STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the

EL DORADO IRRIGATION DISTRICT
EL DORADO FOREBAY DAM MODIFICATION PROJECT

FEDERAL ENERGY REGULATORY COMMISSION
PROJECT NO. 184 – EL DORADO HYDROELECTRIC PROJECT

SOURCES: South Fork of the American River and Tributaries

COUNTY: El Dorado

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

I. Project Description

On December 24, 2013, El Dorado Irrigation District (EID or Licensee) applied to the State Water Resources Control Board (State Water Board) for a 401 water quality certification for the El Dorado Forebay Modification Project (Project). EID also applied to the Federal Energy Regulatory Commission (FERC) for a non-capacity license amendment for the Project, which is part of the larger El Dorado Hydroelectric Project (FERC Project No. 184). Department of Water Resources Division of Safety of Dams (DSOD) and FERC have ordered EID to restrict reservoir levels to below normal levels due to dam stability and freeboard deficiencies. Implementation of this Project would: (1) increase dam stability; (2) meet DSOD and FERC dam safety requirements; (3) provide freeboard sufficient to relieve regulatory reservoir level operating restrictions; and (4) improve and maintain the drinking water and hydroelectric facilities.

The Project includes the following elements:

- Drawdown of El Dorado Forebay (Forebay) to allow for construction of an earthen stability buttress on the dry side (i.e., non-reservoir side) of the Forebay dam;
- Raise the dam 10 vertical feet to meet DSOD and FERC dam safety stability/freeboard requirements;
- Remediate the emergency spillway structure and outfall;
- Stabilize the slope along the spillway channel;
- Repair of the reservoir inlet;
- Relocate the drinking water valve house and dam seepage pump back station;
- Abandon two unused penstocks within the dam;
- Install a control valve on the active penstock within the reservoir;
- Armor the reservoir side of the dam with riprap and repair wave-induced erosion; and
- Replace the drinking water intake structure, install a new control valve and clear away accumulated sediment from in front of the drinking water intake.

II. Background

The Project is located on land owned by EID and private parties in El Dorado County, California (See Figure 1), on the north side of U.S. Highway 50, near Pollock Pines. No construction, staging, or access will occur on federal lands. The Project lies within the El Dorado Hydroelectric Project boundary.

The Forebay is an off stream reservoir, created by an earthen embankment dam. The Forebay receives water from the South Fork American River via the El Dorado Canal, which originates at the El Dorado Diversion Dam. Water diverted at the El Dorado Diversion Dam travels through 22.3 miles of canals, flumes, tunnels, and siphons before reaching the Forebay. A portion of the water delivered to the Forebay is then conveyed through the Main Ditch to a water treatment plant for treatment and distribution in EID's drinking water system. The remaining water delivered to the Forebay is conveyed to the El Dorado Powerhouse for hydroelectric power generation. The El Dorado Powerhouse discharges water back into the South Fork American River upstream of Slab Creek Reservoir.

III. Regulatory Authority

Water Quality Certification and Related Authorities

The Federal Clean Water Act (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 Clean Water Act (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 Clean Water Act (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 the project will be in compliance with specified provisions of the Clean Water Act, including water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Clean Water Act section 401 directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act 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 the state agency responsible for such certification in California (Wat. Code § 13160.) The State Water Board has delegated the issuance of water quality certifications to the Executive Director by regulation. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

The State Water Board received EID's application for water quality certification on December 24, 2013, in accordance with title 23, division 3, chapter 28, subsection 3855 (b) of the California Code of Regulations. On December 17, 2014, the State Water Board received EID's request to withdraw and resubmit its application for water quality certification. On January 8, 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).

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 on February 24, 2014. No comments were received.

Water Code section 13383 provides the State Water Board with authority to "establish monitoring, inspection, entry, reporting and recordkeeping requirements… and [require] other information as may reasonably be required" for activities subject to water quality certification under section 401 of the Clean Water Act that involve a diversion of water for beneficial use. The State Water Board delegated this authority to the Deputy Director for Water Rights (Deputy Director), as provided for in State Water Board Resolution No. 2012-0029. In the *Redelegation of Authorities Pursuant to Resolution No. 2012-0029* memo issued by the Deputy Director on July 6, 2012, this authority is re-delegated to the Assistant Deputy Directors of the Division of Water Rights.

