for water quality certification (certification) and the following mitigation measures and their associated mitigation, monitoring, or reporting program (MMRP) requirements: BIO-1 through BIO-12, BIO-17, and WQ-1 are conditions of this water quality certification. Notwithstanding any more specific conditions in this certification, the Applicant shall comply with all water quality protection measures described in the water quality certification application, and the above-referenced mitigation measures and MMRP requirements.

CONDITION 2. Sediment passage events shall occur at Log Cabin Diversion Dam between October 1 and March 21, at least once each water year when mean daily natural inflow to the Log Cabin Diversion Dam impoundment is estimated to be 540 cfs or greater.⁴ The sediment passage event shall be conducted in accordance with Section 3.2 of the *Log Cabin and Our House Diversion Dams Sediment Management Plan* (Updated Sediment Management Plan).

CONDITION 3. Sediment passage events shall occur at Our House Diversion Dam between October 1 and March 21, at least once each water year when mean daily inflow to the Our House Diversion Dam impoundment is estimated to be 1,500 cfs or greater.⁵ The sediment passage event shall be conducted in accordance with Section 3.2 of the Updated Sediment Management Plan.

CONDITION 4. The low-level outlets shall be opened fully for nine consecutive days for each sediment passage event. The Applicant shall inspect the low-level outlet of the diversion dam(s) at least daily during business hours when sediment passage events are active. The low-level outlets may be closed before the

⁴ The mean daily natural flow to Log Cabin Diversion Dam impoundment shall be calculated by adding the flow downstream of the Log Cabin Diversion Dam (at United States Geological Survey [USGS] gage no. 11409400) and the flow into the Camptonville Diversion Tunnel (at USGS gage no. 11409350) and subtracting that sum from that total the flow into the Lohman Ridge Diversion Tunnel (at USGS gage no. 11408870).

⁵ The mean daily inflow to the Our House Diversion Dam impoundment shall be calculated by adding the flow into the Lohman Ridge Diversion Tunnel (at USGS gage no. 11408870) to the flow below Our House Diversion Dam (at USGS gage no. 11408880).

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

sediment passage event has concluded if instream flows drop below the minimum trigger flows of 540 cfs for Log Cabin Diversion Dam and 1,500 cfs for Our House Diversion Dam. Valve closure shall occur over a two-day period to gradually reduce the flow as follows: 1) the Applicant shall close the low-level outlet valve for one day to approximately 50 percent (by area) of the orifice opening; and 2) by 12:00 p.m. (noon) of the next day, the Applicant shall close the low-level outlet valve entirely. Within 30 days following a sediment passage event, the Applicant shall provide the Deputy Director with the forecasted and actual flow conditions, including the instream flows recorded throughout the sediment passage event, to document compliance with Conditions 2 through 4.

CONDITION 5. Prior to beginning any sediment passage or dredging event, the Applicant shall collect at least three bulk sediment samples from the diversion dam impoundment area. The bulk sediment samples shall be analyzed by a California-certified laboratory for metals, including but not limited to: antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. The bulk samples shall be taken from areas of the impoundments that are expected to be passed during sediment passage (sluicing) event. Sampling and handling procedures shall comply with the most current United States Environmental Protection Agency (USEPA) test methods for both solid and liquid materials. The laboratory results of the sampling shall be submitted to the Deputy Director for review prior to October 1 of each year, with high concentrations flagged. The Deputy Director will approve, deny, or require modifications of sediment passage events based on the sampling results, recommendations, and other information provided by the Applicant. Mercury sediment results shall be reported in both wet and dry weight measurements.

CONDITION 6. The Applicant shall use analytical methods that comply with the Code of Federal Regulations, title 40, part 136, or methods approved by California's Environmental Laboratory Accreditation Program (ELAP), where such methods are available. Samples that require laboratory analysis shall be analyzed by ELAP-certified laboratories.

CONDITION 7. Project activities shall not cause an increase in turbidity downstream of the Project area greater than what is identified in the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan) (shown in Table 1), as averaged over a 24-hour period. Project activities shall not cause increases in turbidity that constitute nuisance or that adversely affect beneficial uses.

