

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

**In the Matter of Water Quality Certification for
PACIFIC GAS AND ELECTRIC COMPANY'S
HELMS PUMPED STORAGE PROJECT
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2735**

Sources: North Fork Kings River, Helms Creek, Courtright Lake, Lake Wishon

Counties: Fresno and Madera

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

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Abbreviations

2024 Review

*2024 Review of State Water Quality Control
Plans and State Policies for Water Quality
Control*

AF

acre-feet

Antidegradation Policy

*Statement of Policy with Respect to
Maintaining High Quality Waters in California*

AMM

Avoidance and Minimization Measure

*Aquatic Weed Control General
Permit*

*Statewide National Pollutant Discharge
Elimination System Permit for Residual
Aquatic Pesticide Discharges to Waters of the
United States from Algae and Aquatic Weed
Control Applications*

Bay-Delta

*San Francisco Bay/Sacramento-San Joaquin
Delta Estuary*

Bay-Delta Plan

*Water Quality Control Plan for the San
Francisco Bay/Sacramento-San Joaquin
Delta Estuary*

CDFW

California Department of Fish and Wildlife

*Central Valley Regional Water
Board*

*Central Valley Regional Water Quality Control
Board*

CEQA

California Environmental Quality Act

certification

water quality certification

cfs

cubic feet per second

Construction General Permit

*National Pollutant Discharge Elimination
System (NPDES) General Permit for
Stormwater Discharges Associated with
Construction and Land Disturbance Activities*

Deputy Director

*Deputy Director of the Division of Water
Rights*

Dredge or Fill Procedures

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

ESA

Endangered Species Act

Executive Director

Executive Director of the State Water Board

FERC

Federal Energy Regulatory Commission

Forest Service

United States Forest Service

ft

feet

IS/MND

initial study/mitigated negative declaration

Licensee

Pacific Gas and Electric Company

MW

megawatt

Abbreviations

<i>NPDES</i>	<i>National Pollutant Discharge Elimination System</i>
<i>PG&E</i>	<i>Pacific Gas and Electric Company</i>
<i>Project</i>	<i>Helms Pumped Storage Project</i>
<i>Regional Water Boards</i>	<i>Regional Water Quality Control Boards</i>
<i>State Water Board</i>	<i>State Water Resources Control Board</i>
<i>state plans and policies</i>	<i>state water quality control plans and policies for water quality control</i>
<i>Tulare Lake Basin Plan</i>	<i>Water Quality Control Plan for the Tulare Lake Basin</i>
<i>USEPA</i>	<i>United States Environmental Protection Agency</i>
<i>USFWS</i>	<i>United States Fish and Wildlife Service</i>
<i>Utility Wildfire General Permit</i>	<i>Revised Draft General Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Utility Wildfire and Similar Operations and Maintenance Activities</i>
<i>Water Boards</i>	<i>State Water Board and Regional Water Boards, collectively</i>
<i>WQMP Plans</i>	<i>Water Quality Monitoring and Protection Plans</i>
<i>WY</i>	<i>water year</i>

1.0 Project Description

Pacific Gas and Electric Company (PG&E or Licensee) owns and operates the Helms Pumped Storage Project (Project), Federal Energy Regulatory Commission (FERC) Project No. 2735. The Project is located on the North Fork Kings River and Helms Creek in Fresno and Madera counties on the west slope of the Sierra Nevada, approximately 55 miles northeast of the city of Fresno, California (see Figure 1).

The Project operates as a pumped storage hydroelectric facility that transfers water to and from Courtright Lake and Lake Wishon for power generation. Courtright Lake (upper reservoir) and Lake Wishon (lower reservoir), are impounded by Courtright Dam and Wishon Dam, respectively, which are licensed facilities of PG&E's Haas-Kings River Hydroelectric Project, FERC Project No. 1988^{1,2}. Courtright Lake has a usable storage area of approximately 123,184 acre-feet (AF) and normal maximum and minimum water surface elevations of 8,184- and 8,050-feet-above-mean-sea-level, respectively. Lake Wishon has a usable storage area of approximately 128,606 AF and normal maximum and minimum water surface elevations of 6,550- and 6,429-feet-above-mean-sea-level, respectively. The Project's authorized installed capacity is 1,080 megawatts (MW), with a normal operating capacity of 1,212 MW³.

The existing Project consists of: (1) intakes/outlets and water conveyance systems, including Courtright Intake-Discharge Structure, Wishon Intake-Discharge Structure, Tunnels 1, 2, and 3, Helms Penstocks, Lost Canyon Pipe, and appurtenant structures; (2) Helms Powerhouse, which includes three turbine units, three generators, Helms transformer, an underground access tunnel and Helms Switchyard; (3) primary transmission and distribution lines, including approximately 61 miles of transmission lines connecting Helms Switchyard to PG&E's interconnected grid and two distribution lines (approximately four miles combined); (4) ancillary support facilities, which include

¹ FERC issued a license to PG&E for the Haas-Kings River Hydroelectric Project on March 18, 2001, with a term expiring on February 28, 2041. The Haas-Kings River Hydroelectric Project controls the discharges from its reservoirs, Courtright Lake and Lake Wishon, to the North Fork Kings River.

² Article 46 of FERC's May 18, 1976, Order Issuing Major License and Amending License for Constructed Project for the Helms Pumped Storage Project states "*The Licensee is authorized to use the reservoirs of Project 1988 [Haas-Kings River Hydroelectric Project] in the operation of Project 2735 [Helms Pumped Storage Project] and shall coordinate operation of the [Helms Pumped Storage] project with that of Project 1988.*" This is consistent with FERC's December 31, 1986, Order Approving "As-Built" Exhibits, which states that the Project consists of "*an intake-discharge structure in each of the reservoirs [Courtright Lake and Lake Wishon] of Project 1988 . . .*"

³ On May 30, 2025, PG&E filed with FERC a final application for a non-capacity license amendment (referred to as the Helms Uprate Project) that will replace three generating units and result in a 180-MW increase in the Project's normal operating capacity from 1,212 MW to 1,392 MW in generation mode and an increase in the authorized installed capacity from 1,080 MW to 1,305 MW. This certification does not act on PG&E's separate request for a certification for the Helms Uprate Project.

