

**STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD**

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**In the Matter of Water Quality Certification for**

**UNITED WATER CONSERVATION DISTRICT  
SANTA FELICIA DAM SAFETY IMPROVEMENT PROJECT**

**FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2153**

**Sources: Lake Piru Reservoir and Lower Piru Creek**

**County: Ventura**

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**WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE**

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**ATTACHMENT**

Attachment A: Santa Felicia Dam Safety Improvement Project Description

## Acronyms and Abbreviations

Basin Plan	<i>Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i>
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
certification	water quality certification
cfs	cubic feet per second
Construction General Permit	<i>General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities</i>
DCF	downstream control facility
Deputy Director	Deputy Director of the Division of Water Rights
Dredge or Fill Procedures	<i>State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State</i>
DSOD	California Department of Water Resources, Division of Safety of Dams
EIR	environmental impact report
ELAP	Environmental Laboratory Accreditation Program
ESA	Endangered Species Act
Executive Officer	Executive Officer of Los Angeles Regional Water Board
FERC	Federal Energy Regulatory Commission
IDF	Inflow Design Flood
kw	kilowatts
Los Angeles Regional Water Board	Los Angeles Regional Water Quality Control Board
MMRP	Mitigation Monitoring and Reporting Program
msl	mean sea level
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
Project	Santa Felicia Dam Safety Improvement Project
State Water Board	State Water Resources Control Board
TMDL	total maximum daily load
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWCD	United Water Conservation District
Water Boards	State Water Board and Regional Water Boards

## **1.0 Project Description**

United Water Conservation District (UWCD or the Licensee) owns and operates Santa Felicia Dam, which is part of the Santa Felicia Project (Federal Energy Regulatory Commission [FERC] Project No. 2153). Santa Felicia Dam is located on Piru Creek, a tributary of the Santa Clara River, in Ventura County. The dam is approximately five miles north of the unincorporated town of Piru.

Santa Felicia Dam is a 213-foot-high embankment dam that is approximately 1,275-foot-long and 30-feet-wide at its crest. The dam impounds Piru Creek to form Lake Piru Reservoir. Santa Felicia Dam is equipped with an ungated spillway that has a rated capacity of approximately 145,000 cubic feet per second (cfs). A small powerhouse with a capacity of approximately 1,420 kilowatts (kW) is located on the west embankment immediately downstream of the Santa Felicia Dam.

In 2013, the California Department of Water Resources, Division of Safety of Dams (DSOD) conducted an independent analysis of Santa Felicia Dam using a modified Hydrometeorology Report methodology. The results of the DSOD analysis indicated that Santa Felicia Dam's spillway should be modified to accommodate a minimum peak inflow, or Inflow Design Flood (IDF), of 220,000 cfs (California Department of Water Resources, 2013). To bring Santa Felicia Dam's spillway into compliance with DSOD's minimum peak inflow recommendation, on March 2, 2021, UWCD submitted a water quality certification (certification) application to the State Water Resources Control Board (State Water Board) for the Santa Felicia Dam Safety Improvement Project (Project).

The Project includes two main components: (1) replace the existing outlet works system to address the potential for dam failure under seismic loading conditions and sedimentation build-up near the existing intake tower; and (2) increase the Santa Felicia Dam spillway capacity to safely pass an IDF of 220,000 cfs. As part of replacing the outlet works system, approximately 1,330 feet of lower Piru Creek will be permanently dewatered, and a new lower Piru Creek channel will be constructed below the new outlet works on the east side of Santa Felicia Dam. Additional information on the Project can be found in Attachment A of this certification.

### **1.1 Water Rights**

Table A lists the water rights held by UWCD in relation to the Project.

**Table A: Water Rights Held by UWCD for the Project<sup>1</sup>**

Application No.	Source	Priority Date	Place of Storage or Diversion	Purpose of Use
A027264	Piru Creek	March 25, 1982	Piru Creek	Power
A012092A	Piru Creek Santa Clara River	September 18, 1947	Piru Creek and Santa Clara River	Domestic Industrial Municipal Irrigation Recreational Other

<sup>1</sup> Information is from the State Water Board’s electronic Water Rights Information Management System.

## 2.0 Federal Energy Regulatory Commission Proceedings

On March 2, 2021, UWCD applied to FERC for the Project, as a license amendment to the Santa Felicia Project.

## 3.0 Regulatory Authority

### 3.1 Water Quality Certification and Related Authorities

The federal Clean Water Act (33 U.S.C. §§ 1251-1388) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. § 1251(a).) The Clean Water Act relies significantly on state participation and support in light of “the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution” and “plan the development and use” of water resources. (33 U.S.C. § 1251(b).) Section 101 of the Clean Water Act (33 U.S.C. § 1251(g)) requires federal agencies to “co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.” (33 U.S.C. § 1251(g))

Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit that may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will comply 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 conditions necessary to ensure compliance with the Clean Water Act and with “any other appropriate requirement of State law.” (33 U.S.C. §1341(d).) Section 401 further provides that certification conditions shall become conditions of any federal license or permit for the project. (*Ibid.*)

The State Water Board is the state agency responsible for such certification in California. (Wat. Code, § 13160.) The State Water Board has delegated authority to act on applications for certification to the Executive Director of the State Water Board. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 authorizes the State Water Board to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements” and obtain “other information as may be reasonably required” for activities subject to certification under section 401 of the Clean Water Act. For activities that involve the diversion of water for beneficial use, the State Water Board delegated this authority to the Deputy Director of the Division of Water Rights (Deputy Director), as provided for in State Water Board Resolution No. 2012-0029 (State Water Board, 2012). In the *Redelegation of Authorities* memo issued by the Deputy Director on November 18, 2020, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights (State Water Board, 2020).

On March 2, 2021, UWCD filed a certification application with the State Water Board under section 401 of the Clean Water Act associated with its FERC license amendment application for the Project. On May 3, 2021, State Water Board staff 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 February 8, 2022, State Water Board staff requested comments from the Los Angeles Regional Water Quality Control Board (Los Angeles Regional Water Board) on the certification. (See Cal. Code Regs., tit. 23, § 3855, subd. (b)(2)(B).) No comments were received.

### **3.2 Water Quality Control Plans and Related Authorities**

The State Water Board's certification for the Project must ensure compliance with applicable water quality standards and objectives. Water quality control plans designate the beneficial uses of water that are to be protected for a specific area (such as municipal and industrial, agricultural, and fish and wildlife beneficial uses), water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Wat. Code, §§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans and applicable state and federal anti-degradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and anti-degradation requirements. (*PUD No. 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

The State Water Board's Antidegradation Policy, "Statement of Policy with Respect to Maintaining High Quality Waters in California," Resolution No. 68-16, requires that the quality of existing high-quality water be maintained unless any change will be consistent with the maximum benefit to the people of the state, will not unreasonably affect present or anticipated future beneficial uses of such water, and will not result in water quality less than that prescribed in water quality control plans or policies. The Antidegradation Policy further requires best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the state will be maintained. The state Antidegradation Policy incorporates the federal Antidegradation Policy (40 C.F.R. § 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

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. (Wat. Code, § 13170.) The State Water Board and Regional Water Boards (collectively Water Boards) adopt the plans pursuant to their authorities under the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) and the federal Clean Water Act (33 U.S.C. § 1313).

The Los Angeles Regional Water Board adopted, and the State Water Board and USEPA approved, the *Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) (Los Angeles Regional Water Board, 2014). The Basin Plan designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses. The Basin Plan identifies existing beneficial uses for Piru Creek (gaging station below Santa Felicia Dam to Agua Blanca Creek) as: industrial service supply; industrial process supply; agricultural supply; ground water recharge; freshwater replenishment; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms; spawning, reproduction, and/or early development; and wetland habitat. The Basin Plan also identifies municipal and domestic supply as a potential beneficial use for Piru Creek (gaging station below Santa Felicia Dam to Agua Blanca Creek).

