

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification for the
SOUTHERN CALIFORNIA EDISON COMPANY
BISHOP INTAKE NO. 4 DAM SPILLWAY AND OUTLETS REPAIR PROJECT
BISHOP CREEK HYDROELECTRIC PROJECT
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 1394

SOURCES: Bishop Creek

COUNTY: Inyo

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

I. Project Description and Background

The Southern California Edison Company (SCE or Applicant) Bishop Intake No. 4 Dam Spillway and Outlets Repair Project (Project) consists of concrete repair and other maintenance of the Bishop Intake No. 4 reservoir dam structures. The Project structures are part of the Bishop Creek Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 1394). The Project is located on SCE-owned lands.

The Project is located on Bishop Creek in Inyo County, approximately 10 miles west of the town of Bishop at approximately 6,000 feet above mean sea level (Figure 1).

The Bishop Intake No. 4 Dam impounds water from Bishop Creek and conveys water to the Plant 4 Flowline and Powerhouse No. 4 downstream of the Project. The Bishop Creek drainage measures approximately 15 miles long by 9 miles wide at its broadest point. The Sierra Nevada mountains are at the top of the Bishop Creek watershed basin. The upper portion of the drainage is rugged and rocky with ridges separating the south, middle, and north forks of the creek. Below the confluence of the forks of the creek, the water flows northeast through a deep canyon and into the Owens Valley.

The purpose of the Project is to conduct concrete repair and other maintenance of the Bishop Intake No. 4 reservoir dam structures to maintain their integrity and extend the service life of the dam. These repairs include:

- Cleaning and repairing the downstream face of the dam;
- Removing the top 6 inches of existing concrete and re-surfacing the downstream surface of the spillway;
- Replacing two existing 36.5-inch discharge pipes with two new 36-inch steel pipes;
- Constructing a new concrete weir within the existing footprint of the spillway; and
- Repairing localized concrete damage at the base of the downstream end of the spill apron.

These items were identified by FERC during its 2014 annual inspection as items that SCE must address.

Project Construction

SCE plans to begin dewatering the reservoir as early as September 2016. Minimum instream flows (MIFs) into Bishop Creek will be maintained throughout construction.¹ Mobilization of equipment and materials to the site would begin as early as mid-September 2016. Construction would be conducted in 8 to 12 weeks, with demobilization complete by November 30, 2016.

SCE's March 27, 2015, application for water quality certification (certification) - *Request for Water Quality Certification under Section 401 of the Clean Water Act for Southern California Edison Company's Bishop Intake No. 4 Dam Spillway and Outlets Repair Project* includes a Reservoir Water Diversion and Dewatering Plan, as well as detailed information on equipment staging, and repair and maintenance activities (see Sections 2.1-2.4 of the application).

Implementation of Project activities could result in impacts to water quality in the reservoir and Bishop Creek. For example, dewatering required for implementation of the Project could result in concentration of suspended sediment as water is drawn down. Power washing of the dam face, excavation, use of equipment, and stockpiling of sediment could potentially increase turbidity within the reservoir or in Bishop Creek. Additionally, contamination from concrete, fuels, or other hazardous materials associated with the Project could result in water quality impacts.

SCE will minimize the potential for water quality impacts through implementation of general construction measures and water quality best management practices (BMPs) listed in Sections 5.1 and 5.2 of the application. General construction measures include GEN-1, which states that SCE will conduct monitoring as needed to ensure protection of resources and adherence to water quality BMPs, and that all workers at the construction site will receive pre-construction training on avoidance and protection measures and BMPs. GEN-2 requires SCE to restrict all activities to designated staging and work areas, flag upstream and downstream limits of work areas, and designate an area for material delivery and storage. Additionally, SCE will implement water quality BMPs WQ-1 through WQ-5, which include equipment use BMPs, debris and spoils control BMPs, erosion control BMPs, and pollution control BMPs.

II. 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 certification that the project will be in compliance with specified provisions of the CWA, including water quality standards and implementation plans promulgated

¹ The FERC license for Project No. 1394 requires SCE to maintain flows of five cubic feet per second (cfs).

pursuant to section 303 of the CWA (33 U.S.C. § 1313). CWA section 401 directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the CWA and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project. The State Water Resources Control Board (State Water Board) is the state agency responsible for such certification in California. (Wat. Code, § 13160.) The State Water Board's Executive Director is authorized to issue a decision on a certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

The application for certification was received on May 11, 2015. The State Water 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 State Water Board's website on May 28, 2015. No comments were received.

SCE applied for coverage under Nationwide Permits 3 and 33 from the Army Corps of Engineers (ACOE) under section 404 of the CWA. The permits from the ACOE are contingent upon certification by the State Water Board.