Helms Headquarters and Helms Support Facility; (5) three helicopter landing zones; (6) recreational facilities, which include Courtright Boat Launch, Trapper Springs Campground, Marmot Rock Campground, and Wee-Mee-Kute Fishing Access near Courtright Lake, and Wishon Boat Launch, Lily Pad Campground, Upper Kings River Group Campground, Wishon Dam Fishing Access, Spillway Fishing Access, Coolidge Meadow Fishing Access, Helms Picnic Area, and Upper Kings River Fishing Access near Lake Wishon; (7) approximately 38 miles of non-recreational Project roads and trails; and (8) an 80-acre wildlife habitat management area⁴. The Project's two intake-discharge structures, located in Courtright Lake and Lake Wishon, are normally underwater, and all Project facilities and structures used to exchange water between the two reservoirs are underground, including Helms Powerhouse. The Project does not include any dams or reservoirs, and releases from Courtright Dam and Wishon Dam are managed as part of the Haas-Kings River Hydroelectric Project. The Project includes lands managed by the United States Forest Service (Forest Service), United States Bureau of Reclamation, and United States Bureau of Land Management.

To generate power, water is released from Courtright Lake through the Courtright Intake-Discharge Structure, Tunnel 1, Tunnel 2, and the penstock into the Helms Powerhouse, and then is discharged into Lake Wishon through Tunnel 3 and the Wishon Intake-Discharge Structure (see Figure 2). In general, water is released from Courtright Lake into Lake Wishon for approximately six hours daily (ranging from four to 12 hours) during periods of high energy demand (i.e., typically late afternoon and evening). In generating mode, the minimum, maximum, and mean daily average flows through the Helms Powerhouse based on the historic average daily flows from the hydrologic period of record (i.e., calendar year 2001 through water year (WY) 2022) are 0 cubic feet per second (cfs), 4,471 cfs, and 707 cfs, respectively. In general, during the approximately six hours of generation per day, Courtright Lake's water surface elevation drops by approximately 1.25 feet (ft) per day, and Lake Wishon's water surface elevation rises by approximately 1.6 ft per day. On average, the Project generates 744,749 megawatt-hours of electricity per year⁵.

During periods of low energy demand (typically midday, late at night, or on weekends), water is pumped through these facilities in reverse (i.e., pumpback mode from Lake Wishon to Courtright Lake). From WYs 1984 through 2022, the minimum, maximum, and mean daily average flows during pump-back were 0 cfs, 5,859 cfs, and 886 cfs, respectively. During these WYs, in pumpback mode, Courtright Lake's water surface elevation rises by approximately 1.2 ft per day, and Lake Wishon's water surface elevation drops by approximately 1.5 ft per day. Energy use for pump-back averages

⁴ Consistent with Article 66 of the existing FERC Project license, PG&E filed a Wildlife Habitat Management Plan on August 27, 1990, for wildlife management on an 80-acre wildlife habitat management area and a 21-kilovolt transmission line rights-of-way. Avoidance and Minimization Measure 16 (AMM-16) in PG&E's proposed *Biological Resources Management Plan* (PG&E 2024, Attachment E2, Appendix B) states that the existing 80-acre wildlife habitat management area located in the Helms Support Facility 120-acre parcel will continue to be dedicated for the purpose of wildlife habitat management under the new FERC Project license.

⁵ Average calculated from 2015 through 2022.

1,070,693 megawatt-hours per year⁶. As a pumped storage facility, the Project consumes energy to pump water to Courtright Lake during lower-demand periods and generates energy during higher-demand periods, providing energy storage, grid reliability, and operational flexibility.

The current FERC license for the Project was issued May 18, 1976, and expired on April 30, 2026. PG&E has applied for a new FERC license for the Project, under which it proposes to: (1) continue operation of the Project; (2) improve, reconstruct, operate, and maintain existing recreation facilities (reconstruction of Trapper Springs Campground, Marmot Rock Campground, Wee-Mee-Kute Fishing Access, Courtright Boat Launch, Lily Pad Campground, Upper Kings River Group Campground, Short Hair Creek Fishing Access, Wishon Dam Fishing Access, Spillway Fishing Access, Coolidge Meadow Fishing Access, Upper Kings River Fishing Access, Helms Picnic Area, and Wishon Boat Launch [PG&E 2024, Exhibit E, Attachment E2, Appendix A]); (3) modify the FERC Project boundary to include approximately 36 miles of existing roads and approximately one mile of existing trails used almost exclusively to access the Project, and to more accurately define lands necessary for safe operation and maintenance of the Project, recreation, and protection of environmental resources; and (4) implement new protection, mitigation, and enhancement conditions, plans, and measures⁷ (PG&E Proposed Conditions 1-10; PG&E 2024, Exhibit E, Attachment E2).

2.0 Water Rights

PG&E's water rights on the North Fork Kings River are subordinate to the downstream water rights of the Kings River water users (specifically, water rights granted to members of the Kings River Water Association under Application 360 covering Pine Flat Reservoir). Under its water rights issued by the State Water Resources Control Board (State Water Board), a 1954 agreement with the Kings River Water Association, and a 1955 agreement with the Kings River Conservation District, PG&E obtained the right to use, under certain specific conditions, the waters of the North Fork Kings River and its tributaries for power purposes related to PG&E's hydropower projects⁸ on the North Fork Kings River. Table 1 lists PG&E's water rights for the Project.

⁶ Average calculated from 2015 through 2022.

⁷ PG&E proposes operations and management activities (PG&E Proposed Conditions 1-10) to protect or enhance the existing environment or to mitigate Project-related effects to existing resources. Proposed conditions include management plans for recreation, biological resources, hazardous substances, visual resources, fire, transportation system, historic properties, and fish stocking, and conditions describing ownership and coordination between the Project and Haas-Kings River Hydroelectric Project.

⁸ The Project, Balch Hydroelectric Project (FERC Project No. 175), and Haas-Kings River Hydroelectric Project (FERC Project No. 1988).