The Basin Plan identifies existing beneficial uses for Lake Piru Reservoir as: industrial service supply; industrial process supply; agricultural supply; ground water recharge; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development. The Basin Plan also identifies the following potential beneficial uses for Lake Piru Reservoir: municipal and domestic supply; freshwater replenishment; and hydropower generation.

### 3.2 Clean Water Act Section 303(d) Listing

In 2018, the State Water Board listed portions of Piru Creek in the 2018 California Integrated Report (*Clean Water Act Section 303(d) List and 505(b) Report*)<sup>1</sup> (State Water Board, 2018) as follows:

- Santa Clara River Reach 11 (Piru Creek, from confluence with Santa Clara River Reach 4 to gaging station below Santa Felicia Dam) is listed for boron, sulfates, total dissolved solids, and specific conductance.

Section 303(d) of the Clean Water Act requires total maximum daily loads (TMDLs) to be developed for impaired waterbodies. TMDLs are written plans that define the maximum amount of a pollutant that a waterbody can receive without exceeding water quality standards and establish load allocations for point and nonpoint sources of pollution.

### 3.3 Construction General Permit

UWCD will need to obtain coverage under the State Water Board's *National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)*<sup>2</sup> (State Water Board, 2009) for activities that disturb one or more acres of soil, or that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Coverage is required pursuant to Clean Water Action sections 301 and 402 that prohibit certain discharges of stormwater containing pollutants except in compliance with a NPDES permit. (33 U.S.C. §§ 1311, 1342(p); 40 C.F.R. pts. 122, 123, and 124.)

### 3.4 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

On April 2, 2019, the State Water Board adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Dredge or Fill Procedures)*<sup>3</sup> (State Water Board, 2019), which became effective on May 28, 2020.

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<sup>1</sup> USEPA approved the 2018 California Integrated Report on June 9, 2021.

<sup>2</sup> Water Quality Order No. 2009-0009-DWQ and NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ, Order No. 2012-0006-DWQ, and any amendments thereto. Available at: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html) Last accessed March 1, 2022.

<sup>3</sup> The Dredge or Fill Procedures and any amendments thereto. Available at: [https://www.waterboards.ca.gov/water\\_issues/programs/cwa401/wrapp.html](https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html). Last accessed February 25, 2022.



The Dredge or Fill Procedures provide California's definition of wetland, wetland delineation procedures, and procedures for submitting applications for activities that could result in discharges of dredged or fill material to waters of the state. The Dredge or Fill Procedures ensure that State Water Board regulatory activities will result in no net loss of wetland quantity, quality, or permanence, compliant with the *California Wetlands Conservation Policy*, Executive Order W-59-93. UWCD must comply with the Dredge or Fill Procedures when conducting dredge or fill activities that may impact waters of the state, including wetlands.

#### **4.0 California Environmental Quality Act**

UWCD is the lead agency for the purpose of compliance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). The State Water Board is a responsible agency under CEQA.

UWCD released a draft Environmental Impact Report (EIR) on November 5, 2018, for public review and comment. Following the end of the public comment period, on February 15, 2019, UWCD adopted a final EIR that identified significant and unavoidable impacts related to Noise and Recreation (UWCD, 2019). The final EIR incorporates mitigation measures, where feasible, to reduce potentially significant impacts to a less than significant level.

The CEQA lead agency must adopt a Mitigation Monitoring and Reporting Program (MMRP) for projects where mitigation measures are a condition of project approval. (Cal. Code Regs., tit. 14, § 15091, subd. (d).) UWCD included a MMRP in its final EIR. In accordance with California Code of Regulations, title 23, section 3859, subdivision (a), the State Water Board has required, as conditions of certifying the Project, compliance with the mitigation, monitoring, and reporting requirements in Table B, as identified in UWCD's MMRP. UWCD is responsible for implementing each mitigation measure and providing verification of implementation.

This certification has been informed by the environmental information and analysis contained in the final EIR and other information in the record. These documents and other materials that constitute the public record are located at the State Water Board, Division of Water Rights, 1001 I Street, Sacramento, California. The State Water Board will file a Notice of Determination with the Office of Planning and Research within five working days of issuance of this certification. (Cal. Code Regs., tit. 14, § 15096, subd. (i).)

**Table B. Resource Area and Mitigation Measure, Impact, and Corresponding Certification Condition**

<b>EIR Resource Area: Mitigation Measure</b>	<b>EIR Potential Impacts</b>	<b>Applicable Certification Condition*</b>
Biological Resources: Pre-construction vegetation surveys (BIO-1)	Temporary or permanent impacts to riparian and wetland vegetation	4
Biological Resources: Construction best management practices (BIO-2)	Adverse impacts to special status wildlife and erosion/turbidity control	5
Biological Resources: Upland Revegetation and Aquatic, Riparian, and Wetland Restoration Plan (BIO-3)	Adverse impacts to riparian and wetland vegetation	4
Biological Resources and Geology and Soils: Design and construct a geomorphically stable channel (BIO-4)	Adverse impacts to special status wildlife and riparian and wetland vegetation	5
Biological Resources: Pre-construction surveys for special status amphibians and reptiles (BIO-6)	Adverse impacts to special status wildlife	3
Biological Resources: Amphibian and reptile relocation during dewatering of lower Piru Creek (BIO-7)	Adverse impacts to special status wildlife	3
Biological Resources: Fish relocation during dewatering of lower Piru Creek (BIO-8)	Adverse impacts to special status fish	3
Biological Resources: Implement turbidity controls (BIO-9)	Adverse impacts to special status fish	1 and 3
Hazards and Hazardous Materials: Implement a worker environmental awareness plan (HZ-1)	Adverse impacts to water quality and beneficial uses	6
Hazards and Hazardous Materials: Contaminated soil/groundwater contingency plan (HZ-2)	Adverse impacts to water quality and beneficial uses	6

### 5.0 Rationale for Water Quality Certification Conditions

This section of this certification provides an explanation of why the conditions in Section 7.0 are necessary to ensure that the Project and its discharges will comply with water quality requirements, and includes a citation to federal, state, or tribal law that

authorizes the condition. Section 4.0 also sets forth citations to applicable regulatory authority. The explanation and citations should be evaluated in the context of the certification as a whole, but the certification conditions are set forth only in Section 7.0.

As noted in Section 3.0 of this certification, pursuant to Clean Water Act section 401 and California Code of Regulations, title 23, section 3859, subdivision (a), the State Water Board, when issuing certifications, may set forth conditions to ensure compliance with applicable water quality standards and other appropriate requirements of state law. Under Water Code section 13160, the State Water Board is authorized to issue certifications under the Clean Water Act and has delegated this authority to the Executive Director. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

California Code of Regulations, title 23, sections 3830 et seq. set forth state regulations pertaining to certifications. In particular, section 3856 sets forth information that must be included in certification requests, and section 3860 sets forth standard conditions that shall be included in all certification actions. Authorization under this certification is granted based on the application submitted. An applicant is required to detail the scope of project impacts in a complete application pursuant to California Code of Regulations, title 23, section 3856, subdivision (h).

As explained in Section 3.0, the conditions in the certification are generally required pursuant to the Basin Plan. Basin Plans are adopted and periodically revised pursuant to Water Code section 13240. The Dredge or Fill Procedures, adopted pursuant to Water Code sections 13140 and 13170, authorize approval of dredge or fill projects subject to satisfaction of specified requirements.

Water Code sections 13267 and 13383 authorize the Water Boards to establish monitoring and reporting requirements for persons discharging or proposing to discharge waste.