The United States Army Corps of Engineers (ACOE) has determined that the Project qualifies for authorization under Department of Army Nationwide Permit (NWP) No. 3 for maintenance, pursuant to Section 404 of the Clean Water Act. The ACOE identification number for the Project is SPK-2012-00057. The NWP is contingent upon certification by the State Water Board.

Water Quality Control Plans

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 Clean Water Act. (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 Quality Control Board (Central Valley Water Board) adopted, and the State Water Board and the United States Environmental Protection Agency approved, the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan). The Basin Plan designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses.

The Project has the potential to affect beneficial uses in the South Fork American River. The Basin Plan identifies the following beneficial uses from the source of the South Fork American River to Placerville: municipal and domestic supply; hydropower generation; contact and non-contact recreation; canoeing and rafting; cold freshwater habitat; warm freshwater habitat; and wildlife habitat.

Construction General Permit

Dischargers whose projects disturb one or more acres 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.

California Environmental Quality Act

EID is the lead agency for the purpose of California Environmental Quality Act (CEQA) compliance. The State Water Board is a responsible agency under CEQA. EID issued a draft Environmental Impact Report (EIR) and Mitigation Monitoring and Reporting Plan (MMRP) for the Project on October 4, 2013. EID approved the Final EIR and MMRP for the Project and filed a Notice of Determination (NOD) with the State Clearinghouse (SCH# 2013032036) on March 14, 2014.

The State Water Board reviewed and considered the Final EIR prepared by EID. As a responsible agency under CEQA, the State Water Board must make findings that address significant impacts to those resource areas over which it has statutory authority. Attachment A of this certification, the MMRP, provides the mitigation measures that will ensure that any potential Project impacts within the purview of the State Water Board are less than significant. No significant, unavoidable impacts to water resources were identified in the Final EIR. The State Water Board will file a NOD 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 Board, Division of Water Rights, 1001 I Street, Sacramento, California 95814.

IV. Rationale

The conditions required in this certification are needed to protect the water quality and beneficial uses of the American River and its tributaries. Condition 2 of this certification requires that a Benthic Macroinvertebrate Monitoring Plan be developed to monitor ecosystem health in the Forebay, and ensure that actions are taken to avoid, minimize and compensate for Project related impacts. Pre- and post-construction monitoring is required to establish a baseline and target for post-construction activities.

In order to ensure that state water quality standards and other appropriate requirements of state law are met during construction and operation of the Project, this certification imposes conditions regarding monitoring, enforcement, and potential future revision. 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 certification. Implementation of the conditions in this water quality certification and mitigation measures identified in the MMRP (Attachment A) will ensure that measures are taken to protect water quality and Western Pond Turtles (WPT).

The State Water Board finds that, with the conditions and limitations imposed under this water quality certification, the proposed 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 EL DORADO FOREBAY DAM MODIFICATION PROJECT will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if EID complies with the following terms and conditions during the Project activities certified herein.

CONDITION 1: The Licensee shall provide the State Water Board with evidence of compliance with all on-site and off-site wetland mitigation requirements, including, but not limited to, the purchase of mitigation credits as required by the ACOE at least 30 days prior to commencing construction. Compensatory mitigation shall be purchased at a 3.81:1 ratio consistent with the ACOE's In-Lieu Fee Program unless a different ratio is approved by the Deputy Director. Compensatory mitigation must comply with any State Water Board policies related to wetlands, as well as the 1993 California Wetlands Conservation Policy, which ensures no overall net loss of wetlands for impacts to waters of the State.

Evidence of compliance with off-site compensatory mitigation requirements includes providing a letter from an ACOE or United States Fish and Wildlife Service approved compensatory mitigation bank. The letter must: (a) be on the compensatory mitigation bank's letterhead; (b) be signed by an authorized representative of the compensatory mitigation bank; (c) indicate the ACOE's Sacramento District (SPK) number; (d) include the project name and location; and (e) detail the type of compensatory mitigation credits purchased for the Project's impacts.