The Project will be implemented under SCE's long-term Streambed Alteration Agreement² with the California Department of Fish and Wildlife³ (CDFW) for routine maintenance in Inyo and Mono Counties. CDFW confirmed approval of the Project under Streambed Alteration Agreement No. 1600-2008-0099-R6 in a letter dated March 13, 2015.

Water Quality Control Plans

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

The Lahontan Regional Water Quality Control Board (Lahontan Regional Water Board) adopted, and the State Water Board and USEPA approved, the *Water Quality Control Plan for the Lahontan Region* (Lahontan Basin Plan). Existing beneficial uses designated for Bishop Creek include: municipal and domestic supply; agricultural supply; ground water recharge; freshwater replenishment; hydropower generation; water contact recreation; non-contact water recreation; commercial and sport fishing; cold freshwater habitat; wildlife habitat; and spawning (spawning, reproduction, and development). Protection of the instream beneficial uses identified in the Lahontan Basin Plan requires the maintenance of adequate instream flows as

² *Long Term Agreement Regarding Proposed Routine Maintenance Activities for Hydroelectric Projects in Inyo and Mono Counties* (Streambed Alteration Agreement No. 1600-2008-0099-R6) (CDFG 2008).

³ Known as the California Department of Fish and Game (CDFG) when the Streambed Alteration Agreement was issued in 2008.

well as effluent limitations and other limitations on discharges of pollutants from point and non-point sources to Bishop Creek and its tributaries.

California Environmental Quality Act

The State Water Board has reviewed the proposed Project and conditions incorporated into the Project to protect the environment and beneficial uses designated for Bishop Creek. The State Water Board has determined that this Project involves the repair and maintenance of an existing facility and that it qualifies for a Categorical Exemption (Class 1 – Existing Facilities) under the California Environmental Quality Act Guidelines (Cal. Code Regs., tit. 14, § 15301). A Notice of Exemption has been prepared. The State Water Board will file a Notice of Exemption with the Office of Research and Planning within five days of issuance of this certification.

State Water Board Authority

California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all certifications, which are included in this certification. Further, State Water Board staff considered the Lahontan Basin Plan, existing water quality conditions, and Project-related controllable factors in the development of this certification.

In order to ensure that the Project operates to meet water quality standards as anticipated, and to ensure that the Project will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, this certification imposes conditions regarding monitoring, enforcement, and potential future revisions. This certification requires SCE to submit a Bishop Creek Water Quality Monitoring Plan to the Deputy Director for Water Rights (Deputy Director). SCE is also required to follow the Avoidance and Protection Measures described in Section 5 of the application for certification, which are incorporated as conditions in this certification.

III. Findings

The State Water Board has found that, with the conditions and limitations imposed under this certification, the proposed Project will be protective of the state water quality standards and other appropriate requirements of state law.

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.

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ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT SOUTHERN CALIFORNIA EDISON COMPANY'S BISHOP INTAKE NO. 4 DAM SPILLWAY AND OUTLETS REPAIR PROJECT will comply with sections 301, 302, 303, 306, and 307 of the CWA, and with applicable provisions of State law, if the Applicant complies with the following terms and conditions during the Project activities certified herein.

CONDITION 1. The Applicant shall comply with the Project description and drawings submitted to State Water Board.

CONDITION 2. The Applicant shall submit a Bishop Creek Water Quality Monitoring Plan to the Deputy Director for review and approval. Construction of the Project shall not start until the Bishop Creek Water Quality Monitoring Plan has been approved by the Deputy Director. At a minimum, the Bishop Creek Water Quality Monitoring Plan shall include: 1) a description of how the Applicant will determine baseline conditions prior to construction; 2) proposed monitoring locations and monitoring schedule; and 3) frequency for reporting monitoring results. The Deputy Director may make modifications as part of the approval. The Applicant shall implement the plan upon approval by the Deputy Director and any other necessary regulatory approvals. All monitoring results shall be submitted to State Water Board staff on a monthly basis until the Project is completed.

CONDITION 3. The Applicant shall follow the Avoidance and Protection Measures described in Section 5 of the application for certification and the Reservoir Water Diversion and Dewatering Plan described in Section 2.3 of the application for certification. Notwithstanding any more specific conditions in this certification, the Applicant shall comply with all measures described in the application for certification.

CONDITION 4. Construction work shall occur between September and November 2016. Any deviation from this timeframe shall be approved by the Deputy Director. The Applicant shall maintain the required minimum instream flows of 5 cfs at all times. Any deviation from the prescribed flows shall be reported immediately to CDFW, the Executive Officer of the Lahontan Regional Water Board (Executive Officer), and the Deputy Director.

CONDITION 5. All water quality compliance monitoring shall be conducted using procedures described in Code of Federal Regulations title 40, chapter I, subchapter D, part 136 (40 C.F.R. § 136) and consistent with the State Water Board's Surface Water Ambient Monitoring Program.