The conditions in this certification were developed to ensure compliance with water quality standards and water quality requirements established under the Porter-Cologne Water Quality Control Act, the federal Clean Water Act, including requirements in the Basin Plan, and other appropriate requirements of state law. The conditions are necessary to protect the beneficial uses of water identified in the Basin Plan, prevent degradation of water quality, and ensure compliance with state and federal water quality requirements. When preparing the conditions in this certification, State Water Board staff reviewed and considered the following information:

- UWCD's March 2021 application for certification (UWCD, 2021), supplemental information, and updates thereto;
- Beneficial uses, water quality objectives, and implementation measures and programs described in the Basin Plan (Los Angeles Regional Water Board, 2014);
- Final EIR adopted by UWCD (UWCD, 2019);
- Existing water quality conditions;
- Project-related controllable factors; and

- Other information in the record.

### **5.1 Rationale for Condition 1: Dewatering and Diversion**

Diverting flows, dewatering, re-watering, and other in-water or water-adjacent work may have direct impacts to water quality in Lake Piru Reservoir and lower Piru Creek. Water quality parameters that may be impacted by such activities include turbidity, dissolved oxygen, pH, and water temperature. Additionally, the section of lower Piru Creek to be dewatered is listed as critical habitat for southern California steelhead (*Oncorhynchus mykiss*). Project activities that may impact water quality through flow diversion, dewatering, re-watering, or other in-water or water adjacent work include:

(1) dewatering approximately 1,330 linear feet of the existing lower Piru Creek channel with continued irrigation of existing riparian habitat for the duration of the existing Santa Felicia Project's FERC license; (2) construction of a new lower Piru Creek channel and outlet works system at and immediately downstream of Santa Felicia Dam; (3) construction of a new intake system; (4) raising Santa Felicia Dam's crest by 6.5 feet; and (5) modifying the existing spillway.

Condition 1 requires UWCD to develop a Dewatering and Diversion Plan that will ensure the protection of Lake Piru Reservoir and lower Piru Creek water quality and associated beneficial uses during Project construction activities. The Dewatering and Diversion Plan will include water quality monitoring, measures to avoid water quality impacts, reporting, and adaptive management.

### **5.2 Rationale for Condition 2: Existing Requirements**

This is a dam safety project for Santa Felicia Dam. Santa Felicia Dam currently operates under a FERC license that was issued on September 12, 2008. Condition 2 requires UWCD to ensure compliance with all conditions in the existing FERC license for the Santa Felicia Project (FERC Project No. 2153), including conditions issued by the State Water Board on March 4, 2014 as part of the Operational Changes at the Santa Felicia Project certification. The existing conditions for the Santa Felicia Project remain in effect unless otherwise modified by conditions of this certification for implementation of this Project.

### **5.3 Rationale for Condition 3: Aquatic Biological Resources Protection**

The Project includes the dewatering of approximately 1,330 linear feet of the existing lower Piru Creek channel as well as the lowering of Lake Piru Reservoir to an elevation of 950 feet above mean sea level (msl) for a period of 24 months. During Project construction activities there is a potential for impacts to aquatic species such as: (1) western pond turtle (*Actinemys marmorata*); (2) two-striped garter snake (*Thamnophis hammondi*); (3) southern California steelhead (*Oncorhynchus mykiss*); and (4) arroyo toad (*Anaxyrus californicus*). Condition 3 requires UWCD to develop and implement an Aquatic Protection Plan to reduce the potential for Project construction-related impacts to aquatic resources.

#### **5.4 Rationale for Condition 4: Wetland and Riparian Protection and Restoration**

The Project includes dewatering of approximately 1,330 feet of the existing lower Piru Creek channel as well as the lowering of Lake Piru Reservoir to its minimum pool for 24 months. Though the Project also includes the restoration of lower Piru Creek through construction of a new lower Piru Creek channel, as of the issuance of this certification, the restoration design is not complete. Condition 4 requires UWCD to develop and implement a Restoration Plan to reduce Project construction impacts to riparian habitat and associated special status species (Least Bell's vireo and southwestern willow flycatcher) habitat, and to ensure no overall net loss in the quantity, quality, and permanence of wetlands acreage and values associated wetlands that may be impacted by Project construction. Condition 4 includes actions already proposed by UWCD such as ongoing irrigation of existing riparian habitat in the existing lower Piru Creek channel to protect the habitat from impacts associated with relocating that portion of lower Piru Creek, additional measures and monitoring to ensure wetland and riparian habitat protections associated with Lake Piru Reservoir, and compliance with the Dredge or Fill Procedures. Irrigation of the existing riparian habitat will continue for the duration of the existing Santa Felicia Project FERC license, which expires in 2048.

#### **5.5 Rationale for Condition 5: New Lower Piru Creek Channel Design**

Dewatering the existing lower Piru Creek channel, constructing and rewatering the new lower Piru Creek channel, and operating a new outlet works system may result in impacts to water quality as well as critical habitat for southern California steelhead. Though the Project design specifies the creation of a new lower Piru Creek channel, it does not provide performance metrics, adaptive management, monitoring, or other criteria to define the new channel and ensure it is providing sufficient habitat for steelhead or meeting water quality standards. Though State Water Board staff have participated in a working group organized by UWCD to refine the design of the new lower Piru Creek channel, the design is not complete, and additional discussions and design work are needed to ensure protection of water quality and steelhead habitat.

Condition 5 requires UWCD to develop and implement a New Lower Piru Creek Channel Plan with the goal of designing a new channel in lower Piru Creek that meets water quality standards and provides sufficient steelhead habitat, as determined in consultation with resource agencies. The plan will require UWCD to develop and quantify habitat characteristics such as the linear feet of the new channel that will be created in lower Piru Creek, number of pools, riffles, high-quality rearing/spawning habitat, riparian vegetation, and large woody material. Developing the new lower Piru Creek channel in consultation with resource agencies will ensure it is appropriately designed to mitigate for the loss of the existing lower Piru Creek channel.

#### **5.6 Rationale for Condition 6: Hazardous Materials Management**

Condition 6 requires implementation of hazardous material management measures to prevent hazardous material spills into waterways, including containment criteria pursuant to California Code of Regulations, title 27, section 20320. Conditions related

to site management require implementation of measures and best practices to prevent, minimize, and/or clean up construction spills, including from construction equipment. For instance, fuels and lubricants associated with the use of mechanized equipment have the potential to result in toxic discharges to waters of the state in violation of water quality standards, including the toxicity and floating material water quality objectives. This condition is also required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this certification.

### **5.7 Rationale for Condition 7: Construction General Permit**

Protection of the instream beneficial uses identified in the Basin Plan requires effluent limitations and other limitations on discharges of pollutants from point and nonpoint sources to Lake Piru Reservoir and Piru Creek. Erosion from Project construction activities has the potential to result in discharges that violate water quality standards. Condition 7 requires UWCD to comply with the Construction General Permit, as applicable, and to develop and implement Water Quality Monitoring and Protection Plans (WQMP Plans) to protect water quality and beneficial uses, as applicable. WQMP Plans will be developed for construction and maintenance activities with the potential to cause erosion, stream sedimentation, release of hazardous materials, or otherwise impair water quality that are not covered by another condition of the certification.

### **5.8 Rationale for Condition 8: Project Activity Reports**

Condition 8 requires UWCD to annually submit a Project Activity Progress Report to document UWCD's compliance with the certification requirements. The Project Activity Progress Reports will provide the State Water Board with a summary of Project activities and their compliance with the certification conditions, including protection of water quality and beneficial uses.

### **5.9 Rationale for Conditions 9 through 27**

This certification imposes additional conditions regarding Project approvals, monitoring, enforcement, and potential future revisions.

Condition 9 is necessary to comply with Water Code section 13167 and Conditions 10 through 13 contain important clarifications concerning the scope and legal effect of this certification, and other legal requirements that may apply to the Project.