CONDITION 2: The Licensee shall, in consultation with the State Water Board and the California Department of Fish and Wildlife, develop a Benthic Macroinvertebrate Monitoring Plan (Plan), and submit it to the Deputy Director for review and approval within 90 days of issuance of the El Dorado Hydroelectric Project license amendment. The objective of the Plan is to monitor benthic macroinvertebrate (BMI) re-colonization in the Forebay after Project completion. The Plan shall include a schedule for data collection and reporting, and shall follow the Surface Water Ambient Monitoring Program's (SWAMP) protocol[1] for monitoring BMI communities in the Project area. The Plan must be approved and in place prior to collection of pre-construction BMI baseline data. The Licensee shall provide a report with results of the BMI monitoring to the Deputy Director as outlined in the approved Plan.

CONDITION 3: Notwithstanding any more specific conditions in this certification, the Licensee shall comply with the attached MMRP (Attachment A).

CONDITION 4: Control measures for erosion, excessive sedimentation and turbidity shall be implemented and in place at 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.

CONDITION 5: Project activities shall not cause nuisance, adversely affect beneficial uses, or increase turbidity greater than those identified in the Basin Plan. 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.

[1] The Deputy Director may approve another protocol, if necessary.

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 NTU
Greater than 100 NTU	Increases shall not exceed 10 percent

During construction turbidity monitoring shall be conducted hourly if water is released from the Forebay into the El Dorado Powerhouse (Powerhouse).[2] Following construction, monitoring shall be conducted hourly for at least the first 12 hours[3] of Powerhouse operation when water is released from the Forebay into the Powerhouse. Monitoring shall also be conducted hourly during any testing period that may be necessary to bring the penstock back online during or directly following construction. Monitoring shall be conducted in the South Fork American River in two locations: 100 feet upstream and 300 feet downstream of the Powerhouse. If monitoring shows that turbidity has exceeded the turbidity water quality objective, the exceedance will be reported immediately to the Deputy Director and the Central Valley Water Board Executive Officer (Executive Officer). Construction may not re-commence without permission of the Deputy Director.

CONDITION 6: Construction material, debris, spoils, soil, silt, sand, bark, slash, sawdust, rubbish, steel, other organic or earthen material, or any other substances which could be hazardous to aquatic life resulting from 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 7: 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 (motors, pumps, generators, etc.) and vehicles 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 is used or staged.

CONDITION 8: Any maintenance or refueling of vehicles or equipment occurring on-site shall be done in a designated area with secondary containment, located away from drainage courses to prevent the runoff of stormwater and spills.

CONDITION 9: Erosion control blankets, liners with berms, and/or other erosion control measures shall be used for any stockpile of excavated material to control runoff resulting from precipitation, and prevent material from contacting or entering surface waters.

[2] The Powerhouse releases water into the South Fork American River.
[3] The monitoring period shall be extended if monitoring results indicate a condition whereby the Project could violate water quality objectives for turbidity.

CONDITION 10: Onsite containment for storage of chemical 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 11: A copy of this 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 Licensee shall be responsible for work conducted by its contractor, subcontractors, or other persons conducting Project-related work.

CONDITION 12: The Deputy Director and the Executive Officer shall be notified one week prior to the commencement of ground disturbing activities. Upon request, a construction schedule shall be provided to agency staff.

CONDITION 13: The Licensee shall take all reasonable measures to protect the beneficial uses of the American 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 with 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 14: 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 group 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, or other disposal site in compliance with State and local laws, ordinances, and regulations.

CONDITION 15: Nothing in this certification is meant to alter the requirements of the El Dorado Hydroelectric Project (FERC Project No. 184) certification, including minimum flow, reservoir level, and ramping rate requirements. The requirements of the El Dorado Hydroelectric Project shall be met throughout 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 ESA (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 Licensee, the Licensee 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 Licensee is responsible for meeting all applicable CESA and federal ESA requirements for the Project authorized under this certification.

CONDITION 17: The Licensee shall submit a report to the Deputy Director within 30 days of Project completion certifying compliance with Conditions 1-16 of this certification and detailing any failure to meet these conditions.