Table 1. PG&E's Water Rights for the Project⁹

Water Right No.	Priority Date and Face Value (AF/year)	Source	Purpose of Use	Maximum Annual Diversion (cfs) and Storage (AF)
A012242	1/14/1948 61,500	Helms Creek (tributary to North Fork Kings River)	Diversion to storage, power, domestic	61,500 AF at Courtright Lake
A012726	10/1/1948 41,000	Helms Creek (tributary to North Fork Kings River)	Domestic, recreational, power, diversion to storage	41,000 AF at Courtright Lake
A018227	7/22/1958 6,335	Helms Creek (tributary to North Fork Kings River)	Domestic, recreational, power, diversion to storage	6,335 AF at Courtright Lake
A024512	12/20/1973 2,714,002	Helms Creek, North Fork Kings River	Diversion to storage, power, domestic, direct diversion	9,000 cfs at Courtright Dam; 7,200 cfs at Wishon Dam; 57,000 AF at both Courtright Lake and Lake Wishon

3.0 Regulatory Authority

3.1 Water Quality Certification and Related Authorities

The federal Clean Water Act (33 U.S.C. § 1251 et seq.) 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 recognizes, preserves, and protects “the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution [and] to plan the development and use (including restoration, preservation, and enhancement) of land and water resources. . . .” (33 U.S.C. § 1251(b).) In addition, section 101 of the Clean Water Act requires federal agencies to “co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and

⁹ Information is from the State Water Board’s California Water Accounting, Tracking, and Reporting System.

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 to conduct any activity which may result in a discharge into waters of the United States to provide the licensing or permitting federal agency with certification that the project will comply with specific 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 state agency responsible for water quality certification (certification) to prescribe effluent limitations, monitoring requirements, and other conditions necessary to ensure the project will comply with the Clean Water Act and with “any other appropriate requirement of State law.” (33 U.S.C. § 1341(d).) These 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 Clean Water Act section 401 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 (Executive Director). (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 provides that the State Water Board may “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) in State Water Board Resolution 2012-0029 (State Water Board 2012). In the *Redelegation of Authorities* memorandum issued by the Deputy Director on April 20, 2023, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights (State Water Board 2023).

3.1.1 Procedure, Application, and Noticing

On July 25, 2025, PG&E filed a certification application for the relicensing of the Project with the State Water Board under section 401 of the Clean Water Act (PG&E 2025). On July 30, 2025, 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. No comments were received.

On July 25, 2025, and again on March 9, 2026, PG&E's certification application was sent to the Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board) and senior staff at the Fresno and Sacramento offices of the Central Valley Regional Water Board. (See Cal. Code Regs., tit. 23, § 3855, subd. (b)(2)(B).) No comments were received.

On June 18, 2026, State Water Board staff released a draft certification for the Project for public comment. The comment period ended on July 2, 2026, with comments

received from PG&E and the Kings River Water Association. These comments were considered in the development of this certification.

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 in the Central Valley Regional Water Board's *Water Quality Control Plan for the Tulare Lake Basin* ([Tulare Lake Basin Plan](#))¹⁰ (Central Valley Regional Water Board 2018) and the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* ([Bay-Delta Plan](#))¹¹ (State Water Board 2018) and any amendments thereto.

Water quality control plans designate the beneficial uses of water that are to be protected (such as municipal and domestic supply, industrial, agricultural, fish and wildlife), 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 water quality 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 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

The nine 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.) As noted above, 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. (Water Code, § 13170.) The State Water Board and Regional Water Boards (collectively Water Boards) adopt water quality control 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).

Periodic Review. The State Water Board has commenced the 2024 Review of State Water Quality Control Plans and State Policies for Water Quality Control (2024 Review). State water quality control plans and policies for water quality control (state plans and policies) contain water quality standards and other provisions established by the Water

¹⁰ Available online at: https://www.waterboards.ca.gov/rwqcb5/water_issues/basin_plans/tularelakebp_201805.pdf. Last accessed: July 3, 2026.

¹¹ In 2018, the Bay-Delta Plan was updated to adopt new and revised Lower San Joaquin River flow objectives and revised southern Sacramento-San Joaquin Rivers Delta salinity objectives. (State Water Board 2018), available online at: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf. Last accessed: July 3, 2026.

Boards to preserve and enhance California's waters to safeguard human health, support aquatic ecosystems, improve the quality of water resources, and protect beneficial uses of waters.

Triennial reviews are conducted pursuant to the federal Clean Water Act (33 U.S.C. § 1251 et seq.) and its implementing regulations, and periodic reviews are conducted pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). (See 33 U.S.C. § 1313(c)(1); 40 C.F.R. § 131.20(a); Wat. Code, §§ 13143, 13170, 13170.2, subd. (b), 13240.) For the 2024 review cycle, the State Water Board will be conducting triennial review and periodic review in a single combined proceeding. In addition to reviewing state plans and policies, the 2024 Review will include consideration of the federally promulgated water quality standards for California (40 C.F.R. §§ 131.36, 131.37, and 131.38) and Clean Water Act section 304(a) recommended criteria.

The 2024 Review will engage the public and interested persons to identify potential changes or additions that will help to guide the Water Boards' priorities for future amendments to state plans and policies, including new or revised water quality standards that are enforceable for the waterbodies for which they are established.

3.2.1 Tulare Lake Basin Plan

The Central Valley Regional Water Board adopted, and the State Water Board and USEPA approved, the Tulare Lake Basin Plan. The Tulare Lake Basin Plan designates beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses. The Tulare Lake Basin Plan identifies existing beneficial uses for the North Fork Kings River as: hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; spawning, reproduction, and/or early development; and freshwater replenishment.

3.2.2 Bay-Delta Plan

The Bay-Delta Plan establishes water quality objectives to protect beneficial uses of water in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta) and tributary watersheds, including drinking water supply, irrigation supply, and fish and wildlife. The State Water Board adopts the Bay-Delta Plan pursuant to its 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 State Water Board has historically developed the water quality control plan for the Bay-Delta for several reasons. The Bay-Delta is a critically important natural resource that is both the hub of California's water supply system and the most valuable estuary and wetlands system on the West Coast. As diversions of water within and upstream of the Bay-Delta Estuary are a driver of water quality in the Bay-Delta watershed, much of the implementation of the Bay-Delta Plan relies on the combined water quality and water rights authorities of the State Water Board. In addition, the Bay-Delta falls within the boundaries of two Regional Water Boards. Having the State Water Board develop

and adopt a water quality control plan that crosses Regional Water Board boundaries ensures a coordinated approach.