Monitoring, reporting, and assessment actions, and the information developed through such actions, must be readable, shared, and coordinated with other appropriate entities, and accessible to ensure that a discharge activity complies with water quality requirements. Water Code section 13167 requires the Water Boards to ensure that monitoring data and assessment information are available in a single location and that the information is presented in a manner easily understandable by the public. To fulfill this legislative mandate, Condition 9 requires electronic data submittal in a compatible format with existing system specifications. Compliance with this condition enhances the

accessibility of data and transparency of regulatory actions. This allows regulatory agencies and the public to better assess compliance and understand water quality trends or data anomalies by compiling data and making it readily available.

Pursuant to the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) and federal Endangered Species Act (16 U.S.C. § 1531 et seq.), Condition 10 of the certification does not authorize any act which results in the taking of a threatened, endangered, or candidate species. An applicant for certification is required to identify other licenses, permits, and agreements in the application. In the event an applicant for certification needs authorization from the state or federal authorities, California Code of Regulations, title 23, section 3856, subdivision (e), requires that the applicant provide copies of “any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document is available, a list of all remaining agency regulatory approvals being sought shall be included.” To help ensure the integrity of the certification process and its focus on ensuring that Project activities meet water quality standards and other appropriate requirements of state law, Condition 11 serves to notify applicants that there may be additional applicable federal, state, or local laws or ordinances with which they must comply, including the state and federal Endangered Species Acts (Condition 10).

Water Code section 13160, subdivision (b)(1) allows the State Water Board to issue a certification when there is “reasonable assurance that an activity of any person subject to the jurisdiction of the state board will comply with applicable requirements” of state and federal law. To help ensure the integrity of the certification process and its focus on the protection of water quality and compliance with other applicable state requirements, Condition 11 serves to notify applicants that there may be additional applicable federal, state, or local laws or ordinances with which they must comply. Because agency organization and authorities change over time, Condition 12 provides direction for continuity of oversight in the event an agency’s authority or responsibility is transferred to or subsumed by another agency.

The State Water Board is responsible for the water right, water quality, and drinking water functions of the California state government. (Wat. Code, § 174.) Certain certifications involve an appropriation of water subject to part 2 of division 2 of the Water Code or the diversion of water for certain beneficial uses. (See, e.g., Cal. Code Regs., tit. 23, § 3855, subd. (b)(1)(A).) Condition 13 explains the State Water Board’s issuance of this certification is not adjudicating or approving the validity of water rights that may be related to Project. It also recognizes the State Water Board’s authority, independent of its water quality authority, to prevent unauthorized or threatened unauthorized diversions of water. This helps to ensure that an applicant for a federal license or permit that involves a discharge to navigable waters understands that, except as specified in the certification, the certification does not constitute, or excuse the applicant from obtaining any other State Water Board approvals required for the activity.

Conditions 14 through 16 are necessary to assure that any discharge authorized under the certification will comply with water quality requirements. These conditions are included to comply with section 3860, which sets forth conditions that must be included in all certifications. Condition 14 is a standard condition that “shall be included as conditions of all certification actions” pursuant to California Code of Regulations, title 23, section 3860, subdivision (a). This condition places the permittee on notice that the certification action may be modified or revoked following administrative or judicial review. Condition 15 is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(b). This condition clarifies the scope of the certification’s application and ensures that any applicant for a federal license or permit, which may result in a discharge into navigable waters, is subject to the appropriate State certification. Condition 16 is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(c). This fee requirement condition is also required pursuant to California Code of Regulations, title 23, section 3833(b), which requires payment of fees by project proponents applying for certification. Fees are essential to support the Water Boards certification program, which includes the development of certifications and related inspections to ensure the protection of water quality and beneficial uses that may be impacted by a project.

Conditions 17 through 27 are necessary to ensure that the Project operates to meet water quality standards and other appropriate requirements of state law, or that adjustments are made to ensure continued compliance with water quality standards in light of new information, changes to the Project, or changes to the standards themselves.

This certification requires monitoring, reporting, and analysis as important elements to ensure that the Project activities will comply with state and federal water quality requirements and other appropriate requirements of state law. Conditions 17, 18, and 19 provide for extensions of time to comply with requirements, prevention or remedy of violations, and notification of changed conditions to ensure compliance and prevent violations of water quality standards. In the event of non-compliance, modified conditions may be necessary to return the Project to compliance and prevent violation of water quality standards. Conditions 20 and 21 requires the applicant to comply with the Basin Plan and to take all reasonable measures to protect water quality and beneficial uses, in accordance with plans adopted pursuant to state and federal water laws. Water Code section 13267 authorizes the State Water Board to require any person or entity who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to furnish, under penalty of perjury, technical or monitoring reports when necessary to investigate the quality of any waters of the state. Condition 22 requires such reports that are necessary to ensure compliance with water quality standards.

Condition 23, related to site access requirements, is authorized pursuant to the Water Boards’ authority to investigate the quality of any waters of the state, including specific



site access authorized under Water Code section 13267 and 13383. Site access is needed to ensure compliance with the certification and associated protection of water quality and beneficial uses. Condition 24 requires site personnel and agencies to be familiar with the content of the certification and availability of the document at the Project site. This condition is required to assure that site personnel are familiar with the conditions needed to protect water quality and any authorized discharge will comply with the terms and conditions of this certification, which requires compliance with water quality objectives and beneficial uses adopted or approved under sections 13170 or 13245 of the Water Code, and with other appropriate requirements of state law.

Condition 25 reserves the State Water Board's authority to add or modify conditions of this certification to ensure that Project activities meet water quality objectives and protect beneficial uses.

Condition 26 requires that UWCD use analytical methods approved by California's Environmental Laboratory Accreditation Program (ELAP), when available, to ensure that such analyses are done in a consistent manner.

Condition 27 provides that the State Water Board will provide notice and an opportunity to be heard in exercising its authority to add or modify certification conditions.

## **6.0 Conclusion**

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

## 7.0 Water Quality Certification Conditions

**ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES** that implementation of the Santa Felicia Dam Improvement Project (Project) will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, under the following terms and conditions.

### **CONDITION 1      Dewatering and Diversion**

A minimum of six months prior to commencement of Project construction-related activities covered by this condition, the Licensee shall submit a Dewatering and Diversion Plan (Dewatering Plan) to the State Water Resources Control Board (State Water Board, Deputy Director for the Division of Water Rights (Deputy Director) for review and consideration for approval. The Deputy Director may require modifications as part of any approval. The objective of the Dewatering Plan shall be to identify and implement actions to protect water quality associated with Project-related activities that require dewatering, water diversions, or in-water work below the maximum water surface elevation of Lake Piru Reservoir and lower Piru Creek. The Licensee shall develop the Dewatering Plan in consultation with State Water Board, California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and Los Angeles Regional Water Quality Control Board (Los Angeles Regional Water Board) staff. At a minimum, the Dewatering Plan shall include:

- (1) An overview of all in-water work, including work related to dewatering or diversion of water for Project implementation;
- (2) Schedule for conducting Project construction activities associated with in-water work, including dewatering and diversion of water related to Project implementation;
- (3) Description of coffer dams or other barriers that will be used to isolate the construction area from surface waters;
- (4) List of construction materials that will be used in or adjacent to the watercourse. Any imported riprap, rocks, and gravels shall be pre-washed;
- (5) Description of measures, if needed, that will be implemented to avoid potential water quality impacts, fish stranding, and fish entrainment<sup>4</sup>;
- (6) Proposed water quality monitoring and reporting related to in-water Project construction activities, which shall at a minimum include the parameters and monitoring specified for in-water work and initial releases from the new outlet works specified below in this condition. The Licensee shall describe the equipment, frequency, methods, and quality assurance process for the monitoring;

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<sup>4</sup> The plan may refer to measures identified per compliance with Condition 3: Aquatic Biological Resource Protections.

