STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the

NEVADA IRRIGATION DISTRICT BOWMAN LOW LEVEL OUTLET REPAIR PHASE 2 PROJECT

SOURCE: Canyon Creek, tributary to South Yuba River

COUNTY: Nevada County

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

I. <u>Project Description</u>

Nevada Irrigation District (NID or Applicant) filed a water quality certification application with the State Water Resources Control Board (State Water Board) on February 4, 2015, for the Bowman Low Level Outlet Repair Phase 2 Project (Project). The Project is located in Nevada County on Canyon Creek, approximately 10.7 miles upstream of the confluence with the South Yuba River. Access to the Project area is provided via Bowman Lake Road, approximately 13 miles north of Highway 20 (see Figure 1).

The Project involves modification of and addition to the existing Bowman North Dam low level outlet facilities. On January 26, 2013, a surge event in the low level outlet at the Bowman North Dam caused a significant leak in the 1920s era outlet piping and valves. In 2013, NID performed the Phase 1 repairs on the low level outlet, which included removing and replacing the off stream portions of the piping and valves. Phase 1 work was primarily conducted within Bowman North Dam and underground. Phase 2 repairs include installation of a new 66-inch butterfly valve and a new 48-inch Howell-Bunger Valve, with associated piping. The valve structure will be approximately 50 feet by 20 feet and will be installed on the bank of Canyon Creek adjacent to where the old outlet valves were removed in Phase 1. Phase 2 is proposed to be constructed in June of 2015, during the outage period of Pacific Gas and Electric Company's associated Drum Spaulding Hydroelectric Project. Conducting the construction during the outage period will eliminate the water leakage coming through the Bowman Powerhouse and allow Phase 2 to be constructed with minimal flows in Canyon Creek below the dam. A new concrete foundation, which will support the valves and piping, will be poured within an area isolated from the stream, minimizing any potential impacts to water quality.

NID identified the following best management practices (BMPs) in its certification application for the Project:

- Staging areas are to be located outside of the stream zone and all waterbodies so as to reduce the potential for pollutants from equipment to enter the water;
- Develop plans for deposition and storage of excavated material, if needed;

- Silt fencing, sand bags, and other appropriate materials will be placed between the work area and diversion channel in order to prevent sedimentation and other pollutants from entering Canyon Creek;
- Use of appropriate sediment control measures, including sedimentation fences, bale check dams, fiber roles, or other sediment traps, barriers, and covers, or other methods approved by the State Water Board and the Central Valley Regional Water Quality Control Board (collectively Water Boards);
- Sedimentation traps, if used, shall be cleaned and maintained on a regular basis to ensure proper functioning of erosion control; and
- Provide mulching, seeding, or other suitable erosion stabilization measures, for post-construction, if needed and as approved by the Water Boards.

II. Construction Activities

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

1) Site Isolation and Dewatering:

The new concrete valve structure will be located on the margin of the Canyon Creek stream channel immediately below the Bowman North Dam. The construction area will be isolated and dewatered prior to the pouring of any concrete. Only a small portion of the stream will be diverted, and a small portion of the stream bank will need to be isolated. The construction will occur during a low flow period, reducing the area that will need to be isolated and dewatered before construction.

2) Concrete Valve Structure Construction:

A concrete foundation, approximately 50 feet by 20 feet in area, will be poured after the area has been isolated and dewatered. The area will remain isolated and dewatered until all concrete pouring activities are complete and the concrete is set to the point where the cement mix or associated materials have no potential to discharge into Canyon Creek.

3) Post Concrete Activities:

The valves and associated equipment will be installed once the concrete foundation is set. This work will be done in a concrete structure with no potential for discharge to Canyon Creek; therefore these activities are not covered by this certification.

Throughout construction, the BMPs listed in the Project Description section will be implemented as needed, in conjunction with the conditions of this certification, to protect the water quality of Canyon Creek. Per Condition 12 of this certification, NID is required to provide a post-Project report to the State Water Board, including identification of BMPs implemented as part of the Project.

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 "cooperate 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 requirements 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 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 Water Board adopted, and the State Water Board and the United States Environmental Protection Agency approved, the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (Basin Plan). The Basin Plan identifies existing beneficial uses for the Yuba River and its tributaries above Englebright Reservoir (including Canyon 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 and Order No. 2012-0006-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.

California Environmental Quality Act

NID 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. NID filed a Notice of Exemption (NOE) on May 15, 2013 for a Categorical Exemption under sections 15301 (Class 1 – Existing Facilities) and 15302 (Class 2 – Replacement or Reconstruction) of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq). The State Water Board reviewed and considered the NOE filed by NID and Project description in connection with issuance of this certification. The State Water Board will file a NOE 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 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

The State Water Board received NID's application for water quality certification on February 4, 2015, in accordance with title 23, division 3, chapter 28, subsection 3855 (b) of the California Code of Regulations. On March 5, 2015, the State Water Board provided notice of receipt of a complete application for the Project to the applicable parties pursuant to California Code of Regulations, title 23, section 3835(c).