Beneficial uses identified in the Bay-Delta Plan are: municipal and domestic supply; industrial service supply; industrial process supply; agricultural supply; groundwater recharge; navigation; water contact recreation; non-contact water recreation; shellfish harvesting; commercial and sport fishing; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; estuarine habitat; wildlife habitat; and rare, threatened, or endangered species. In addition, the State Water Board is proposing to incorporate tribal beneficial uses in recognition of the numerous California Native American Tribes that rely upon Bay-Delta waterways, the surrounding lands, and the native fish and fauna for subsistence, cultural, ceremonial, and spiritual purposes.

Protection of the Bay-Delta ecosystem and its native aquatic species requires an integrated approach to effectively connect upstream suitable cold water nursery habitat, floodplains, tidal marshland, and turbid open water habitats in the Delta and Bay – and to connect those environments to the ocean.

The State Water Board retains its authority to carry out its responsibilities under the Water Code, article X, section 2 of the California Constitution, the public trust doctrine, or other legal obligations, through other water right or quality proceedings, including through regulation, certifications, adjudicative water right proceedings, or other actions.

3.2.3 Antidegradation Policy

The State Water Board's *Statement of Policy with Respect to Maintaining High Quality Waters in California* ([Antidegradation Policy](#))¹² (State Water Board 1968) 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 impact 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, which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." (40 C.F.R. § 131.12(a)(1).)

3.2.4 Aquatic Weed Control General Permit

The *Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Residual Aquatic Pesticide Discharges to Waters of the United States from Algae and*

¹² State Water Board Resolution 68-16 and any amendments thereto. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf. Last accessed: July 3, 2026.

Aquatic Weed Control Applications ([Aquatic Weed Control General Permit](#))¹³ (State Water Board 2022b) applies to projects that require aquatic weed management activities. The Aquatic Weed Control General Permit sets forth detailed management practices to protect water quality from pesticide and herbicide use associated with aquatic weed control.

3.3 Clean Water Act Section 303(d) Listing

The State Water Board listed as impaired portions of the Project-affected waterbodies in *California's 2024 California Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report)* (State Water Board 2024a) as follows:

- Upper North Fork Kings River is listed as impaired for alkalinity as calcium carbonate.

Section 303(d) of the Clean Water Act requires total maximum daily loads to be developed for impaired waterbodies. Total maximum daily loads 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.

3.4 Construction General Permit

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](#))¹⁴ (State Water Board 2022a) is required 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 a facility. Coverage is required pursuant to Clean Water Act sections 301 and 402 which prohibit certain discharges of stormwater containing pollutants except in compliance with an NPDES permit. (33 U.S.C. §§ 1311, 1342(p); 40 C.F.R. parts 122, 123, and 124.)

¹³ State Water Board Order WQ 2013-0002-DWQ and NPDES No. CAG990005, as amended by Order WQ 2014-0078-DWQ, Order WQ 2015-0029-DWQ, Order WQ 2016-0073-EXEC, Order WQ 2017-0015-EXEC, Order WQ 2020-0037-EXEC, and Order WQ 2022-056-EXEC, and any amendments thereto. Available online at: https://www.waterboards.ca.gov/water_issues/programs/npdes/pesticides/docs/weed_control/2022-0056-EXEC.pdf. Last accessed: July 3, 2026.

¹⁴ State Water Board Order WQ2022-0057-DWQ and NPDES CAS000002, and any amendments thereto. Available online at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Last accessed: July 3, 2026.

3.5 Dredge or Fill Procedures

The *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* ([Dredge or Fill Procedures](#))¹⁵ (State Water Board 2019b and 2021) 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, consistent with Water Code sections 16200-16201. PG&E must comply with the Dredge or Fill Procedures when conducting Project-related dredge or fill activities that may impact waters of the state, including wetlands.

3.6 Comprehensive Plans

Section 10(a)(2)(A) of the Federal Power Act requires FERC to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. In March 2019, the State Water Board submitted to FERC the plans and policies included in California's comprehensive plan for orderly and coordinated control, protection, conservation, development, and utilization of the water resources of the state. On August 5, 2024, the State Water Board filed a comprehensive plan supplement to its March 2019 filing that included updated plans and policies for water quality protection. These submissions included the Tulare Lake Basin Plan, the Bay-Delta Plan, the Antidegradation Policy, and other applicable plans and policies for water quality control. FERC included these updates in its List of Comprehensive Plans in May 2025 (FERC 2025).

3.7 Utility Wildfire General Order

On March 28, 2025, the State Water Board released a revised draft *Utility Wildfire and Similar Operations and Maintenance Activities Clean Water Act Section 401 Certification and Waste Discharge Requirements General Order* ([Utility Wildfire General Order](#))¹⁶ (State Water Board 2024c). The revised draft Utility Wildfire General Order covers the following activities that may cause or threaten to cause a discharge of waste into waters of the state or potentially effect water quality: (1) electric utility company wildfire risk mitigation, response, and cleanup activities; and (2) electric utility infrastructure operations and maintenance activities that are not directly related to wildfire. The activities covered by the revised draft Utility Wildfire General Order have the potential to discharge waste to waters of the state including sediment, herbicides, oils and greases, and some vegetative waste. The revised draft Utility Wildfire General Order imposes conditions that avoid, minimize, and mitigate impacts to waters of the

¹⁵ The Dredge or Fill Procedures and any amendments thereto. Available online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html. Last accessed: July 3, 2026.

¹⁶ The revised draft Utility Wildfire General Order is available online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2025/revised-draft-utility-general-order.pdf. Last accessed: July 3, 2026.

state. The revised draft Utility Wildfire General Order seeks to provide a consistent set of requirements for owners and operators of electrical utility infrastructure located throughout the state in order to avoid inconsistent procedures and additional costs. The Utility Wildfire General Order, if adopted, will establish a framework to streamline the permitting process so that authorization of critical operation and maintenance activities is issued efficiently while protecting water quality.

California has had an increase in wildfire intensity and frequency in recent years due to drought, tree mortality due to pests, climate change, fuel accumulation, and fire suppression. One of the drivers of wildfire in California has been ignition sources associated with the electrical power grid. Among other things, the revised draft Utility Wildfire General Order seeks to facilitate wildfire prevention work to reduce risks to water quality posed by wildfires and to facilitate post-wildfire response activities that help mitigate the negative water quality impacts caused by wildfire. Adoption of a Utility Wildfire General Order is anticipated to be considered by the State Water Board in 2026.