- (7) Description of how, upon completion of construction activities, rewatering will resume with the least disturbance to the substrate, water quality, and beneficial uses. Releases from the new outlet works shall be increased by no more than one (1) cubic foot per second (cfs) per hour until the minimum flow required by the Federal Energy Regulatory Commission (FERC) license for the Santa Felicia Project (FERC Project No. 2153) is achieved; and
- (8) Documentation of consultation with CDFW, USFWS, NMFS, Los Angeles Regional Water Board, and State Water Board staff, including comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

Any modifications to the Dewatering Plan require approval by the Deputy Director prior to implementation. The Licensee shall file with FERC the Deputy Director-approved Dewatering Plan, any approved amendments thereto, and any additional Deputy-Director required actions. The Licensee shall not commence Project construction without receipt of Deputy Director approval of the Dewatering Plan. The Licensee shall implement the Dewatering Plan, any amendments thereto, and any additional required actions upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

*Water Quality Monitoring During In-Water Work.* For water quality monitoring associated with in-water work, the Licensee shall at a minimum, monitor:

- (1) Temperature;
- (2) Turbidity;
- (3) Dissolved oxygen (measured in milligrams per liter);
- (4) pH; and
- (5) Conductivity.

Unless otherwise approved by the Deputy Director, continuous water quality monitoring shall occur every 15-minutes during in-water work. Monitoring shall be conducted at a minimum of two locations: 1) a location in Lake Piru Reservoir within 300 feet of the new intake location at a depth representative of the new intake locations (i.e., low level outlet and two new intakes); and 2) a location in lower Piru Creek that is no more than 300 feet downstream of the Project area. Monitoring shall commence a minimum of two weeks prior to Project construction activities to establish background conditions. Additionally, the Licensee shall continuously monitor for visible construction-related pollutants (e.g., oils, greases, fuels) throughout the entire construction period.

*Water Quality Monitoring During Initial Releases from the New Outlet Works.* The Licensee shall monitor, at 15-minute intervals or more frequently, the newly constructed lower Piru Creek channel for turbidity during the initial releases from the new outlet works (i.e., at least until the Santa Felicia Project FERC license flow requirement is met at the compliance point specified in the license (i.e., flow meters located in the outlet works system). Unless otherwise approved by the Deputy Director, turbidity monitoring shall occur at the: (a) new outlet works discharge to the new lower Piru Creek channel;

and (b) confluence of the new lower Piru Creek channel with the existing, unmodified lower Piru Creek channel.

Turbidity levels at the confluence of the newly constructed lower Piru Creek channel and the existing, unmodified lower Piru Creek channel must be compliant with the turbidity limits of the *Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) (Los Angeles Regional Water Board, 2014) and any amendments thereto. As of water quality certification (certification) issuance the Basin Plan turbidity limits are as follows:

- Where natural turbidity is between 0 and 50 Nephelometric Turbidity Units (NTU), increases shall not exceed 20 percent; and
- Where natural turbidity is greater than 50 NTU, increases shall not exceed 10 percent.

For turbidity compliance, natural turbidity shall be defined as the turbidity levels measured at the discharge of the new outlet works unless otherwise approved by the Deputy Director.

*Reporting of Violations.* The Deputy Director and the Executive Officer of the Los Angeles Regional Water Board (Executive Officer) shall be notified promptly, and in no case more than 24 hours following a violation of a water quality objective. The notice shall include the cause of the violation, measures taken to correct the violation, and measures the Licensee will implement to prevent a future violation. The Deputy Director may require additional actions to help prevent similar violations in the future. Project activities associated with the violation shall immediately cease and may not resume without approval from the Deputy Director.

## **CONDITION 2 Existing Requirements**

Unless otherwise modified by conditions of this certification, The Licensee shall implement the Project as described in the Application for FERC License Amendment Exhibit E Santa Felicia Project, Section 2, which is attached to United Water Conservation District's (UWCD's) March 2, 2021, request for certification.

Additionally, the Licensee shall continue to comply with all provisions of the March 4, 2014 certification issued by the State Water Board to the Licensee for the Operational Changes at the Santa Felicia Project, including but not limited to, the flow release requirements and dissolved oxygen monitoring.

## **CONDITION 3 Aquatic Biological Resource Protections**

A minimum of three months prior to commencement of Project construction activities, the Licensee shall submit an Aquatic Biological Resource Protection Plan (Aquatic Protection Plan) to the Deputy Director for review and consideration for approval. The Deputy Director may require modifications as part of any approval. The objective of the Aquatic Protection Plan shall be to reduce Project-related construction impacts to

aquatic biological resources by monitoring and implementing protection measures. The Licensee shall develop the Aquatic Protection Plan in consultation with State Water Board, CDFW, USFWS, and NMFS staff. At a minimum, the Aquatic Protection Plan shall include:

- (1) Protocols for pre-construction aquatic biological resource surveys, including:
  - (a) Minimum qualifications of the person(s) conducting the surveys;
  - (b) Timing and schedule of preconstruction surveys in relation to beginning applicable Project construction activities that may impact aquatic biological resources;
  - (c) Special status species<sup>5</sup> and their associated habitats in the Project area, which at a minimum shall include western pond turtle (*Actinemys marmorata*), two-striped garter snake (*Thamnophis hammondi*), southern California steelhead (*Oncorhynchus mykiss*); and arroyo toad (*Anaxyrus californicus*); and
  - (d) The survey areas, which shall include, at a minimum: (i) all work areas (including staging areas); (ii) existing lower Piru Creek channel from the existing outlet works at base of Santa Felicia Dam to the United-Rancho Temescal Property Line; (iii) all side channel areas associated with the spillway; and (iv) newly created sections of the new channel below the outlet works.
- (2) Protocols and schedule or frequency for monitoring during construction activities to ensure special status species are not present;
- (3) Protocols to prevent special status species from entering the Project area. Protocols shall include installation of a temporary barrier at the confluence of the newly constructed lower Piru Creek channel and the existing lower Piru Creek channel during initial watering of the newly constructed lower Piru Creek channel to prevent aquatic species from entering the new channel. The barrier shall remain until the minimum flows required by the FERC license for the Santa Felicia Project have been met.
- (4) A relocation plan for any special status species that are observed in the Project area, which includes areas surveyed per 1(d) of this condition. The relocation plan shall include predetermined locations outside of the Project area for relocation. The predetermined locations shall have sufficient habitat features for each species (e.g., instream cover, appropriate dissolved oxygen concentration, temperature, etc.). The relocation areas shall be selected to ensure that the species will not re-enter the Project area and will not be impacted by construction;
- (5) Avoidance measures to protect special status species' habitats and specimens that cannot be relocated from construction impacts;

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<sup>5</sup> For this certification, special status species are defined as: those species listed, proposed, or under review as threatened or endangered under the federal Endangered Species Act or California Endangered Species Act; those designated as Species of Special Concern by CDFW; and those designated as Fully Protected under the California Fish and Game Code (sections 3511, 4700, 5050, and 5515).

- (6) Protocols to prevent the introduction and spread of aquatic invasive species (e.g., bullfrogs) and diseases. Description of how observations of aquatic invasive species and diseases will be documented and reported. If aquatic invasive species or diseases are observed, the Licensee shall notify the Deputy Director within 48 hours and consult with State Water Board, CDFW, NMFS, and USFWS to manage further spread and introduction;
- (7) Environmental training provided by a qualified biologist that will be provided to construction staff, including the frequency of such training that at a minimum meets the training requirements of mitigation measure BIO-2 of the final EIR (UWCD, 2019); and
- (8) Reporting schedule, including identification of any adaptive management proposed based on implementation of the Aquatic Protection Plan.