Table 1 - Turbidity Limits for Project Activities

Background Level or Natural Turbidity	Downstream Turbidity (after starting construction)
Less than 1 NTU	Total turbidity shall not exceed 2 NTU
Between 1 and 5 NTU	Increases shall not exceed 1 NTU
Between 5 and 50 NTU	Increases shall not exceed 20 percent
Between 50 and 100 NTU	Increases shall not exceed 10 NTUs
Greater than 100 NTU	Increases shall not exceed 10 percent

Monitoring

A hand-held field meter may be used to measure turbidity, in NTU, provided the meter uses a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. For each meter used for monitoring, a calibration and maintenance log shall be maintained onsite and provided to State Water Board staff upon request.

Mechanical Sediment Removal (Dredging). The Applicant shall obtain grab samples for turbidity at least three times daily (before work, at noon, and the end of the day) in the stream channel 300-500 feet downstream of the diversion dam and at a point below the confluence of the Middle Yuba River and Oregon Creek. Note additional water quality monitoring associated with dredging activities is outlined in Condition 8.

Sediment Passage (Sluicing) Events. The Applicant shall obtain grab samples for turbidity at least daily during sediment passage activities in the stream channel immediately downstream of the associated diversion and at a point below the confluence of the Middle Yuba River and Oregon Creek.

Standard turbidity limits may be temporarily exceeded during sediment passage events to allow a turbidity increase of 15 NTU over the background turbidity as measured in surface waters 300-500 feet downstream from the associated diversion dam, as determined based on access and safety needs. The higher turbidity limits shall only apply when stream flows are at or greater than the sediment passage flows established in Conditions 2 (Log Cabin) and 3 (Our House).

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

Background Turbidity. Background turbidity shall be established as outlined below.

- a. Background turbidity shall be established by the numerically highest turbidity sample taken within 12 hours prior to opening the low-level outlet. The background turbidity sample may be taken from the following locations upstream of the diversion dams:
 - At or within 100 feet of the upstream end of the high-water mark of the active reservoir pool;
 - Downstream of the Lohman Ridge Tunnel discharge above the Log Cabin Diversion Dam impoundment; and
 - Within the reservoir pool.
- b. Alternatively, for sediment passage events, if the reservoir is spilling prior to opening the low-level outlet, the Applicant may establish background turbidity by collecting a turbidity sample 300-500 feet downstream of the outlet, at the same location where turbidity will be measured during the sediment passage event. Such measurement must be taken within 12 hours prior to opening the low-level outlet.

If monitoring shows that turbidity has exceeded the specified turbidity levels outlined in this condition, the low-level outlet shall be closed, and sediment passage activities and mechanical sediment removal activities shall cease. The violation shall be reported immediately to the Deputy Director for the Division of Water Rights (Deputy Director) and the Central Valley Regional Water Quality Control Board's Executive Officer (Executive Officer). Sluicing and dredging activities may not re-commence without the permission of the Deputy Director.

Reporting

Within 30 days following a sluicing or dredging event, the Applicant shall provide a Sediment Turbidity Summary Report (Turbidity Report) to the Deputy Director. The Turbidity Report shall include the turbidity sampling results and records collected as part of the sediment passage or dredging event and a summary of the relevant information, including: how background turbidity was established; a map of the locations where background and compliance turbidity samples were collected; information on why these locations were selected; and quality control/assurance documentation for the turbidity measurements/results.

The Applicant may request modifications to the required turbidity monitoring for sediment passage events and mechanical sediment removal. The Applicant shall request any such changes and include supporting information as part of the Turbidity Report submittal to the Deputy Director. The Applicant shall comply with the turbidity requirements outlined in this condition unless otherwise approved by the Deputy Director.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

CONDITION 8. This condition applies only to mechanical sediment removal (dredging) activities. The Applicant shall perform surface water sampling in accordance with this certification and as described in the Updated Sediment Management Plan: a) when performing any in-water work; b) in the event that Project activities result in any materials reaching surface waters; and c) when any activities result in the creation of a visible plume in surface waters.

Monitoring

The surface water monitoring requirements below shall be conducted upstream of Project influence (as described in the Turbidity Background section in Condition 7), and within 300-500 feet downstream of the work area during activities that involve mechanical removal of sediments. Surface water monitoring shall occur at mid-depth.

Turbidity. See Condition 7 for turbidity-related requirements.

Settleable Material. The Applicant shall obtain grab samples for settleable material, measured in units of milliliter per liter (mL/L), three times daily (before work, at noon, and the end of the day). Settleable material shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136. Mechanical sediment removal activities shall not cause settleable matter to increase above 0.1 mL/L in surface waters.

