

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 APRON CURTAIN REPAIR PROJECT**

SOURCE: Oregon Creek

COUNTY: Yuba County

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

I. Project Description

Yuba County Water Agency (YCWA or Applicant) filed a water quality certification application with the Central Valley Regional Water Quality Control Board (Central Valley Regional Board) on July 10, 2014, for the Log Cabin Diversion Dam Apron Repair Project (Project). The Project is located in Yuba County on Oregon Creek, approximately 4.3 miles upstream of the confluence with the Middle Yuba River. Access to the Project area is provided via Log Cabin Dam Road, which branches off of State Route 49. The Project involves modification of the existing Log Cabin Diversion Dam.

In November of 2011, during a diving inspection YCWA discovered two small areas of scour on the toe of the Log Cabin Diversion Dam spill apron on the downstream side of the dam. One of these scour areas was estimated to be 9 cubic feet in volume, while the other was estimated at 2.5 cubic feet in volume, both in approximately 6 feet wide sections. YCWA planned to repair these scour areas during the same time period that sediment removal work was planned in 2014. Conducting both activities at approximately the same time could avoid the need to dewater the area around the dam separately for each maintenance project. The Project is expected to take approximately five days to complete in conjunction with the sediment removal project. The Central Valley Regional Board issued YCWA a Section 401 water quality certification (certification) (33 U.S.C. §1341) for dredging activities at the Log Cabin Diversion Dam under the Federal Clean Water Act (CWA) (33 U.S.C. §§ 1251-1387) on September 17, 2014.

YCWA plans to repair the scour areas by drilling dowels into the existing concrete and stream bed in the scour area and then filling the scour areas with fiber reinforced shotcrete which contains a high silica fume content. A discharge pipe from the upstream Log Cabin Diversion Dam temporary impoundment will be extended approximately 150 feet downstream of the dam to allow an estimated 8 cubic feet per second of streamflow to pass around the construction area. A combination of sandbag barriers upstream of the discharge pipe and sump pumps will dewater the construction area, allowing the work to proceed in dry conditions.

YCWA included the following best management practices (BMPs) within its certification application:

1. **Exclusion Devices** – Nets, screens, and other exclusion materials will be provided on any pumps, or pipes within the reservoir and around the work area as appropriate to exclude aquatic species.
2. **Heavy Equipment Restrictions** – No heavy equipment shall operate, and no excavation shall take place, in the portion of the stream where flowing water is present.
3. **Flow Diversion** – Flow will be diverted in a manner that minimizes turbidity, siltation, and pollution and provides flows to downstream reaches. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.
4. **Invasive Species Protection** – Work activities will be conducted in a manner that prevents the introduction or transfer and spread of aquatic, riparian, and terrestrial invasive species, including plants, animals, and microbes from one work site and/or waterbody to another. Visual inspections will be used before entering waterbodies and all equipment will be cleaned prior to entry and exit of waterbodies if multiple waterbodies are involved in the Project area.
5. **Hazardous Materials** – No debris, soil, silt, sand, rubbish, construction waste, cement, or concrete or washings thereof, oil or other petroleum products or any other substance which could be hazardous to aquatic life shall be allowed to contaminate the soil and/or enter into or be placed where it may be washed by rainfall or runoff into waters. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark.

Leaks and spills will be prevented: by ensuring that all vehicles and equipment are in good working order (no leaks); by use of drip pans or absorbent materials under vehicles and equipment where necessary; and by ensuring that all construction areas have proper spill prevention and clean up materials on hand to contain spilled substances. Refueling and maintenance of vehicles and equipment must occur offsite and in an area located away from drainage courses where runoff could enter waterbodies.

II. Construction Activities

The Project involves the following repair work as outlined in the certification application:

- 1) **Site Isolation:**
 - A temporary diversion dam will be built upstream of the Log Cabin Diversion Dam to allow instream flow to bypass the construction area.
 - If applicable, the temporary diversion dam, as well as the other items required for site isolation, will use the same infrastructure installed for the sediment dredging project at the same location. If however this Project is not performed in 2014, it is assumed that a new temporary diversion dam will be installed to isolate the area at the time of construction.