4.0 California Environmental Quality Act

The State Water Board is the lead agency for the purposes of California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) compliance for the relicensing of the Project. On November 17, 2025, the State Water Board released for public review and comment a draft initial study and mitigated negative declaration (collectively draft IS/MND) for the FERC relicensing of the Project (Stantec 2025a, Stantec 2025b). Comments were received from PG&E, California Department of Fish and Wildlife (CDFW), and California Geologic Energy Management Division.

This certification is informed by the environmental information and analysis contained in the final IS/MND, public comments on the draft IS/MND, and other information in the record. The final IS/MND is available at the State Water Board's office (1001 I Street, Sacramento, California) and on the [Project webpage](#).¹⁷

The State Water Board, through its Executive Director, adopts the final IS/MND and has determined it is adequate to support Project approval. In accordance with CEQA Guidelines section 15074, the State Water Board, through the Executive Director, further finds that the final IS/MND has been completed in compliance with CEQA and the final IS/MND represents the State Water Board's independent judgement and analysis. The State Water Board will file a Notice of Determination for the Project with the Office of Land Use and Climate Innovation within five working days of issuing this certification.

5.0 Rationale for Water Quality Certification Conditions

This section of the certification explains that the grant of certification, as conditioned, is warranted and why the conditions in Section 7.0 are necessary to ensure that the Project will comply with water quality requirements. This section also includes, as

¹⁷ Available at: https://waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/helms-pumped-storage.html

necessary, citations to federal, state, or tribal laws that authorize the conditions and sets forth citations to applicable regulatory authority. Section 3.0 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 explained in this section, the conditions in this certification are generally required pursuant to the Tulare Lake Basin Plan and other applicable plans and policies adopted by the Water Boards, as described in Section 3.0, Regulatory Authority.

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.

California Code of Regulations, title 23, section 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.

As noted in Section 3.1, Clean Water Act section 401(d) authorizes state agencies responsible for certification to require monitoring to ensure the project will comply with the Clean Water Act and with “any other appropriate requirement of State law.” (33 U.S.C. § 1341(d).) Water Code sections 13267 and 13383 authorize the Water Boards to establish monitoring and reporting requirements for persons discharging or proposing to discharge waste to navigable waters. Water Code section 13165 authorizes the State Water Board to require a state or local agency to investigate and report on technical factors involved in water quality control, 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. Water Code section 1051 additionally authorizes the State Water Board to investigate waters diverted for beneficial use. Moreover, this certification ensures continued monitoring, reporting, and assessment of water quality for project activities that may impact waters of the state.

Fish and Game Code section 5937 requires the owner¹⁸ of any dam to allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist downstream. Section 5937 and requirements to maintain or monitor flow or other water quality characteristics as required to meet section 5937 are appropriate conditions of state law necessary to protect fishery beneficial uses.

The State Water Board has broad authority to prevent waste and unreasonable use pursuant to article X, section 2 of the California Constitution and Water Code sections 100 and 275. In addition, the State Water Board has both the authority and the duty to protect public trust uses whenever feasible under the public trust doctrine. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446.) Under California’s public trust doctrine, public trust uses include, but are not limited to,

¹⁸ The Fish and Game Code defines “owner” to include “the United States . . . , the State, a person, political subdivision, or district (other than fish and game district) owning, controlling, or operating a dam or pipe.” (Fish & G. Code, § 5900, subd. (c).)

navigation, fishing, recreation, environmental values, and fish and wildlife habitat. (*Id.* at pp. 434-435.)

In general, the code citations, plans, and policies that support issuance of this certification that are described in Section 3.0 are not duplicated in this section. 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 and the federal Clean Water Act, including requirements in applicable water quality control plans and policies, and other appropriate requirements of state law. The conditions in Section 7.0 of this certification are necessary to protect the beneficial uses of waters of the state identified in water quality control plans and policies, prevent degradation of water quality, and ensure compliance with state and federal water quality requirements and other applicable requirements of state law. When preparing the conditions in this certification, State Water Board staff reviewed and considered the following information:

- PG&E's July 25, 2025, certification application for the Project (PG&E 2025);
- PG&E's Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam (PG&E 2024);
- IS/MND for the Project (Stantec 2025a, Stantec 2025c);
- United States Forest Service Preliminary Terms and Conditions Provided Under Section 4(e) of the Federal Power Act (United States Forest Service 2025);
- Any comments associated with the aforementioned documents;
- Beneficial uses, associated water quality objectives, and implementation measures and programs described in the Tulare Lake Basin Plan (Central Valley Regional Water Board 2018) and Bay-Delta Plan (State Water Board 2018);
- Applicable water quality information, permits, policies, objectives, implementation measures, and programs (e.g., Construction General Permit, Clean Water Act Section 303(d) List/305(b) Report, Dredge or Fill Procedures);
- Project-related controllable factors (e.g. scheduled maintenance and construction); and
- Other information in the record.

This certification is issued in conformance with the final Clean Water Act Section 401 Water Quality Certification Improvement Rule (88 Fed.Reg. 66558 (Sept. 27, 2023) [amending 40 C.F.R. parts 121, 122, and 124]) that went into effect on November 27, 2023 (2023 Rule), but as it pertains to documentation of conditions also generally complies with the previous USEPA Clean Water Act Section 401 Certification Rule, 85 Fed.Reg. 42210 (July 13, 2020) (2020 Rule) that was in effect for portions of 2020-2023. Under section 401 of the Clean Water Act, when an activity requiring a federal permit or license “may result in any discharge into the navigable waters,” the applicant is required to obtain a certification that states the activity will comply with applicable water quality standards and that also sets forth any “limitations” and “monitoring requirements” necessary to assure that the “applicant” will comply with water quality standards, other provisions of the Clean Water Act, and “with any other appropriate requirement of State law.” (33 U.S.C. § 1341(a) & (d).) Certification is required for such activity as a whole, not merely for its point source discharges to waters of the United States. (*PUD No. 1, supra*, 511 U.S. at pp. 711- 712.) As explained

in this certification, each certification condition is authorized by applicable state and federal law and is necessary to ensure compliance with such laws. This paragraph is hereby incorporated as part of the explanatory statement for each condition of this certification.

Deputy Director approval of modifications to plans required by certification conditions allows the State Water Board to exercise its authority granted by the Clean Water Act to protect water quality at an appropriate time in the future. Section 401 anticipates that certifications will not only set limits on operations but will also monitor operations on an ongoing basis. (33 U.S.C. § 1341 (d).) Activities not included in the certification application and management plans that have not yet been created or submitted to the State Water Board cannot be specifically conditioned at the time of certification issuance. Ensuring flexibility for adaptive management via delegation of authority to the Deputy Director in these situations is necessary to ensure the Project is operated in a manner that is protective of water quality for the duration of the Project's FERC license.