CONDITION 6. Project activities shall not cause an increase in turbidity downstream of the Project area greater than those identified in the Lahontan Basin Plan. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity shall not exceed upstream natural background levels by more than 10 percent.

Minimum sampling frequency for turbidity shall be three times per day during construction activities that have the potential to cause discharge to surface waters. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The Applicant shall monitor turbidity levels 50 feet upstream of Project activities (i.e., natural background) and 300 feet downstream of construction activities. If an increase in turbidity caused by Project activities is observed between the upstream and downstream sampling locations, the monitoring frequency shall be increased to a minimum of once every hour during the period of increased turbidity due to Project activities. If three consecutive sample results or a 24-hour average turbidity indicate that turbidity levels exceed the water

quality objectives outlined in the Lahontan Basin Plan and this condition, the associated Project activities shall cease immediately. In addition, any and all actions shall be implemented immediately to reduce and maintain turbidity at or below the given water quality objective.

Turbidity shall be measured using nephelometry. A hand-held field meter may be used, provided the meter uses a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. For each meter used for monitoring, a calibration and maintenance log shall be maintained onsite and provided to State Water Board staff upon request. If monitoring shows that turbidity has exceeded the water quality objective, construction will cease and the violation will be reported immediately to the Deputy Director and the Executive Officer. Construction activities may not resume without approval from the Deputy Director.

CONDITION 7. Construction material resulting from Project-related activities, which include foundation grouting, unset cement, concrete, grout, damaged concrete, concrete spoils, wash water, debris, spoils, soil, silt, sand, organic or earthen material, and any other substances which could be potentially hazardous to aquatic life, shall be prevented from entering surface waters by use of BMPs, including those described in Sections 5.1 and 5.2 of the application for certification.

CONDITION 8. Any maintenance or refueling of vehicles or equipment occurring onsite shall be done in a designated area with secondary containment, located away from drainage courses to prevent spill runoff. All equipment using gas, oil, hydraulic fluid or other petroleum products shall be inspected for leaks prior to use and monitored for leaks. 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 9. All equipment shall be washed prior to transport to the Project site and free of sediment, debris and foreign matter. Wash water shall be contained and disposed of in compliance with State and local laws, ordinances, and regulations.

CONDITION 10. All imported riprap, rocks, and gravels used for construction shall be pre-washed. Wash water shall be contained and disposed of in compliance with State and local laws, ordinances, and regulations.

CONDITION 11. 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 the Project site for disposal at an authorized site. Excavated material may be left in place in the reservoir bed or used to backfill and anchor the liner. If excavated material is left on site, the Applicant shall monitor water quality during and after filling up the Bishop Intake No. 4 Reservoir to ensure the Lahontan Basin Plan water quality objectives are not exceeded and report the results to the Deputy Director. The proposed monitoring shall be included as part of the Bishop Creek Water Quality Monitoring Plan (Condition 2).

CONDITION 12. A copy of this certification shall be provided to all contractors and subcontractors conducting the construction work, and copies shall remain in their possession at the Project site. The Applicant shall be responsible for all work conducted by its contractors and subcontractors.

CONDITION 13. The Applicant shall notify the Deputy Director and the Executive Officer one week prior to the commencement of ground disturbing activities. Upon request, a construction schedule shall be provided to State Water Board staff. The Applicant shall provide State Water Board and Lahontan Regional Water Board staff access to the Project site to document compliance with this certification.

CONDITION 14. This certification is contingent on compliance with all applicable requirements of the Lahontan Basin Plan. If at any time an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project has or could soon be in violation of water quality objectives, the associated Project activities shall cease immediately and the Deputy Director and the Executive Officer shall be notified. Associated activities shall not resume without approval from the Deputy Director.

CONDITION 15. Unless otherwise specified in this certification or at the request of the Deputy Director, data and/or reports shall 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 16. 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 Bishop Creek or its tributaries.

CONDITION 17. 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 CWA. The Applicant shall take all reasonable measures to protect the beneficial uses of Bishop Creek and its tributaries.

CONDITION 18. 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) (DFG 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 19. 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, 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 20. In response to a suspected violation of any condition of this certification, the State Water Board or Lahontan Regional 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. (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 21. No construction shall commence until all necessary federal, state, and local approvals are obtained.

CONDITION 22. This certification is contingent on compliance with all pertinent permits and orders issued by the Lahontan Regional Water Board, and compliance with all water right licenses and permits applicable to this Project, existing or as amended.

CONDITION 23. 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 24. The Applicant shall submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for review and written approval prior to implementation. If the State Water Board is not notified of a significant change to the Project, it will be considered a violation of this certification.