CONDITION 18: The State Water Board reserves the authority to add to or modify the conditions of this water quality certification to incorporate changes in technology, sampling, or methodologies developed by the State Water Board or a Regional Water Board.

CONDITION 19: The State Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality objectives and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

CONDITION 20: The State Water Board reserves authority to modify this certification if monitoring results indicate that continued operation of the Project could violate water quality objectives or impair the beneficial uses of the American River and its tributaries.

CONDITION 21: 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 (Wat. Code § 13000) or section 303 of the Clean Water Act.

CONDITION 22: The State Water Board's approval authority includes the authority to withhold approval or to require modification of a proposal or plan prior to approval. The State Water Board may take enforcement action if the Licensee fails to provide or implement a required plan in a timely manner.

CONDITION 23: In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, 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 24: In response to a suspected violation of any condition of this certification, the State Water 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 (California Water Code sections 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 25: No construction shall commence until all necessary federal, state, and local approvals have been obtained.

CONDITION 26: Any requirement in this water quality 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 27: The Licensee 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. The Deputy Director shall determine the significance of the change and may require consultation with state and federal agencies. If the Deputy Director is not notified of a significant change to the Project, it will be considered a violation of this water quality certification.

CONDITION 28: The Licensee must provide State Water Board and Regional Water Board staffs access to Project sites to document compliance with this certification.

CONDITION 29: The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add to or modify the conditions of this certification.

CONDITON 30: 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 31: 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 32: 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 the 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.

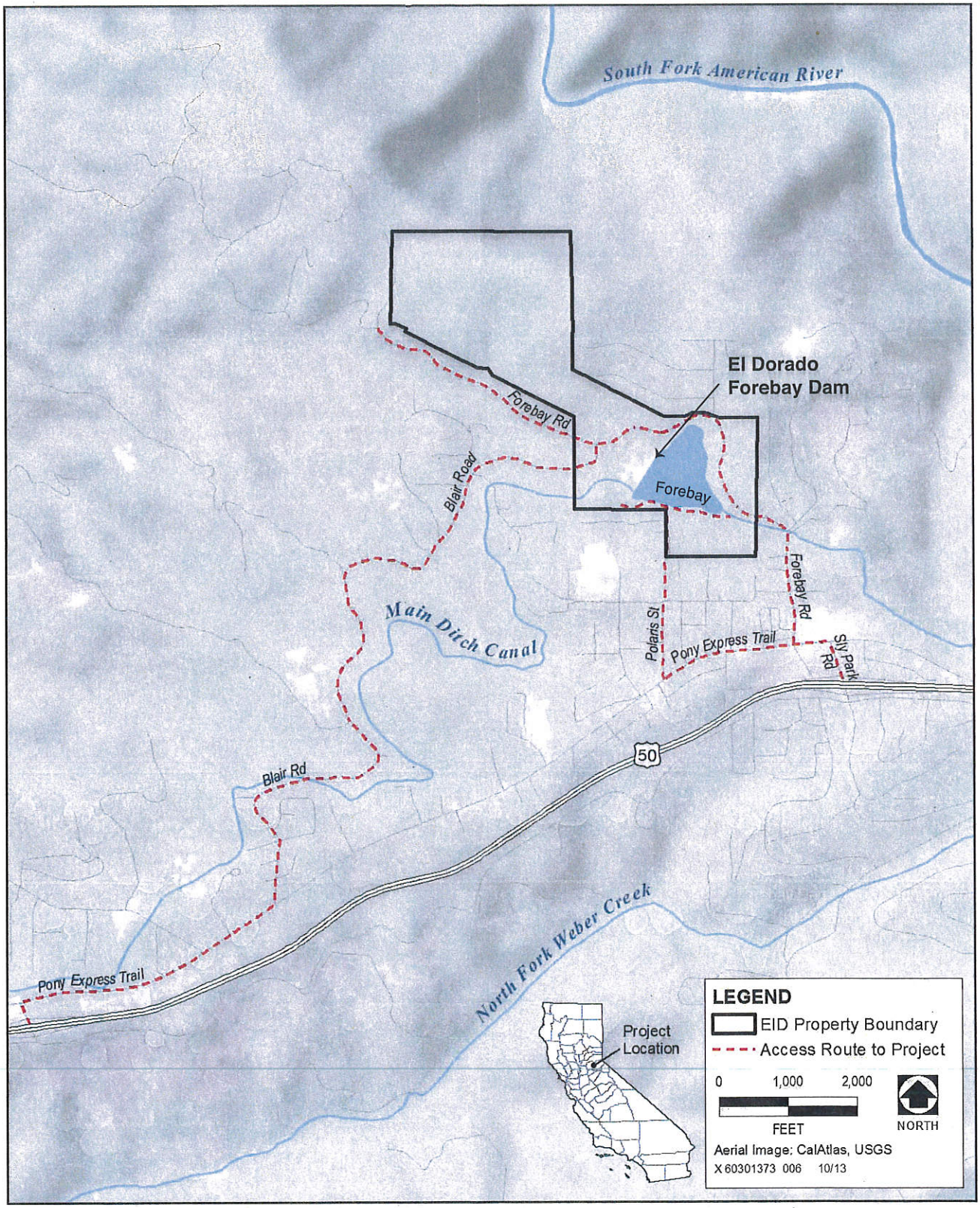
CONDITION 33: Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action if necessary to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 34: Certification is conditioned upon total payment of any fee required under title 23, division 3, chapter 28 of the California Code of Regulations, and owed by the applicant, per regulation.