5.1 Rationale for Condition 1: Water Quality Management

Project-related construction (e.g. changes to existing recreation) and operation and maintenance of the Project have the potential to impact water quality in Courtright Lake and Lake Wishon.

During the Project relicensing period, PG&E proposed developing a *Transportation System Management Plan* (PG&E 2024, Attachment E2) that will include the location, description, and condition of drainage structures and stream crossings and routine procedures for the maintenance and repair of non-recreational vehicular roads or trails. In addition, PG&E proposed a *Biological Resources Management Plan* that included sediment and erosion control measures.

Condition 1(A). Implementation of a Project roads and trails maintenance plan has the potential to impact water quality and associated beneficial uses by mobilizing sediments and increasing turbidity. Condition 1(A) requires PG&E to submit a complete Transportation System Management Plan for Deputy Director review and consideration of approval and implement the plan following approval.

Relicensing studies indicated that water quality in Courtright Lake and Lake Wishon was consistent with the Tulare Lake Basin Plan with two exceptions: dissolved oxygen and pH. It is not anticipated that Project operations will impact dissolved oxygen and pH; however, Project operations have the potential to increase sediment disturbance and runoff into reservoirs and streams. PG&E's proposed *Biological Resources Management Plan* includes measures that protect waterbodies and aquatic habitat (e.g., wet meadows, riparian vegetation) from soil disturbance and runoff from spoil sites; erosion control measures to reduce sedimentation in wetland areas and waterways and protect water quality; and measures to limit disturbance of streams and wetlands. Condition 1(A) requires PG&E to implement applicable sediment and erosion control measures from its *Biological Resources Management Plan*. The avoidance and minimization measures presented in PG&E's proposed *Biological Resources Management Plan* will protect water quality by limiting sediment disturbance and runoff to Project-affected waterways.

Condition 1(B). Activities that have not been expressly identified and evaluated in the Project certification, including maintenance activities throughout the new FERC license term, cannot be determined to be protective of water quality and beneficial uses. Compliance with the Construction General Permit, which is incorporated into the certification for certain types of not-yet-identified activities, is one way for the Board to determine that those activities will be conducted in a manner that is protective of water quality. However, the Board cannot make a finding that compliance with the Construction General Permit will ensure protection of water quality for activities that are not covered by the permit and therefore are not conducted in accordance with its requirements. Condition 1(B) requires PG&E to comply with the Construction General Permit, as applicable, or to develop and implement Water Quality Monitoring and Protection Plans (WQMP Plans) to protect water quality and beneficial uses. WQMP Plans are required to address future unanticipated Project activities that, without a WQMP Plan provision, may not comply with applicable water quality standards. Inclusion of this provision provides PG&E with flexibility over the Project's FERC license term to conduct Project activities that do not require an amendment to the Project's FERC license while ensuring ongoing protection of water quality. WQMP Plans must be developed and implemented for construction, operations, and maintenance activities that have the potential to cause erosion, stream sedimentation, release of hazardous materials, or otherwise impair water quality that are not otherwise covered by the Construction General Permit or a condition of the Project certification. Additionally, Condition 1(B) requires PG&E to comply with the Dredge or Fill Procedures.

Condition 1(C). California has had an increase in wildfire intensity and frequency in recent years due to drought, tree mortality due to pests, climate change, fuel accumulation, and fire suppression. One of the drivers of wildfire in California has been ignition sources associated with the electrical power grid. Project activities relate to wildfire management because maintenance of Project facilities help reduce the risk of future wildfires. Wildfires pose a significant public risk and adversely impact water quality through contribution to erodible surfaces and the potential discharge of hazardous materials. Waste discharges from wildfire prevention and response activities can adversely impact water quality and often require a permit from the Water Boards. The State Water Board is developing a Utility Wildfire General Order to protect water quality from discharges related to wildfires. As part of its Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam, PG&E included a *Fire Management and Response Plan* that describes actions PG&E plans to take for fire protection, prevention, and reporting related to PG&E's operation and maintenance of the Project (PG&E 2024, Attachment E2, Appendix C).

Condition 1(C) requires PG&E to comply with the Utility Wildfire General Order (State Water Board 2024c) or similar permit, if adopted, and any amendments thereto. If the Utility Wildfire General Order or similar permit is not adopted and in effect, Condition 1(C) requires PG&E to develop and implement WQMP Plans to protect water quality and beneficial uses associated with operation and maintenance of the Project's transmission lines and related infrastructure and as necessary following wildfires within the Project's boundaries. Further, Condition 1(C) recognizes PG&E's *Fire Management and Response Plan* and notes it may be used to comply with Condition 1(C) including any need to develop the wildfire-related WQMP Plans.

Requirements of Condition 1 support the Water Boards' authority to investigate waters of the state, including for quality, and require necessary monitoring and reporting pursuant to Water Code sections 1051, 13165, 13267, and 13383. Condition 1 is also required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this certification.

Beneficial uses of the North Fork Kings River that may be impacted by wildfires and Project-related operations, construction, and maintenance include hydropower generation; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; spawning, reproduction, and/or early development; and freshwater replenishment.

5.2 Rationale for Condition 2: Biological Resources Management

Project activities that have the potential to impact aquatic habitat and biological resources include changes to existing recreational facilities and existing operations and management activities such as inspections, operation of facility equipment (e.g., powerhouse equipment), vegetation management, and road grading. The potential impacts of routine operations and maintenance activities implemented under the Project on Endangered Species Act (ESA)-listed and otherwise special status species include direct effects related to vehicle and equipment use, indirect effects related to pollution and runoff (including sedimentation and pesticides), and indirect effects related to habitat alterations.