- A temporary pipe will collect water flowing in Oregon Creek at the upstream diversion dam and discharge the water approximately 150 feet downstream of the Project area.
- A sandbag barrier will be placed upstream of the discharge end of the pipe to prevent backwater from reaching the construction area.
- Sump pumps will discharge any remaining water in the isolation area below the sandbag barrier.
- Visquin plastic will be laid on the creekbed and stabilized with sandbags along the edges, creating an approximately 40-foot by 20-foot lined work space to prevent construction materials from entering the creekbed.

2) Apron Curtain Repair:

- The scour areas will be pressure washed with water to clean the areas in need of repair.
- Holes will be drilled into the concrete using hand-held, generator powered drills.
- Wooden dowels will be attached with a bonding agent to the holes in the concrete. Dowels driven into the creekbed will not be attached with a bonding agent.
- Rapid Set Shotcrete mix will be applied to the scoured areas, completely covering the bonded areas. (While the Shotcrete has a high pH in solution, it becomes inert after curing, which takes approximately 24 hours).
- All overspray from the above activities will be captured on the Visquin plastic.

3) Post-Repair Activities:

- All Visquin plastic will be removed after the Shotcrete has completely cured. Care will be taken to ensure that all materials gathered in the Visquin plastic stay contained during removal, and all the materials enclosed, along with the Visquin plastic itself, will be disposed of properly off-site.
- Site isolation infrastructure components will be removed in a controlled manner, gradually allowing water to return to the previously isolated area. Once isolation infrastructure is removed, the Log Cabin Diversion Dam will return to normal operations.

III. Regulatory Authority

Water Quality Certification and Related Authorities

The Federal Clean Water Act (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 water quality certification that the 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 water quality 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 Resources Control Board (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 has been delegated the authority to issue a decision on a water quality certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Quality Control Plans and Related Authorities

The California Regional Water Quality Control Boards (Regional Water Boards) adopt, and the State Water Board approves, water quality control plans (basin plans) for each watershed basin in the State. The basin plans designate the beneficial uses of waters within each watershed basin, and water quality objectives designed to protect those uses pursuant to section 303 of the CWA. (33 U.S.C. § 1313.) The beneficial uses together with the water quality objectives that are contained in the basin plans and state and federal anti-degradation requirements constitute California's water quality standards.

The Central Valley Regional Board adopted, and the State Water Board and the United States Environmental Protection Agency 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.

The State Water Board reviewed and considered the plans and Project description provided by the Applicant. Further, the State Water Board considered the Basin Plan, the existing water quality conditions and Project-related controllable factors.

Construction General Permit

Dischargers whose projects disturb one or more acres¹ of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, may need to obtain coverage under the *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Quality Order 2009-0009-DWQ and National Pollutant Discharge Elimination System No. CAS000002, as amended by Order No. 2010-0014-DWQ)*. Construction activity subject to the Construction General Permit includes 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. It is not expected that a Construction General Permit will be required for this Project.

¹ This Project is expected to disturb only 0.25 acres of land.

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 issued a Notice of Exemption (NOE) with the certification application for a Categorical Exemption under section 15301 (Class 1) of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq). Subsequently it was determined that a NOE would not be appropriate for the Project, and YCWA released a Mitigated Negative Declaration (MND) for public comment on August 29, 2014. A Notice of Determination (NOD) for the MND was issued by YCWA on September 30, 2014 (State Clearinghouse No. 201408078).

The State Water Board reviewed and considered the MND, plans and Project description in connection with the issuance of this certification. The MND identified the following potentially significant impacts from the Project that fall within the State Water Board's purview:

- Reduced water quality due to increased turbidity from construction activities and/or storm water runoff during construction;
- Adverse effects to riparian habitat or other sensitive natural communities due to the activities needed to isolate and dewater the streambed; and
- Adverse effects to sensitive or special-status aquatic species due to activities needed to isolate and dewater the streambed.