The Licensee shall conduct preconstruction surveys prior to any in-water work or work in or near riparian areas. The Licensee shall notify State Water Board and CDFW staff, and as appropriate USFWS and NMFS staff, within 48 hours of when any special-status species are encountered and/or relocated during a preconstruction survey. Species may only be relocated in accordance with the protocols outlined in the Deputy Director-approved Aquatic Protection Plan. The Licensee shall stop work and notify State Water Board and CDFW staff, and as appropriate USFWS and NMFS staff, within 24 hours if a special-status species is found during construction. The Licensee may resume work after the specimen has been relocated, or left of its own volition, and another preconstruction survey has been completed. If a specimen cannot be relocated or does not leave, but can be adequately protected from take by avoidance measures identified in the Aquatic Protection Plan, the Licensee may resume work upon approval from CDFW and as appropriate USFWS and NMFS.

The Licensee shall file with FERC the Deputy Director-approved Aquatic Protection Plan and any approved amendments thereto. The Licensee shall implement the Aquatic Protection Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein. The Licensee shall not commence Project construction without receipt of Deputy Director approval of the Aquatic Protection Plan. Any revisions to the Aquatic Protection Plan must be approved by the Deputy Director prior to implementation.

#### **CONDITION 4      Wetland and Riparian Protection and Restoration**

A minimum of three months prior to commencement of Project construction activities, the Licensee shall submit a Riparian and Wetland Restoration Plan (Restoration Plan) to the Deputy Director for review and consideration for approval. The Deputy Director may require modifications as part of any approval. The objective of the Restoration Plan shall be to reduce and mitigate Project-related construction impacts to riparian habitat and associated special status species (Least Bell's vireo and southwestern willow flycatcher) habitat, and to ensure no overall net loss in the quantity, quality, and permanence of wetlands acreage and values of wetlands that may be impacted by Project implementation. The plan shall ensure the Project will be implemented in compliance with the *State Wetland Definition and Procedures for Discharges of*

*Dredged or Fill Material to Waters of the State* (State Water Board, 2019) and the California Wetlands Conservation Policy (Governor's Executive Order W-59-93 (Aug. 23, 1993)). The Licensee shall develop the Restoration Plan in consultation with State Water Board, CDFW, and USFWS staff. At a minimum, the Restoration Plan shall include:

- (1) Protocols for pre-construction riparian habitat surveys and wetland delineations/assessment including:
  - (a) Minimum qualifications of the person(s) conducting the surveys;
  - (b) Timing and schedule of preconstruction surveys in relation to beginning Project activities, including drawdown of Lake Piru Reservoir;
  - (c) The survey areas, which unless otherwise approved by the Deputy Director, shall include at a minimum: (i) all work areas (including staging areas); (ii) Lake Piru Reservoir's rim (interface of land and water's edge) that is proposed to be dewatered for 24 months during Project construction, (iii) existing lower Piru Creek channel from the existing outlet works at base of Santa Felicia Dam to the United-Rancho Temescal Property Line; (iv) all side channel areas associated with the spillway; and (v) newly created sections of the new channel below the new outlet works.

If portions of the Project area listed above have already been surveyed for riparian habitat and delineated/assessed for wetlands, information from those surveys may be provided in this plan and may be used to meet the pre-construction survey requirements of the plan, if appropriate.

- (2) Quantification (in acres and/or linear feet) of temporary and permanent impacts to riparian habitat and wetlands associated with Project construction;
- (3) Proposed quantification of riparian habitat and wetlands following completion of Project implementation;
- (4) Description of measures the Licensee will implement to ensure no net loss of wetlands and protection of riparian habitat. Measures shall include as appropriate:
  - (a) Establishment of a minimum 20-foot buffer, or other radius approved by the Deputy Director, around delineated wetlands and riparian habitat potentially affected by construction impacts to deter heavy machinery from traversing wetland and riparian habitat and prevent runoff pollution associated with Project activities from directly entering wetlands;
  - (b) Detailed description of proposed restoration activities (e.g., grading, planting, wetland construction, etc.) and a preliminary map identifying proposed locations for restoration activities;
  - (c) Description of irrigation activities for the existing riparian and wetland habitat along the lower Piru Creek channel that will be dewatered following Project completion. Description of irrigation shall include the proposed method, duration, and quantity of water needed to maintain the riparian and wetland habitat; and
  - (d) Mitigation banking and associated proposed offset ratios, as appropriate.

- (5) Protocols for monitoring riparian habitat and wetlands during and following Project implementation to ensure no net loss of wetlands, appropriate restoration of riparian areas, and compliance with the Dredge or Fill Procedures;
- (6) Environmental training that will be provided to construction staff, including the frequency of such training; and
- (7) Reporting schedule, including identification of any adaptive management proposed based on implementation of the Restoration Plan.

The Licensee shall file with FERC the Deputy Director-approved Restoration Plan and any approved amendments thereto. The Licensee shall implement the Restoration Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein. The Licensee shall not commence Project construction without receipt of Deputy Director approval of the Restoration Plan. Any revisions to the Restoration Plan must be approved by the Deputy Director prior to implementation.

#### **CONDITION 5      New Lower Piru Creek Channel**

A minimum of six months prior to commencement of Project construction activities, the Licensee shall submit a New Lower Piru Creek Channel Plan (Channel Plan) to the Deputy Director for review and consideration for approval. The Deputy Director may require modifications as part of any approval. The Licensee shall develop the Channel Plan in consultation with State Water Board, Los Angeles Regional Water Board, CDFW, USFWS, and NMFS staff. At a minimum, the Channel Plan shall include:

- (1) Channel design criteria which, unless other approved by the Deputy Director, shall include a geomorphically stable channel with at least a 1:1 replacement ratio (existing channel to new channel) for the linear feet of lower Piru Creek that will be created as part of the new channel design and Project implementation;
- (2) Quantification of existing habitat characteristics in the existing lower Piru Creek channel (e.g., linear feet of lower Piru Creek, number of pools, riffles, high-quality rearing/spawning habitat, riparian vegetation, and large woody material)<sup>6</sup>;
- (3) Final design for the new channel including the quality/quantity of habitat features (e.g., linear feet of the new lower Piru Creek channel, number of pools, riffles, high-quality rearing/spawning habitat, riparian vegetation, and large woody material) that will be constructed;
- (4) Schedule for channel construction, including restoration and enhancement activities;
- (5) Performance metrics to assess effectiveness of new channel, including restoration and enhancement activities;
- (6) Anticipated maintenance activities, including schedule;

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<sup>6</sup> As appropriate, the Channel Plan may reference elements of the requirements or plan required by Condition 4: Wetland and Riparian Restoration.



- (7) Implementation and effectiveness monitoring to ensure performance metrics are met. Monitoring may coincide with other monitoring activities, such as those in Condition 3 (Wetland and Riparian Protection and Restoration) and Condition 1 (Dewatering and Diversion);
- (8) Documentation of consultation with State Water Board, Los Angeles Regional Water Board, CDFW, USFWS, and NMFS staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations; and
- (9) Format and schedule for reports that document, summarize, and analyze construction of the channel and associated monitoring results. The Licensee shall propose and implement any updates to the plan based on the monitoring results. Reports shall include identification of any potential concerns, as well as proposed actions to address any Project-related impacts. Reports shall be submitted to State Water Board, Los Angeles Regional Water Board, CDFW, USFWS, and NMFS staff.

The Licensee shall file with FERC the Deputy Director-approved Channel Plan and any approved amendments thereto. The Licensee shall implement the Channel Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein. The Licensee shall not commence Project construction without receipt of Deputy Director approval of the Channel Plan. Any revisions to the Channel Plan must be approved by the Deputy Director prior to implementation.