Visible Construction Related Pollutants. The Applicant shall visually inspect for oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials continuously throughout the mechanical sediment removal and disposal period.

Dissolved Oxygen. The Applicant shall obtain grab samples for dissolved oxygen (DO), measured in units of milligrams per liter (mg/L) and percent saturation (% saturation), three times daily (before work, at noon, and the end of the day). Dissolved oxygen shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136. A hand-held field meter may be used, provided the meter uses a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite. Mechanical sediment removal activities shall not cause dissolved oxygen to be reduced below 7.0 mg/L for surface waters designated with the cold freshwater habitat (COLD) or fish spawning (SPWN) beneficial uses.

Reporting

A Surface Water Monitoring Report for Mechanical Removal of Sediment (Surface Water Monitoring Report) shall be submitted to the Deputy Director within two weeks of initiation of in-water work and every two weeks thereafter until dredging activities are complete (i.e., dredged materials are properly disposed of at the

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

disposal sites identified in the Updated Sediment Management Plan and Figure 2). Following completion of in-water work, the Applicant shall continue to report on monitoring for visual construction-related pollutants. The Surface Water Monitoring Report shall include tabulated monitoring data (sample locations, date, constituents, and concentrations), summary of data that illustrate clearly whether the Project complies with certification requirements, surface water sampling results, visual observations, and identification of the turbidity increases in the receiving water applicable to the natural turbidity conditions specified in the turbidity condition above (Condition 7).

If monitoring shows that water quality parameters exceed the specified levels for turbidity, settleable matter, dissolved oxygen, or other water quality objectives, in-water dredging activities shall cease and the violation shall be reported immediately to the Deputy Director and the Executive Officer. Dredging may not commence or re-commence without the permission of the Deputy Director.

CONDITION 9. The Applicant shall have a qualified biologist on site prior to and periodically throughout each sediment passage (sluicing) or dredging event to act as a Biological Monitor.

Training

The Biological Monitor shall conduct training for employees working in the Project area. The training shall include but not be limited to: a description of special status species⁶ with potential to be present in the Project area; actions to take to prevent or reduce impacts to the species; and protocols to follow if the species are encountered.

Inspection

The Applicant shall ensure that the Biological Monitor inspects the associated diversion dam area prior to all sluicing- or dredging-related work to identify if the activity will increase the spread of invasive aquatic species into, or out of, the diversion dam area, or if there will be any impacts from the activity to sensitive species in the diversion dam reservoir area, within 300 feet downstream of the diversion dam, and Disposal Site 2.

⁶ Special status species are defined as: those species listed, proposed, or under review as threatened or endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA); those listed as rare under the California Native Plant Protection Act and/or included on California Department of Fish and Wildlife's (CDFW) most recent *Special Vascular Plants, Bryophytes, and Lichens List* with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4; those designated as *Species of Special Concern* by CDFW; those designated as Fully Protected under the California Fish and Game code (Sections 3511, 4700, 5050, and 5515); and those protected under the federal Bald and Golden Eagle Protection Act.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

Flagging Sensitive Resources

Prior to commencing Project activities, any known sensitive resources (which include, but are not limited to: special-status species, sensitive habitats, invasive plants, and other predetermined areas with significant sensitive resources) within or near the proposed work area will be flagged to ensure that no activities are conducted in those areas.

Notifications

If any significant issues are identified by the Biological Monitor (e.g., identification of special status species in the work area or immediately downstream, or evidence of invasive aquatic species entering or leaving the work area), the Applicant shall notify the Deputy Director and any other pertinent state or federal resource agencies as soon as possible to determine what steps shall be taken to protect water quality and the beneficial uses of the water.

CONDITION 10. Prior to and during diversion of flow and dewatering of the stream channel and work area (Condition 22), as well as prior to sediment laydown at Disposal Site 2, the Biological Monitor will remove all fish, frogs, turtles, and other aquatic vertebrate species in accordance with the *Fish Rescue and Salvage Plan* dated 2014, included as Attachment E of the IS/MND.

CONDITION 11. Within 30 days of Project activity completion (i.e., completion of each sluicing or dredging event), the Applicant shall submit a Project Activity Completion Report (Completion Report) to the Deputy Director. The Completion Report shall include:

- a. Project area documentation and monitoring data;
- b. Daily Project work summaries;
- c. Documentation of compliance with each condition of this certification and details of any failure to meet the certification requirements; and
- d. If applicable, details of Project-related adverse impacts to beneficial uses.