The mitigation measures proposed in the MND that pertain to the protection of resources within the State Water Board's purview have been incorporated into conditions of this certification to meet the requirements of Public Resources Code Section 21081.6(a)(1). Monitoring and reporting requirements are built into certification conditions as appropriate and necessary to ensure the implementation and completion of mitigation measures in accordance with California Code of Regulations, title 14, section 15097. The State Water Board will file a NOD within five days of issuance if this certification.

All documents and other information that constitute the public record for this Project shall be maintained by the Division of Water Rights and shall be available for public review at the following address: State Water Resources Control Board, Division of Water Rights, 1001 I Street, Sacramento, CA 95814.

IV. Discussion

On July, 18, 2014, the Central Valley Regional Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the Central Valley Regional Board's website. No comments were received.

The United States Army Corps of Engineers (ACOE) has determined a Nationwide Permit 3 under section 404 of the CWA is required for the Project. The ACOE identification number for the Project is SPK-2013-00914.

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 APRON CURTAIN REPAIR PROJECT will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if YCWA complies with the following terms and conditions during the Project activities certified herein.

CONDITION 1 All BMPs described in the application for water quality certification (see Project Description section) and supplemental information are conditions of this water quality certification. Notwithstanding any more specific conditions in this water quality certification, the Applicant shall comply with all measures described in the water quality certification application and its supplements.

CONDITION 2 Construction materials, debris, spoils, soil, silt, sand, bark, slash, sawdust, rubbish, steel, other organic or earthen material, and any other substances from any Project activities shall be prevented from entering surface waters. All construction debris and trash shall be contained and regularly removed from the work area to the staging area during construction activities. Upon completion, all Project-generated debris, building materials, excess material, waste, and trash shall be removed from all the Project sites for disposal at an authorized landfill or other disposal site in compliance with State and local laws, ordinances, and regulations.

CONDITION 3 Project activities shall not cause an increase in turbidity downstream of the Project area greater than those identified in the Basin Plan except as provided for in this condition. Waters shall be free of changes in turbidity (due to Project activities) that cause nuisance or adversely affect beneficial uses. Except for in-water working periods discussed at the end of this condition, increases in turbidity shall not exceed background levels (natural turbidity measured in Nephelometric Turbidity Unit [NTUs] prior to the start of Project activities) by more than the thresholds identified below and as outlined in the Basin Plan:

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 shall occur every hour during Project construction in Oregon Creek. If monitoring shows that turbidity has exceeded the specified turbidity levels outlined in this condition, construction will cease and the violation will be reported immediately to the Deputy Director) and the Central Valley Regional Board's Executive Officer (Executive Officer). Construction may not re-commence without the permission of the Deputy Director.

Standard turbidity limits may be eased during in-water working periods to allow a turbidity increase of up to 15 NTU over the background turbidity as measured in surface waters 300 feet downstream from the working area. For in-water working periods, turbidity shall not exceed 15 NTU over background turbidity for more than four consecutive hours or 24 hours total for the Project.

CONDITION 4 All equipment must be washed prior to transport to the Project site and must be free of sediment, debris and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. 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 (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be maintained onsite at all locations where such equipment is used or staged.

CONDITION 5 Onsite containment for storage of chemicals classified as hazardous shall be kept away from watercourses and include secondary containment and appropriate management as specified in California Code of Regulations, title 27, section 20320.

CONDITION 6 The application shall have a qualified biologist on site during Project construction to act as a Biological Monitor. Applicant is responsible for ensuring that the Biological Monitor guides all construction related work as it pertains to the spread of invasive aquatic species into, or out of, the construction area, as well as monitoring for sensitive aquatic species within the construction area. If any significant changes are made to the Project by the Biological Monitor (e.g. identification of sensitive or endangered species within the construction area, or evidence of invasive aquatic species entering or leaving the construction area), then the Applicant shall notify the Deputy Director and any other pertinent state or federal resource agencies as soon as possible to determine what steps must be taken.