#### **CONDITION 6      Hazardous Materials Management**

A minimum of six months prior to commencement of Project-related construction activities, the Licensee shall submit a Hazardous Materials Management Plan (Hazardous Materials Plan) to the Deputy Director for review and consideration for approval. The Deputy Director may require modifications as part of any approval. The objective of the Hazardous Materials Plan shall be to identify measures for the storage and disposal of hazardous materials and identification of protocols that will be implemented to address any spills during Project implementation. The Licensee shall develop the Hazardous Materials Plan in consultation with State Water Board and Los Angeles Regional Water Board staff. At a minimum, the Hazardous Materials Plan shall include:

- (1) Identification of all hazardous materials to be used during Project implementation;
- (2) Identification of all on-site spill response materials, including those in spill kits, and their potential uses and locations. At a minimum, hazardous materials spill kits shall be maintained onsite and in vehicles for small spills for the duration of construction activities. These kits shall include oil-absorbent material and tarps to contain and control any minor releases. During Project implementation, emergency spill supplies and equipment shall be kept adjacent to all work and at staging areas and shall be clearly marked;

- (3) Measures to manage, remediate, and dispose of hazardous and non-hazardous waste;
- (4) Locations and protocols as defined in California Code of Regulations, title 27, section 20320, for storing hazardous materials during Project construction, which, at a minimum, shall not be stored in or near a floodplain;
- (5) Measures to limit, control, and clean up spills, which shall include, as applicable, use of bermed storage areas, regular equipment inspections, and fueling/refueling procedures;
- (6) Procedures for notifying State Water Board, Los Angeles Regional Water Board, and other appropriate agencies of any hazardous materials spills, and the measures taken to contain and clean up the spills; and
- (7) Documentation of consultation with State Water Board and Los Angeles Regional Water Board staff, comments and recommendations made in connection with the plan, and a description of how the plan incorporates or addresses the comments and recommendations.

Prior to Project construction activities, all staff and personnel of contractors and subcontractors shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including water quality compliance and hazardous materials spill prevention and response measures. The training shall include identification and reporting to the appropriate onsite person of any visual observations that may indicate a water quality impairment (e.g., oil sheen, etc.).

Hazardous materials or other materials that can affect water quality shall not be disposed of or released onto the ground, the underlying groundwater, or any surface water. All construction and maintenance waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials (including equipment lubricants, solvents, and cleaners), shall be removed to an appropriate waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.

Any modifications to the Hazardous Materials Plan shall be approved by the Deputy Director prior to implementation. The Licensee shall file with FERC the Deputy Director-approved Hazardous Materials Plan and any approved amendments thereto. The Licensee shall implement the Hazardous Materials Plan and any amendments thereto upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein. The Licensee shall not commence Project construction without receipt of Deputy Director approval of the Hazardous Materials Plan.

## **CONDITION 7      Construction General Permit**

The Licensee shall comply with the State Water Board's *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit)<sup>1</sup> (State Water Board 2009), and amendments thereto. For construction and maintenance activities with the potential to impact water quality or beneficial uses

that are not subject to the Construction General Permit and that are not covered by another condition of this certification, the Licensee shall prepare and implement site-specific Water Quality Monitoring and Protection Plans (WQMP Plans) for Deputy Director review and consideration of approval.

At a minimum, the WQMP Plans must demonstrate compliance with the solid, suspended, or settleable materials and turbidity water quality objectives in the Basin Plan.

The Licensee shall submit WQMP Plans to the Deputy Director for review and consideration of approval at least 120 days prior to the desired start date of the applicable construction or maintenance activity. The objective of the WQMP Plans shall be to identify and implement control measures for construction, maintenance, or other activities with the potential to cause erosion, stream sedimentation, fugitive dust, soil mass movement, release of hazardous materials, or other water quality impairment.

WQMP Plans shall be based on actual site geologic, soil, and groundwater conditions, and at a minimum shall include:

- (i) A description of site conditions and the proposed activity;
- (ii) Detailed descriptions, design drawings, and specific topographic locations of all control measures in relation to the proposed activity, which may include:
  - Measures to divert runoff away from disturbed land surfaces;
  - Measures to collect and filter runoff from disturbed land surfaces, including sediment ponds;
  - Measures to dissipate energy and prevent erosion;
- (iii) Revegetation measures for disturbed areas, which shall include use of native plants and locally-sourced plants and seeds; and
- (iv) A monitoring, maintenance, and reporting schedule.

The Deputy Director may require modifications as part of any approval. The Licensee shall file with FERC the Deputy Director-approved WQMP Plans, and any approved amendments thereto. The Licensee shall implement the WQMP Plans upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein. The Licensee shall not commence the Project-specific activity covered by the WQMP without receipt of Deputy Director approval of the WQMP.

#### **CONDITION 8      Project Activity Reports**

By January 30 of each year, the Licensee shall submit a Project Activity Progress Report (Progress Report) to the Deputy Director for the previous year. Within 60 days of Project completion, the Licensee shall provide the Deputy Director with a comprehensive Project report summarizing items (a) – (d) for the entire Project period. At a minimum the Progress Report and comprehensive Project report shall include:

- (a) Summary of Project activities performed that construction season;

- (b) Results and analysis of all data collected for that construction season to comply with certification conditions;
- (c) Documentation of compliance with each condition of this certification and details of any failure to meet the certification requirements;
- (d) If applicable, details of Project-related adverse impacts to beneficial uses; and
- (e) Any proposed modifications to Project implementation to address impacts or other concerns.

The Licensee shall provide any additional information or clarification requested by the Deputy Director related to a Progress Report or the comprehensive Project report. Upon request from State Water Board staff, the Licensee shall meet with staff to discuss a Progress Report or the comprehensive Project report. The Deputy Director may require the Licensee to implement corrective actions or new measures to protect water quality and beneficial uses in response to the information provided in a Progress Report or the comprehensive Project report.

## **CONDITIONS 9 – 27**

**CONDITION 9** 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 Water Code section 13167.

**CONDITION 10** This certification does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (ESA) (Fish & G. 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 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 requirements of the applicable ESAs for the Project authorized under this certification.

**CONDITION 11** This certification shall not be construed as replacement or substitution for any necessary federal, state, and local approvals. The Licensee is responsible for compliance with all applicable federal, state, or local laws or ordinances and shall obtain authorization from applicable regulatory agencies prior to the commencement of Project activities.

**CONDITION 12** 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 13** Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 or riparian 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 14** This certification is subject to modification or revocation upon administrative or judicial review, including but not limited to 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 15** 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 application for certification was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application for certification specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

**CONDITION 16** This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.

**CONDITION 17** Notwithstanding any more specific provision of this certification, any plan or report developed as a condition of this certification requires review and approval by the Deputy Director. The State Water Board's approval authority, including authority delegated to the Deputy Director or others, includes the authority to withhold approval or to require modification of a plan, proposal, or report prior to approval. The State Water Board may take enforcement action if the Licensee fails to provide or implement a required item in a timely manner. If a time extension is needed to submit an item for Deputy Director approval, the Licensee shall submit a written request for the extension, with justification, to the Deputy Director no later than 30 days prior to the deadline. The Licensee shall not implement any plan, proposal, or report until after receiving Deputy Director approval and any other necessary regulatory approvals.

**CONDITION 18** 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 ensure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

**CONDITION 19** The Licensee shall submit any change to the Project, including, facilities, technology changes or upgrades, or methodology, which could have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for prior review and written approval. The State Water Board shall determine significance and may require consultation with state and/or

federal agencies. If the State Water Board is not notified of a change to the Project, it will be considered a violation of this certification.

**CONDITION 20** This certification is contingent on compliance with all applicable requirements of the Basin Plan.

**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 or section 303 of the Clean Water Act. The Licensee shall take all reasonable measures to protect the beneficial uses of lower Piru Creek and Lake Piru Reservoir.

**CONDITION 22** In response to a suspected violation of any condition of this certification, the State Water Board or Los Angeles 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.)

**CONDITION 23** Upon request, a construction schedule shall be provided to State Water Board and Los Angeles Regional Water Board staff. The Licensee shall provide State Water Board and Los Angeles Regional Water Board staff access to Project sites to document compliance with this certification.