Thomas Howard
Executive Director

4/22/15
Date

Figure 1: El Dorado Forebay Dam Modification Project Vicinity Map
Attachment A: Mitigation Monitoring and Reporting Plan



Source: EID 2013 Draft EIR

Figure I **Project Vicinity Map**

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
Biological Resources			
Mitigation Measure 1: Implement Measures to Avoid, Restore, and Compensate for the Loss of Wetlands and Riparian Vegetation The Licensee (El Dorado Irrigation District) will avoid, minimize, and/or mitigate for loss of wetlands and riparian vegetation resulting from Project construction by implementing one or more of the following measures: Through regulatory authorization for fill of waters of the United States under Nationwide Permit 3 (maintenance), implement specific agency-required mitigation for direct and indirect impacts on wetland and riparian vegetation to achieve no net loss of habitat under Clean Water Act jurisdiction. This could include but is not limited to, developing on-site mitigation and/or paying in lieu mitigation fees to compensate for loss of wetlands and riparian areas. The loss of wetlands around the reservoir could be partially or wholly mitigated by creation of new inundated areas that would develop the same qualities as the existing areas that would be lost (in-kind mitigation). Additionally, loss of wetlands can be mitigated with the purchase of off-site mitigation credits from an appropriate mitigation bank or other available preserve. If wetland and riparian areas can be avoided during construction, these areas would be identified as avoidance areas and delineated with construction fencing or other methods.	Licensee	Consultation with agencies will occur before construction. Fencing and avoidance zones will be marked before construction, and new wetlands and riparian areas will be created following construction.	The Licensee shall submit a report to the State Water Resources Control Board (State Water Board) Deputy Director for Water Rights (Deputy Director) within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
Mitigation Measure 2: Avoid and Minimize Impacts to Fish To reduce impacts on fish, EID will implement the following measures, which have been developed in coordination with State Water Board staff and the California Department of Fish and Wildlife (CDFW): • Cessation of ongoing fish-stocking activities in El Dorado Forebay (Forebay) will take place before planned dewatering activities. • To remove game and nongame fish before construction, EID will advertise and notify the public of fishing opportunities at the Forebay consistent with CDFW regulations. • Conduct visual surveys to monitor fish condition during and immediately following Forebay drawdown. • Develop a fish salvage plan, to be implemented in the event visual surveys identify the need for fish salvage. The goal of the fish salvage plan would be to minimize fish mortality.	Licensee	Cessation of fish stocking will occur before drawdown. Fish condition monitoring will occur during Forebay drawdown. A fish salvage plan will be developed and implemented (if needed) in consultation with State Water Board staff and CDFW.	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.
Mitigation Measure 3: Minimize Impacts to Birds Nesting on the Project Site during Construction Activities The Licensee shall implement one or more of the following measures, depending on consultation with CDFW and/or the United States Fish and Wildlife Service (USFWS) as appropriate, to minimize impacts to birds nesting on the Project site during construction activities. The specific measure(s) implemented will depend on the species observed, nature of nesting activities, location of nests	Licensee	Mitigation will occur not more than 30 days prior to ground disturbing construction activities, if construction activities are to occur during the nesting season (February 1 through August 15). Also, mitigation will occur during construction if active special status species	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
relative to construction activities, and the nature of construction activities. When feasible, Project-related construction activities, including tree and vegetation removal, will occur during the non-nesting season (August 16 through January 31). If construction activities, including noise-generating activities, ground-disturbing construction, or vegetation trimming/removal, cannot be initiated prior to the avian nesting season (February 1 through August 15), the use of feasible proactive deterrence measures will be initiated prior to nesting season to discourage birds from nesting in the area. These measures could include, but would not be limited to: the use of sound deterrents (e.g., broadcast of predator or distress calls or other sounds); physical deterrents (e.g., bird netting in strategic locations); or visual deterrents (e.g., owl decoys, reflective tape, lightweight reflective turbines), if appropriate. If Project-related construction activities, including tree and vegetation removal, must occur during avian nesting season (February 1 through August 15), a preconstruction survey for nesting birds shall be conducted by a qualified biologist not more than 30 days prior to the start of noise generating activities, ground-disturbing construction, or vegetation trimming or removal activities. Trees with raptor nests shall be evaluated by a qualified biologist to determine whether the nests are active. If active raptor nests are found during preconstruction surveys, a site evaluation will be conducted by a qualified biologist to determine what avoidance zone is appropriate based on the observed sensitivity of the nesting birds in question and other site-specific features (e.g.,		nests are encountered.	