CONDITION 7 Copies of this water quality certification shall be provided to any contractor and all subcontractors conducting Project-related work, and copies shall remain in their possession at the Project site. The Applicant shall be responsible for work conducted by its contractor, subcontractors, or other persons conducting Project-related work.

CONDITION 8 The Deputy Director and the Executive Officer shall be notified as soon as possible after this certification is issued, when construction is expected to commence. If this Project does not commence in 2014, notification must be no less than one week prior to the commencement of ground disturbing activities. Upon request, a construction schedule shall be provided to agency staff in order for staff to be present onsite, to answer public inquiries regarding the Project and to document compliance with this certification. The Applicant must provide State Water Board and Central Valley Regional Board staff access to the Project site to document compliance with this certification.

CONDITION 9 The Applicant must take all reasonable measures to protect the beneficial uses of waters of the Yuba River and its tributaries. This certification requires compliance 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 within three days. Associated activities may not resume without approval from the Deputy Director.

CONDITION 10 Nothing in this certification is meant to alter the current instream flow requirements of the Yuba River Development Project (FERC Project No. 2246), and the existing minimum flow requirements shall be maintained throughout the Project.

CONDITION 11 No unset cement, concrete, grout, damaged concrete, concrete spoils, or wash water used to clean concrete surfaces shall contact or enter surface waters or be allowed to percolate into Project area soils. Any area containing wet concrete shall be completely bermed and isolated. The berm shall be constructed of sandbags or soil and shall be lined with plastic to prevent seepage. No leachate from truck or grout mixer cleaning stations shall percolate into Project area soils. Cleaning of concrete trucks or grout mixers shall be performed off-site or in such a manner that affected wash water and associated debris is captured, contained and disposed of in compliance with state and local laws, ordinances and regulations. Washout areas shall be of sufficient size to completely contain all liquid and waste concrete or grout generated during washout procedures. Hardened concrete or grout shall be disposed of at an authorized landfill, in compliance with state and local laws, ordinances and regulations.

CONDITION 12 All imported riprap, rocks, and gravel used for construction shall be pre-washed. Wash water generated on-site shall not contact or enter surface waters. Wash water shall be contained and disposed of in compliance with state and local laws, ordinances, and regulations.

CONDITION 13 The Applicant shall file a report within 10 days of project completion certifying compliance with Conditions 1–12 of this certification and detailing any failure to meet these conditions. Unless otherwise specified in this 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.

CONDITION 14 Notwithstanding any more specific conditions in this certification, the Project shall be operated 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.

CONDITION 15 Notwithstanding any more specific conditions in this certification, the Project shall be operated in a manner consistent with the Construction General Permit, if it is required for completion of the Project.

CONDITION 16 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 California Endangered Species Act (ESA) (Fish & Game Code §§ 2050-2097) 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 certification.

CONDITION 17 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, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the CWA, the applicability of any state law authorizing remedies, penalties, process 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 18 In response to a suspected violation of any condition of this certification, the Deputy Director or the Executive Officer 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 Deputy Director 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). The State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

CONDITION 19 No construction shall commence until all necessary federal, state, and local approvals have been obtained.

CONDITION 20 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 21 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 certification, to the Deputy Director for prior review and written approval. If the Deputy Director is not notified of a significant change to the Project, it will be considered a violation of this certification.

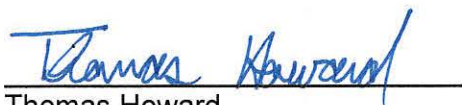
CONDITION 22 Nothing in this water quality certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action if necessary to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 23 The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to modify any of the conditions of this certification.

CONDITION 24 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 25 This certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (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 26 This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, chapter 28.



Thomas Howard
Executive Director

10/28/14
Date