The Applicant shall provide any additional information or clarification requested by the Deputy Director related to the Completion Report. Upon request from State Water Board staff, the Applicant shall meet to discuss the Completion Report.

CONDITION 12. Unless otherwise specified in this water quality certification or at the request of the Deputy Director, data and/or reports must be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with California Water Code section 13167.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

CONDITION 13. A copy of this certification shall be provided to all contractors and subcontractors conducting Project work, and at least one copy shall be available at the Project site for reference. The Applicant shall be responsible for work conducted by its contractors and subcontractors. The Applicant, including its contractors and subcontractors, shall report any noncompliance with the conditions of this certification to the Deputy Director within 24 hours of the time when the Applicant, its contractors, or subcontractors become aware of noncompliance with this certification.

CONDITION 14. Appropriate spill containment, absorbent spill clean-up materials, and spill kits shall be available on-site. All spills shall be cleaned up immediately and shall not be buried or washed with water. Initial containment shall be with absorbent material or, if necessary, construction of berms. Used clean-up materials, contaminated materials, and recovered spilled materials that are no longer useable shall be stored and disposed of properly. Hazardous and non-hazardous material shall be disposed of in the manner specified by the manufacturer. Contaminated soil shall be excavated, contained, and transported to an approved disposal site.

CONDITION 15. The Applicant and its contractors shall notify all applicable agencies as soon as feasible, but no later than three business days after an incident, as to the type, date, time, and actions taken in response to all spills within their jurisdiction. In the event of a major spill affecting plant, wildlife, or aquatic resources or creating public health concerns, notification shall be according to all applicable requirements.

CONDITION 16. Control measures for erosion, excessive sedimentation, and turbidity shall be implemented and in place prior to the commencement of, during, and after any ground clearing activities, excavation, or any other Project activities that could result in erosion or sediment discharges to surface waters. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic wildlife is prohibited.

CONDITION 17. Mechanical sediment removal activities may continue during precipitation events of less than 0.25 inches within a rolling 24-hour period. Mechanical sediment removal shall stop when 0.25 inches of rain occurs within a rolling 24-hour period. Work shall not resume until at least 24 hours has passed with no precipitation and the Applicant has determined site conditions are appropriate to resume mechanical sediment removal activities.

CONDITION 18. All equipment shall be washed prior to transport to the Project site and be free of sediment, debris, and foreign matter. All wash water generated from pre-washing shall be contained and disposed of off-site in compliance with federal, state, and local laws, ordinances, and regulations.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management
Water Quality Certification

CONDITION 19. Use of vehicles and equipment shall be limited to the designated work areas shown in Figure 1. Project-related vehicle traffic will be confined to established roads, staging areas, and parking areas.

Any maintenance or refueling of equipment occurring on-site shall be done in a designated area with secondary containment, located away from the riparian area and stream corridor. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (motors, pumps, generators, etc.) not in use shall be positioned over drip pans or other types of containment. Spill and containment equipment (oil spill booms, sorbent pads, etc.) shall be maintained onsite at all locations where such equipment and vehicles, are used, or staged.

CONDITION 20. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Deputy Director within 24-hours of the discharge. Activities shall not cause visible oil, grease, or foam in the receiving water.

CONDITION 21. All temporarily affected areas, outside of the areas of maintenance dredging, shall be restored to pre-construction contours and conditions upon completion of construction activities.

CONDITION 22. The Applicant shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The plan(s) shall include the proposed method and duration of diversion activities. The Surface Water Diversion and/or Dewatering Plan(s) must be consistent with this certification. This certification does not allow permanent water diversion of flow from the receiving water. This certification is invalid if any water is permanently diverted as a part of the Project. The Applicant must also abide by the following:

- a. No heavy equipment will operate or any excavation take place in the portion of the stream where flowing water is present, except to place bypass pumps.
- b. Exclusion devices will be placed on any pumps or pipes, as appropriate, to exclude aquatic species. Block nets shall be erected to prevent frog movement into the work area. Exclusion devices shall be in place and maintained in working order at all times water is being diverted. The Biological Monitor will periodically inspect all exclusion devices to verify they are functioning properly and effectively protecting aquatic species.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management
Water Quality Certification

The Deputy Director may require updates to the Surface Water Diversion and/or Dewatering Plan(s) if potential impacts to water quality or beneficial uses are identified that necessitate such updates.