**CONDITION 24** 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 25** The State Water Board reserves the authority to add to or modify the conditions of this certification: (1) to incorporate changes in technology, sampling, or methodologies; (2) if monitoring results indicate that Project activities could violate water quality objectives or impair beneficial uses; (3) to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act; and (4) to require additional monitoring and/or other measures, as needed, to ensure that Project activities meet water quality objectives and protect beneficial uses.

**CONDITION 26** The Licensee shall use analytical methods approved by California's Environmental Laboratory Accreditation Program (ELAP), where such methods are available. Samples that require laboratory analysis shall be analyzed by ELAP-certified laboratories.

**CONDITION 27** 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.



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Eileen Sobeck  
Executive Director

March 2, 2022

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Date

## 8.0 References

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**ATTACHMENT A**  
Santa Felicia Dam Safety Improvement Project  
Project Description

The Santa Felicia Dam Safety Improvement Project (Project) consists of two main components: (1) replace the existing outlet works system to address the potential for dam failure under seismic loading conditions and sedimentation build-up near the existing intake tower; and (2) increase the Santa Felicia Dam spillway capacity to safely pass an Inflow Design Flood (IDF) of 220,000 cubic feet per second (cfs). As part of replacing the outlet works system, approximately 1,330 feet of lower Piru Creek will be permanently dewatered, and a new lower Piru Creek channel will be constructed below the new outlet works on the east side of Santa Felicia Dam. Additional details on these main components are provided below.

**Outlet Works System Replacement**

The existing outlet works system consists of: an intake tower located in Lake Piru Reservoir on the west side of Santa Felicia Dam; a flow conveyance conduit beneath the dam; a downstream control facilities (DCF) on the west side of the dam; and a hydroelectric generation facility (i.e., powerhouse) capable of generating 1,454 kilowatts (kW) that is located adjacent to the DCF.

The Project involves: the replacement of the existing outlet works system with a new sloping intake facility with two intakes and a new low-level intake that will be located on the east side of Santa Felicia Dam in Lake Piru Reservoir; a new flow conveyance conduit through the east abutment of the dam; a control building for the intakes constructed along the east side of Lake Piru Reservoir; and a new DCF and powerhouse that will be located on the east side of the dam, on the opposite side of lower Piru Creek from the existing powerhouse. The DCF structure will include a primary (high-flow) system for discharge of conservation, migration, and emergency flows and a low-flow system for discharge of habitat water releases, all of which are required by the existing Federal Energy Regulatory Commission (FERC) license for the Santa Felicia Project (FERC Project No. 2153).

In order to complete work on the new outlet works system, Lake Piru Reservoir will be drawn down to an elevation of 950 feet above mean sea-level (msl) and maintained at this level for up to 24 months. This will allow for better access to the construction area.

The new sloping intake facility will be placed on bedrock in Lake Piru Reservoir on the east side of the dam and will consist of a primary-flow system with four intakes at different elevations (953, 980, 1,007, and 1,034 feet above msl) in Lake Piru Reservoir and a low-flow system that will have one intake opening. The primary-flow conduits will be capable of passing up to 500 cfs each. Each primary-flow intake will consist of a 12-foot by 12-foot opening. The low-flow intake will be located at an elevation of 965 feet above msl. The low-flow intake will be used to pass flows of 20 cfs or less. Each intake will be opened and closed with hydraulically operated knife-gate valves. Movable fish screens will be placed above each intake. Additionally, removable trash racks will be installed at each intake to prevent debris from entering the intakes at times of no flow when the fish screens are not in place.

Santa Felicia Dam Safety Improvement Project  
Water Quality Certification  
Attachment A – Project Description

The primary-flow and low-flow conduits will be 78-inch and 30-inch diameter steel pipes, respectively. The steel pipes will be installed in a tunnel through the east abutment of the dam to convey flows from the intake structure to the DCF structure. A control building for the intakes will be constructed along the east side of Lake Piru Reservoir. The DCF will consist of an open-topped partially buried concrete vault containing flow control valves, isolation valves, flow meters, and associated appurtenances. Hooded fixed-cone valves will be used for hydraulic energy dissipation of flows from both the primary- and low-flow system conduits. The DCF will also include provisions for aeration of the discharges to increase dissolved oxygen content in the discharged water.

All discharges from the new intakes will enter the newly constructed section of lower Piru Creek, which will consist of an approximately 200-foot-long channel lined with riprap immediately downstream of the discharge point that transitions to a natural channel. Portions of the riprap will be grouted in place. The newly constructed channel downstream of the riprap channel will connect into the existing lower Piru Creek. This newly constructed portion of lower Piru Creek will be constructed to provide high quality spawning and rearing habitat for southern California steelhead, create as much aquatic and riparian habitat as possible, and establish a geomorphically stable channel.

The Project includes the decommissioning of the existing powerhouse as well as a portion of the existing lower Piru Creek channel. Decommissioning the existing outlet works will result in the dewatering of approximately 1,330 liner feet of lower Piru Creek directly below the existing outlet works. United Water Conservation District (UWCD) plans to irrigate the existing riparian vegetation in the existing lower Piru Creek (i.e., channel that is dewatered when the existing outlet works are decommissioned) in order to maintain existing riparian habitat for least Bell's vireo, southwestern willow flycatcher, and other species for the duration of the Santa Felicia Project FERC license, which expires in 2048.

Two small turbines will be installed in the new DCF structure, which will decrease the generation capacity of the Santa Felicia Project from 1,420 kW to 142 kW.

In order to facilitate construction of the new outlet works system, the existing unpaved access road will be realigned and paved for a distance of approximately 320 feet. Additionally, a temporary bridge will be placed across lower Piru Creek at the location of the existing low-flow crossing to allow heavy construction equipment to travel across lower Piru Creek.

Construction associated with the new outlet works system is expected to take 24 months.

### **Spillway Capacity**

The existing spillway is located on the west side of Santa Felicia Dam and consists of an ungated ogee crest and a funnel-shaped reinforced concrete chute. Downstream of the chute, an unlined rock discharge channel conveys flows to its confluence with lower Piru Creek, approximately 0.7 miles downstream of the existing Santa Felicia Dam outlet works. The current spillway capacity was designed to pass IDF of 105,000 cfs with five feet of freeboard below the dam crest. In 1973, the IDF inflow was increased to 162,400 cfs. In order to accommodate this increase, UWCD constructed a three-foot high parapet wall on the dam crest and portions of the spillway walls were raised to prevent overtopping from wave action. The IDF inflow was once again updated in 2015 to 220,000 cfs as the minimum level of risk reduction. In order to meet the new IDF criteria, UWCD will increase the spillway capacity through a combination of raising the dam crest and deepening the spillway chute.

The dam crest will be raised by 6.5 feet to an elevation of 1,081.5 feet above msl using mechanically stabilized earth fill. Mechanically stabilized earth fill will extend the entire length of the dam crest and will be approximately 25 feet wide. The upstream riprap slope protection will be replaced with a new three-foot high concrete parapet wall that will reach an elevation of 1,084.5 feet above msl.

The deepening of the spillway will involve preserving the existing ogee spillway crest; preserving the existing spillway walls; raising the existing spillway walls to an elevation of 1,081.5 feet above msl; demolishing the spillway chute invert downstream of the ogee crest along the wall; excavating the chute foundation down to an elevation of 990 feet above msl at the downstream end with a continuous slope back to the toe of the ogee structure; constructing a new chute slab and sloped side walls with rock anchors; and improving a counterfort wall forming a portion of the left wall of the spillway.

During construction of the spillway, Lake Piru Reservoir will not be lowered to below minimum pool (980 msl). As per communication with United on February 28, 2022, Lake Piru Reservoir will only be drawn down below minimum pool during work on the new outlet works system. Construction on the spillway will occur after work is completed on the new outlet works system. Construction on the new spillway is expected to take approximately 24 months.