Implementation of biological resource protection measures as proposed by PG&E and required by Condition 2 will help avoid unreasonable impacts to water quality and beneficial uses related to biological resources and their habitat. Aquatic habitat includes reservoirs, streams, wet meadows, and vernal pools (Stantec 2025b). Relicensing surveys found critical habitat for three special-status species of wetland (vernal pool) plants within the FERC Project boundary: Succulent owl's clover (*Castilleja campestris* var. *succulenta*), San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), and Hairy Orcutt grass (*Orcuttia pilosa*). Relicensing studies found that two special-status species of branchiopods (vernal pool fairy shrimp [*Branchinecta lynchi*] and vernal pool tadpole shrimp [*Lepidurus packardii*]) and six special-status species of amphibians and aquatic reptiles species (California tiger salamander [*Ambystoma californiense*], Yosemite toad [*Anaxyrus canorus*], western spadefoot [*Spea hammondi*], gregarious slender salamander [*Batrachoseps gregarius*], Kings River slender salamander [*Batrachoseps regius*], and northwestern pond turtle [*Actinemys marmorata*]) have the potential to occur in the FERC Project boundary. Special-status amphibians and aquatic reptiles known to occur in the FERC Project boundary are California tiger salamander, western spadefoot, and northwestern pond turtle. Designated critical habitat for California tiger salamander and Yosemite toad are present within the FERC Project boundary (USFWS 2023a, USFWS 2023b).

PG&E proposes implementing its *Biological Resources Management Plan*, as included in its Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam (PG&E 2024, Attachment E2, Appendix B),

which defines appropriate measures to avoid or minimize potential adverse effects on sensitive biological resources during routine Project operations and maintenance activities within the FERC Project boundary. Resource-specific protections include measures for special-status plant populations (including Succulent owl's clover, San Joaquin Valley Orcutt grass, and Hairy Orcutt grass), vernal pool wetlands, California tiger salamander, western spadefoot, Yosemite toad, and northwestern pond turtles. The plan also describes surveys, monitoring, and treatment activities for biological resources, along with reporting and scheduling for surveys and monitoring activities.

To prevent or minimize impacts to biological resources and their habitats, including wetlands, Condition 2 requires implementation of PG&E's *Biological Resources Management Plan*.

In 2006, PG&E entered into an agreement between PG&E and CDFW for stocking of additional trout in Courtright Lake and Lake Wishon Reservoirs under which PG&E funds an additional allotment of 9,000 pounds of catchable trout, split between Courtright Lake and Lake Wishon, to supplement the fishery due to increased angling pressure and to improve angling success (2006 stocking agreement) (PG&E and CDFW 2006; PG&E 2024). PG&E proposes to continue to provide funding to supplement CDFW's fish stocking program. Specifically, PG&E proposes to annually reimburse CDFW for the fish food equivalent of 9,000 pounds of catchable trout to supplement CDFW's annual stocking program in Courtright Lake and Lake Wishon (PG&E 2024, Attachment E2). Fish stocking, although it benefits recreation activities, could impact other beneficial uses and water quality standards. Condition 2 requires implementation of PG&E's *Supplemental Fish Stocking* (included in PG&E's Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam, PG&E 2024, Attachment E2), and requires Deputy Director review and approval of any amendments thereto to ensure fish stocking activities do not impact water quality of beneficial uses.

Condition 2 also requires PG&E to comply with the State Water Board's Aquatic Weed Control General Permit, to prevent or minimize impacts from herbicide and algaecide use, if needed for reservoir maintenance.

Water quality related impacts could affect aquatic biota and wildlife within Courtright Lake, Lake Wishon, and North Fork Kings River. Related beneficial uses of the North Fork Kings River that may be impacted by Project-related disturbances that could impact biological resources include cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; spawning, reproduction, and/or early development; and freshwater replenishment.

5.3 Rationale for Condition 3: Hazardous Materials Management

Hazardous materials management is essential to ensure hazardous materials are properly stored, transported, and managed throughout Project implementation to avoid their discharge to surface waters. Such discharges could result in impacts to water quality and aquatic species and their habitats. Condition 3 is required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this certification.

The Project involves changes to existing recreational facilities and existing operations and management activities such as inspections, pest management, road maintenance/grading, operation of facility equipment, and vegetation management. Improvements to recreational facilities may involve use of hazardous materials such as oil and gas, paint, or other wood treatments. Hazardous materials management requires implementation of best management 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 surface water in violation of water quality standards, including the toxicity and floating material water quality objectives. Condition 3 requires the implementation of hazardous materials management measures to prevent hazardous materials spills into waterways, including containment pursuant to California Code of Regulations, title 27, section 20320. Secondary containment around hazardous materials storage sites helps ensure that any leaks or spills of hazardous materials do not result in a discharge to waters of the state.

PG&E proposes developing and implementing a *Hazardous Substance Plan* (PG&E 2024, Attachment E2) that will address any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or threatened hazard to human health and safety or to the environment, if released into the workplace or the environment. This plan will address the storage, transportation, spill prevention, cleanup, and disposal of hazardous substances used by PG&E associated with Project activities. Condition 3 requires PG&E to develop and submit its *Hazardous Substance Plan* (PG&E 2024, Attachment E2), including additional measures to ensure water quality protection, for Deputy Director review and consideration of approval and requires PG&E to implement the plan following all required approvals. Condition 3 requires implementation of hazardous-substance-related avoidance and minimization measures (AMMs) AMM-5, AMM-6, AMM-7, AMM-9, and AMM-11 in PG&E's *Biological Resources Management Plan* (PG&E 2024, Attachment E2, Appendix B).

The Tulare Lake Basin Plan includes narrative water quality objectives for oil, grease, and other hazardous materials. Waters must be free of hazardous materials in concentrations that cause nuisance, “detrimental physiological responses in human, plant, animal, or aquatic life,” or “result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses” (Central Valley Regional Water Board 2018).

Beneficial uses of the North Fork Kings River that may be impacted by hazardous material releases associated with the Project include water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; spawning, reproduction, and/or early development; and freshwater replenishment.

5.4 Rationale for Conditions 4 through 25

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

Condition 4 is necessary to comply with Water Code section 13167 and Conditions 5 through 8 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 4 requires electronic data submittal in a format compatible 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 ESA (Fish & G. Code, § 2050 et seq.) and federal ESA (16 U.S.C. § 1531 et seq.), Condition 5 states that 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 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-related activities meet water quality standards and other appropriate requirements of state law, Condition 6 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 ESAs.

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 Water Board] will comply with applicable requirements” of state and federal law. Because agency organization and authorities change over time, Condition 7 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 8 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 the 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 9 through 11 are necessary to assure that any discharge authorized under the certification will comply with water quality requirements. These conditions are included to comply with California Code of Regulations, title 23, section 3860, which sets forth conditions that must be included in all certifications.