On February, 17, 2015, the State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858(a) by posting information describing the Project on the State Water Board's website and to a subscription based email notification list. No comments were received.

On May 4, 2015, the State Water Board denied the certification for the Project without prejudice. NID submitted a new application for the Project on May 5, 2015. As the Project description did not change, no further public notice was required. On May 13, 2015, the State Water Board again provided notice of receipt of a complete application for the Project to the applicable parties pursuant to California Code of Regulations, title 23, section 3835(c).

¹ This Project is expected to disturb only 0.015 acres of land.

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The United States Army Corps of Engineers (ACOE) has determined that a pre-construction notification is not required for the Project, and the Applicant will self-certify compliance with Nationwide Permit 3 under section 404 of the CWA. Because pre-construction notification is not required, there is no ACOE identification number for the Project.

The California Department of Fish and Wildlife determined that a Lake and Streambed Alteration (LSA) Agreement will be required, and has permitted the proposed work under LSA Agreement #1600-2013-099-R2.

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE NEVADA IRRIGATION DISTRICT BOWMAN LOW LEVEL OUTLET REPAIR PHASE 2 PROJECT will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if NID 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.

All BMPs, such as silt fences or straw wattles, shall be placed below all construction activities at the edge of or prior to surface water features to intercept sediment and other debris before reaching Canyon Creek. BMPs shall be installed prior to any clearing or grading activities associated with construction activities that have the potential to impact surface water features.

The Applicant shall take all necessary measures in preconstruction planning to minimize construction impacts on riparian habitat. Upon completion of construction activities, any unvegetated and impacted areas resulting from construction activities shall be seeded with native species or native grasses. Seeded areas shall be covered with broadcast straw and/or erosion control blankets.

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 Canyon 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 Water 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, standard turbidity limits shall not be eased 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, generators, 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 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 7 The Deputy Director and the Executive Officer shall be notified 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 Water Board staff access to the Project site to document compliance with this certification.

CONDITION 8 The Applicant must take all reasonable measures to protect the beneficial uses of waters of Canyon Creek 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 9 Nothing in this certification is meant to alter the requirements of the Yuba-Bear Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 2266), including minimum flow, ramping rates, and reservoir level requirements. The requirements of the Yuba-Bear Hydroelectric Project shall be met throughout the Project.

CONDITION 10 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 11 All imported riprap, rocks, and gravel used for construction shall be prewashed. 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 12 The Applicant shall file a report within 10 days of Project completion certifying compliance with Conditions 1–11 of this certification and detailing any failure to meet these conditions.

CONDITION 13 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 (Water Code, § 13000 et seq.) or section 303 of the CWA.

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 (CESA) (Fish & Game Code §§ 2050-2097) or the federal Endangered Species Act (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 CESA and federal ESA requirements 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, processes 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, processes or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure 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 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.

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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

Date

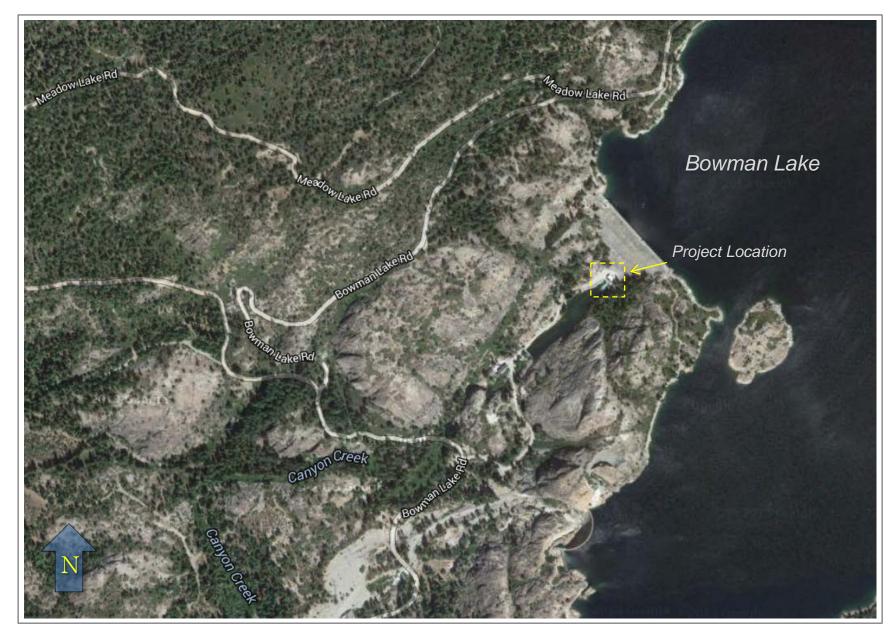


Figure 1 – Location of NID's Project (source: Google Inc. 2015)