CONDITION 23. If the Project will involve land disturbance activities of one or more acres, or the Project disturbs less than one acre but is part of a larger common plan of development that in total disturbs one or more acres, the Applicant shall obtain coverage under the Construction General Permit (*National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ*, and any amendments thereto) for discharges to surface waters comprised of stormwater associated with construction activity.

CONDITION 24. The Applicant shall obtain coverage under the Central Valley Regional Water Quality Control Board's *General Waste Discharge Requirements for Maintenance Dredging Operations Sacramento-San Joaquin Delta, Order No. R5-2009-0085* (Order), for dredging and/or dredged material placement projects that remove and/or place up to 100,000 yd³ of material and meet other criteria described in the Order. If mechanical removal of more than 100,000 yd³ of material is necessary, the Applicant must apply for individual waste discharge requirements.

CONDITION 25. Prior to commencing construction, the Applicant shall provide evidence to the Deputy Director of mitigation for any impacts to wetlands or riparian areas... Mitigation may include onsite restoration, in-lieu fee payment, or purchase of mitigation credits at an agency approved mitigation bank. Compensatory mitigation must comply with the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, dated April 2019, which ensures no overall net loss of wetlands for impacts to waters of the State.

Evidence of compliance with compensatory mitigation bank requirements includes providing a letter from the approved compensatory mitigation bank. The letter shall: (a) be on the compensatory mitigation bank's letterhead; (b) be signed by an authorized representative of the compensatory mitigation bank; (c) indicate the United States Army Corp of Engineers SPK number(s); (d) include the Project name and location; and (e) detail the type of compensatory mitigation credits purchased for the Project's impacts.

CONDITION 26. The Deputy Director and the Executive Officer shall be notified no less than one week prior to the commencement of sluicing or dredging activities, except as otherwise noted in this condition. Upon request, a sluicing or dredging schedule shall be provided to agency staff and the Applicant shall provide State Water Board and Central Valley Regional Water Quality Control Board staff access to the Project site to document compliance with this certification. Due to the reliance of the Project on uncontrollable factors (storm events), 24-hour notice

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

will be accepted if it is accompanied by evidence that notice was not possible one week prior to commencement of a sediment passage (sluicing) event.

CONDITION 27. The Applicant shall comply with all applicable requirements of the Basin Plan. If at any time an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project has or could soon be in violation of water quality objectives, the associated Project activities shall cease immediately and the Deputy Director and the Executive Officer shall be notified. Associated activities may not resume without approval from the Deputy Director.

CONDITION 28. This certification covers only those sediment passage and dredging events for the Log Cabin and Our House Diversion Dams described in the application. To the extent that certification requirements for the pending long-term Federal Energy Regulatory Commission (FERC) Project operating license for the Yuba River Development Project (FERC Project No. 2246) conflict with the requirements in this certification regarding sediment management at the Log Cabin and Our House Diversion Dams, the terms in the subsequent water quality certification shall supersede those in this certification.

CONDITION 29. Nothing in this water quality certification is meant to alter the instream flow requirements of the Yuba River Development Project (FERC Project No. 2246). Minimum instream flows shall be maintained throughout the Project unless the Applicant receives the necessary approvals to modify the Yuba River Development Project flows.

CONDITION 30. Notwithstanding any more specific conditions in this certification, the Project shall be conducted in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act. The Applicant shall take all reasonable measures to protect the beneficial uses of waters identified in the Basin Plan.

CONDITION 31. This certification does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the CESA (Fish & G. Code §§ 20502097) or the federal ESA (16 U.S.C. §§ 1531 - 1544). If a "take" will result from any act authorized under this certification or water rights held by the Applicant, the Applicant must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Applicant is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this water quality certification.

CONDITION 32. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to all remedies, penalties, processes, or sanctions as provided for under applicable state or

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

CONDITION 33. In response to a suspected violation of any condition of this certification, the State Water Board and the Central Valley Regional Water Quality Control Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs of the reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Wat. Code §§ 1051, 13165, 13267 and 13383). In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate.

CONDITION 34. No Project activities shall commence until all necessary federal, state, and local approvals have been obtained. The Applicant is responsible for compliance with all applicable federal, state, and local laws and ordinances.