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
topographical characteristics that obstruct the line of sight from construction activities). Requests to remove trees with active raptor nests will be reviewed and approved by CDFW.			
Mitigation Measure 4: Initiate Western Pond Turtle Relocation Mitigation to reduce the impact of the Project on Western Pond Turtles will include: consultation with State Water Board staff and CDFW; trapping of turtles and relocation off-site; and opportunistic capture during water drawdown. Beginning in April 2015, trapping for breeding-size adult turtles will commence. Captured turtles will be relocated to a suitable nearby water body, subject to prior approval by CDFW. Trapping will be performed by a qualified biologist operating under an active California State Scientific Collecting Permit. This action will remove egg laying females from the Forebay prior to egg deposition (late April through early August) in 2015 and 2016, thus eliminating the potential for drowning of eggs or hatchlings in nests when water is raised to its new elevation (projected to occur in December 2016). As with breeding adults, captured small-sized turtles will be relocated to a preapproved recipient site. Despite the aforementioned trapping efforts, smaller nonbreeding individuals will likely remain after the cessation of trapping. As a result, a qualified biological monitor will be retained and will be on-site during drawdown of the Forebay. The qualified biologist will collect turtles opportunistically as they are exposed by receding waters and will relocate them to a recipient site preapproved by CDFW.	Licensee	Breeding-size pond turtles will be captured and relocated before egg deposition. Nonbreeding turtles will be captured and removed opportunistically during Forebay drawdown (anticipated October 2015) and relocated to a preapproved recipient site.	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
No action will be taken to restock the Forebay with pond turtles because it is believed that recolonization will take place naturally.			
Mitigation Measure 5: Conduct Preconstruction Surveys for Ringtail in Riparian Zones and Areas of Rocky Outcrops Large snags and rocky outcrops on the Project site will be surveyed and evaluated by a qualified biologist for the presence of ringtails within 14 days prior to vegetation removal. Occupied dens will be flagged. Ground-disturbing activities will be avoided within 200 feet of occupied dens.	Licensee	Habitat assessments will be performed before initiation of construction. Biological surveys for ringtail will be conducted before construction, during construction, and within 14 days prior to vegetation removal.	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.
Hydrology and Water Quality			
Mitigation Measure 6: Implement Water Diversion and Control Plan EID will develop a water diversion and control plan in consultation with State Water Board staff, which will be submitted to the Deputy Director for review and approval prior to the start of construction activities. The water diversion and control plan will identify implementation measures necessary to mitigate potential construction-related impacts on water quality, resulting from dewatering activities associated with the removal and diversion of surface waters, seepage, springs, and groundwater. Such measures will include, but are not limited to, the discharge of accumulated stormwater, groundwater, or other water from excavations or temporary containment facilities into the Main Ditch. The Main Ditch carries water to the Reservoir 1 Water Treatment Plant and is not connected with surface waters. EID will implement measures identified in the water diversion and control plan according to regulatory requirements.	Licensee	Mitigation will occur before the start of construction, during construction, and until final stabilization requirements are met.	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
EID will operate and maintain the water treatment system to provide for the settling of suspended solids in discharge from any sumping, dewatering well, or well point system. Implementation of the water diversion and control plan will reduce impacts from drainage alterations. It will also reduce the potential for erosion and siltation on- or off-site.			
Mitigation Measure 7: Implement National Pollutant Discharge Elimination System (NPDES) General Permit, Storm Water Pollution Prevention Plan (SWPPP), and Best Management Practices (BMPs) EID will comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit; NPDES Order No. 2009-0009-DWQ, and amendments thereto). Compliance with the Construction General Permit includes preparation of a SWPPP before the start of construction activities. The SWPPP will identify implementation measures necessary to mitigate potential construction-related impacts on water quality. The measures identified in the SWPPP will include BMPs and other standard pollution prevention actions such as erosion and sediment control measures, proper control of non-stormwater discharges, and hazardous-spill prevention and response. The SWPPP will also include requirements for BMP inspections, monitoring, and maintenance. A detailed site map shall be included in the SWPPP outlining specific areas where soil disturbance may occur, and the drainage patterns associated with excavation and grading activities. In addition, the SWPPP will provide plans and details for BMP implementation, before and during construction, to prevent erosion of exposed soil and to treat sediments before they are transported off-site. Examples of BMPs that may be	Licensee	Mitigation will occur prior to and during construction activities.	The Licensee shall submit a report to the Deputy Director within 30 days of completion of construction that describes compliance with the measures identified in this MMRP.