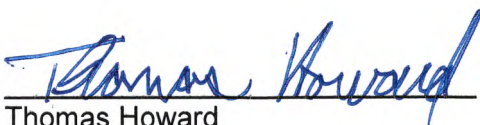
CONDITION 25. The State Water Board may provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification.

CONDITION 26. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

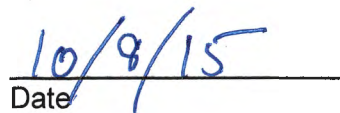
CONDITION 27. Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

CONDITION 28. 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 29. Certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28 and owed by the Applicant.



Thomas Howard
Executive Director



Date

Attachment: Figure 1 – Bishop Intake No. 4 Dam Spillway and Outlets Repair Project Location

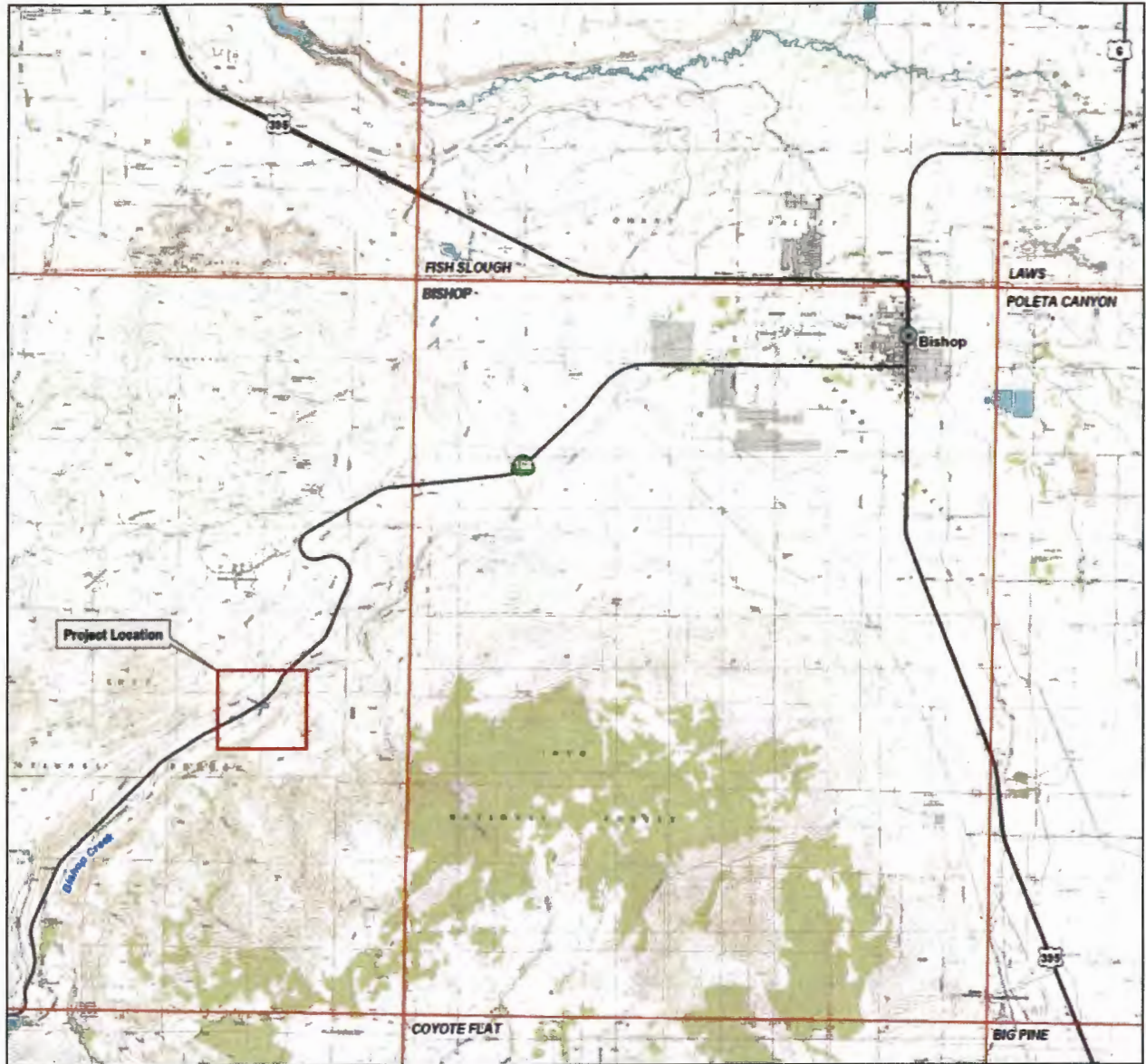


Figure 1 – Bishop Intake No. 4 Dam Spillway and Outlets Repair Project Location