CONDITION 35. Any requirement in this certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

CONDITION 36. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

CONDITION 37. Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action if necessary, to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 38. The State Water Board will provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification.

CONDITION 39. Activities associated with construction and maintenance of the Project that threaten or potentially threaten water quality may be subject to further review by the Deputy Director and Executive Officer.

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management
Water Quality Certification

CONDITION 40. The Applicant must submit any changes to the Project which would have a significant or material effect on the findings, conclusions, or conditions of this water quality certification, to the State Water Board for review and written approval prior to implementation. If the State Water Board is not notified of a significant change to the Project, it will be considered a violation of this certification.

CONDITION 41. This certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

CONDITION 42. This water quality certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, chapter 28 and owed by the Applicant.

ORIGINALLY SIGNED BY ERIN RAGAZZI for
Eileen Sobeck
Executive Director

April 10, 2020
Date

Enclosures: Figure 1: Log Cabin Diversion Dam and Our House Diversion Dam
Sediment Management Project Area Map

Figure 2: Sediment Disposal Sites

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

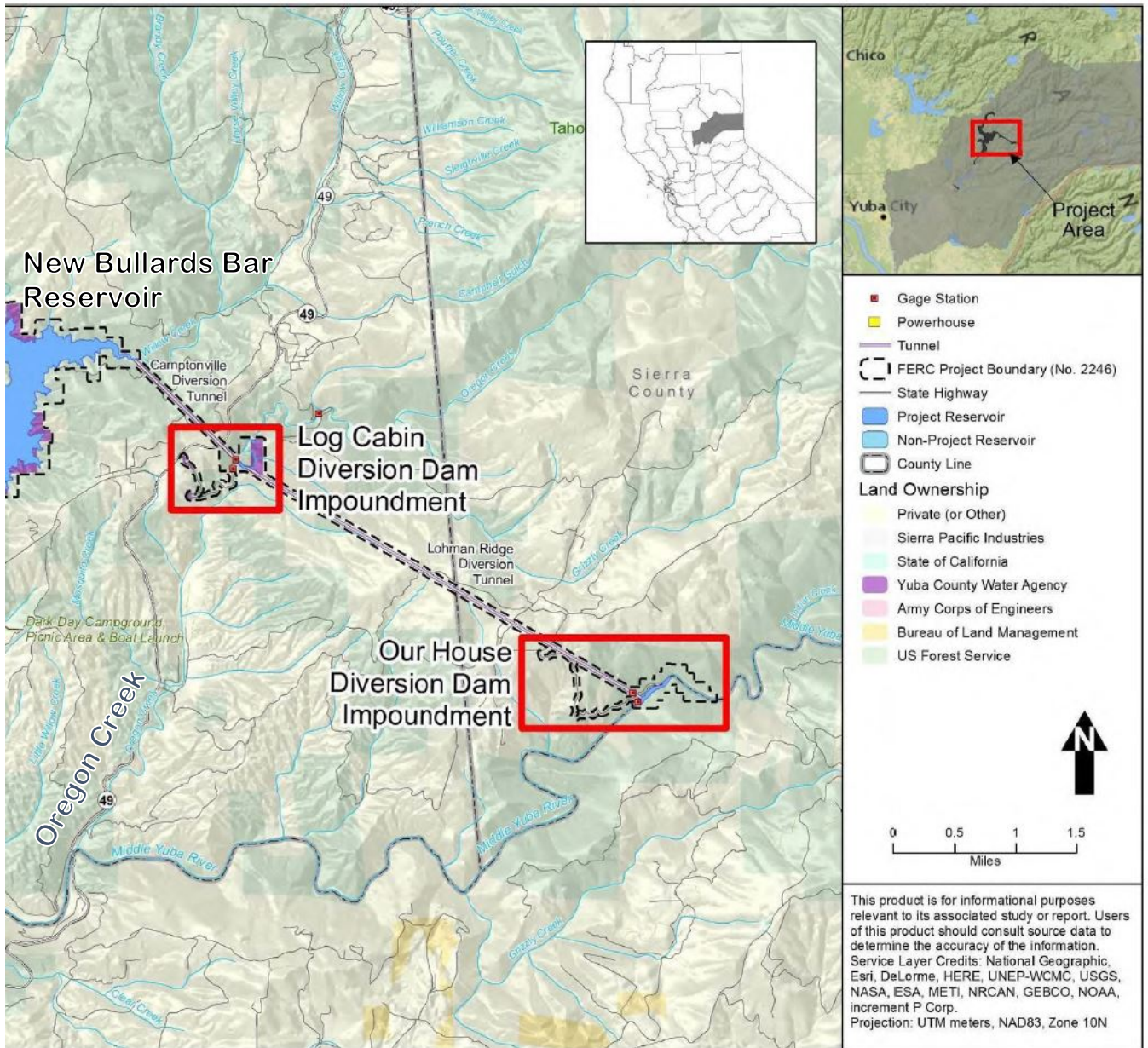


Figure 1: Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Project Area Map (From YCWA Final Mitigated Negative Declaration, January 2020)

Log Cabin Diversion Dam and Our House Diversion Dam Sediment Management Water Quality Certification

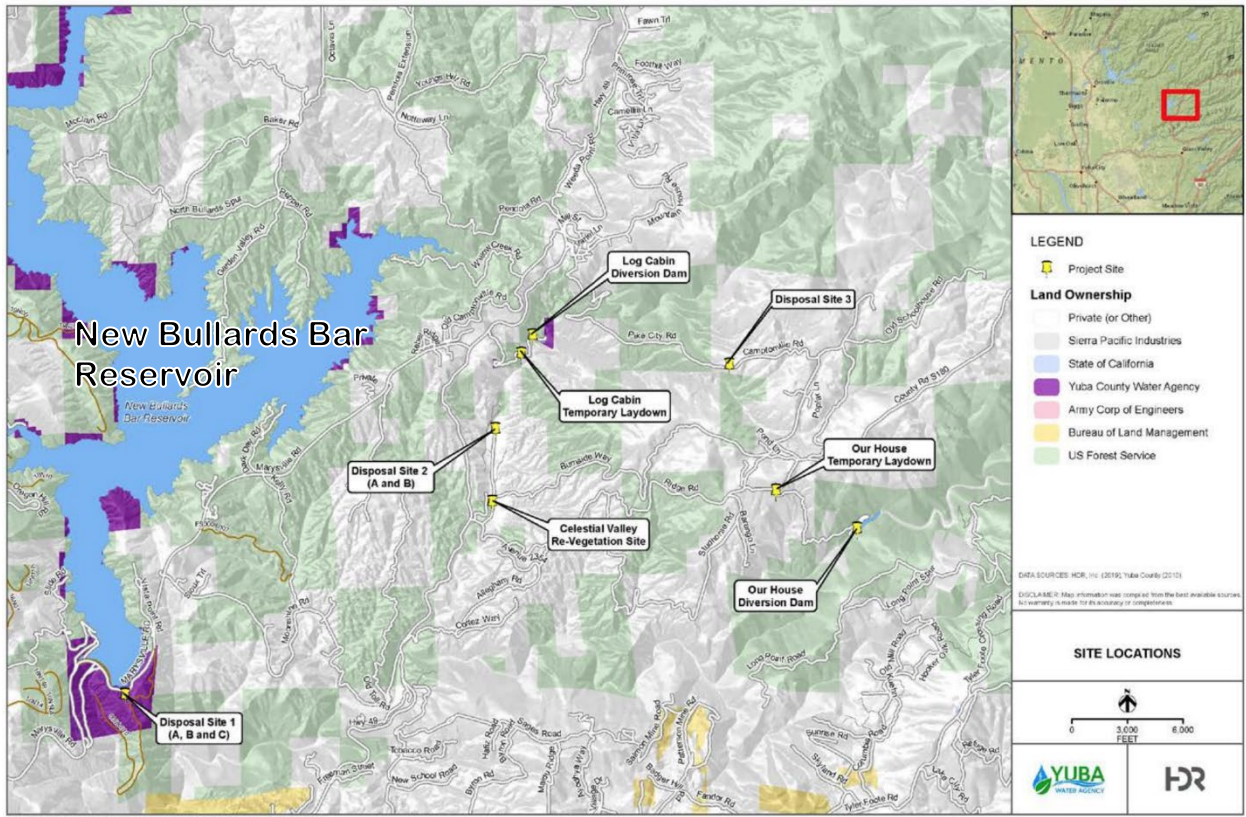


Figure 2: Sediment Disposal Sites (from YCWA Final Mitigated Negative Declaration, January 2020)