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
implemented during construction: • Erosion-control BMPs, such as the use of mulches or hydro-seeding to prevent detachment of soil, that follow guidance presented in the *California BMP Handbook for Construction;* • Sediment control BMPs such as silt fencing or detention basins that trap soil particles; • Design the construction staging area so that stormwater runoff during construction will be collected and treated using a BMP, such as a detention basin; • Management of hazardous materials and wastes to prevent spills; • BMPs for delineating areas for vehicle and equipment fueling with appropriate spill controls; and • Maintenance checks of equipment and vehicles to prevent spills or leaks. Measures to control on-site spills will be included in the SWPPP. For the contingency that the spill prevention and control BMPs listed above fail to protect surface and groundwaters, the SWPPP will contain guidelines for a visual monitoring program and a chemical monitoring program for nonvisible pollutants. Materials storage and handling, and equipment servicing will occur only in designated areas. If a spill occurs, local regulatory agencies will be informed appropriately and a spill response program will be implemented as outlined in the SWPPP and spill response program. Additionally: • All hydraulic hoses and lines will be regularly inspected for cracks and leaks and maintained			

ATTACHMENT A

Mitigation Monitoring and Reporting Plan (MMRP)
El Dorado Forebay Dam Modification Project (Project) Water Quality Certification
Federal Energy Regulatory Commission Project No. 184

Mitigation Program	Responsible Party	Timing for Mitigation	Compliance
appropriately to prevent contamination; • Drilling activities will not use ammonium nitrate fuel oil because it dissolves in water and releases ammonia and nitrates; • Contractors will submit measures and plans for containment of drilling fluid spills caused by hose breaks and other sources, and for shutdown and cleanup of spills; and • All refueling and servicing will occur at designated locations with appropriate containment measures in place to control hazardous materials, which are at least 1,000 feet from the reservoir's high-water mark and at least 50 feet away from sensitive water features and wetlands.			