Conditions 9, 10, and 11 are standard conditions that “shall be included as conditions of all certification actions” pursuant to California Code of Regulations, title 23, section 3860, subdivisions (a), (b), and (c), respectively. Condition 9 places the licensee on notice that the certification action may be modified or revoked following administrative or judicial review. Condition 10 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 11 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 12 through 25 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, climate change, or changes to the standards themselves.

This certification requires monitoring, reporting, and analysis as important elements to ensure that Project-related activities will comply with state and federal water quality requirements and other appropriate requirements of state law. Conditions 12, 13, and 14 provide for extensions of time to comply with requirements, prevention or remedy of violations, and notification of additional actions to ensure compliance and prevent violations of water quality standards. In the event of non-compliance, additional actions may be necessary to return the Project to compliance and prevent violation of water quality standards. Conditions 15, 16, 17, and 18 require: the licensee to comply with the applicable requirements of the Tulare Lake Basin Plan and the Bay-Delta Plan, and amendments thereto; provide for updates to the Project based on changes in technology and methodology; provide for consideration of the effects of climate change on the Project’s operations and updates to ensure continued compliance with appropriate requirements of state law; and ensure that all reasonable measures are taken 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 18 requires such reports that are necessary to ensure compliance with water quality standards.

Condition 19 provides for changing conditions related to climate change during the term of the new FERC license in order to protect water quality and beneficial uses by providing for appropriate adjustments to protect water quality and beneficial uses during the term of the new FERC license. State Water Board Resolution No. 2017-0012, resolves that the state shall update plans, permits, and policies to improve “ecosystem resilience to the impacts of climate change, including but not limited to actions that protect headwaters, facilitate restoration, enhance carbon sequestration, build and enhance healthy soils, and reduce vulnerability to and impacts from fires.”

Condition 20 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.

Condition 21 relates to site access requirements and 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 22 requires site personnel and agencies to be familiar with the content of the certification and availability of the document at the Project’s sites. This condition is required to ensure 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 23 requires the licensee to use analytical methods approved by California’s Environmental Laboratory Accreditation Program, when available, to ensure that such analyses are done in a consistent manner.

Condition 24 ensures the licensee complies with the Dredge or Fill Procedures and the Project’s operation and maintenance activities result in no net loss of wetland quantity, quality, or permanence, consistent with the Water Code sections 16200-16201.

In the event that any provision of this certification is found invalid, Condition 25 ensures that the certification will remain effective, and water quality will still be protected. (Wat. Code, § 13160.)

6.0 Conclusion

The State Water Board finds that, with the conditions and limitations imposed under this certification, the proposed Project will comply with applicable 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 THE RELICENSING OF THE HELMS PUMPED STORAGE PROJECT (Project) (Federal Energy Regulatory Commission Project No. 2735) 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: Water Quality Management

The Licensee shall ensure that Project activities comply with the Central Valley Regional Water Quality Control Board's (Central Valley Regional Water Board's) *Water Quality Control Plan for the Tulare Lake Basin* (Tulare Lake Basin Plan) (Central Valley Regional Water Board 2018 and any amendments thereto), including its water quality objectives.

1(A) Sediment Management

Biological Resources Management Plan. Upon issuance of a new Project license, the Licensee shall implement avoidance and minimization measures (AMMs) AMM-1, AMM-4, AMM-5, and AMM-8 from PG&E's *Biological Resources Management Plan* (PG&E 2024, Attachment E2, Appendix B), which relate to water quality and sediment management. Any changes to the AMMs that could impact water quality or beneficial uses shall be approved by the State Water Resources Control Board's (State Water Board's) Deputy Director of the Division of Water Rights (Deputy Director) prior to implementation. The Deputy Director may require changes as part of any approval. The Licensee shall file with FERC any Deputy Director-approved changes to the *Biological Resources Management Plan* AMMs. The Licensee shall implement any Deputy Director-approved changes to the *Biological Resources Management Plan* AMMs upon receipt of Deputy Director and any other required approvals.

Transportation System Management Plan. No later than nine months following issuance of a new Project license, the Licensee shall develop and submit its proposed *Transportation System Management Plan* (PG&E 2024, Attachment E2) to the Deputy Director for review and consideration of approval. The *Transportation System Management Plan* shall include water quality-related AMMs that will be implemented to protect water quality and beneficial uses related to activities covered by the *Transportation System Management Plan*. The *Transportation System Management Plan* shall be developed in consultation with United States Forest Service (Forest Service) and State Water Board staff, consistent with PG&E's Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam (PG&E 2024, Attachment E2). The *Transportation System Management Plan* shall not be implemented until receipt of Deputy Director and any other required approvals.

Any changes to the *Transportation System Management Plan* that could impact water quality or beneficial uses shall be approved by the Deputy Director prior to implementation. The Deputy Director may require changes as part of any approval. The Licensee shall file with FERC the Deputy Director-approved *Transportation System*

Management Plan and any Deputy Director-approved changes thereto. The Licensee shall implement any Deputy Director-approved *Transportation System Management Plan* and changes thereto upon receipt of Deputy Director and any other required approvals.

1(B) Construction and Maintenance

When applicable, the Licensee shall comply with 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](#))¹⁹ (State Water Board 2022a), *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* ([Dredge or Fill Procedures](#)) (State Water Board 2019b and 2021), and amendments to the aforementioned documents.

For construction, maintenance, and other Project activities with the potential to impact water quality or beneficial uses (e.g., updates to recreation sites) that are not subject to the Construction General Permit and/or that are not covered by another condition of this certification, the Licensee shall prepare and submit site-specific Water Quality Monitoring and Protection Plans (WQMP Plans) for Deputy Director review and consideration of approval. The objective of the WQMP Plans shall be to identify and implement water quality protection 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 that are not covered by the Construction General Permit or another condition of this certification.

At a minimum, WQMP Plans must demonstrate compliance with: (1) sediment and turbidity water quality objectives, as well as other applicable water quality objectives in the Tulare Lake Basin Plan associated with the construction, maintenance, or other Project activities; and (2) the Dredge or Fill Procedures. The Licensee shall submit WQMP Plans to the Deputy Director for review and consideration for approval at least four months prior to the desired start date of the applicable construction, maintenance, or other Project activity with the potential to impact water quality or beneficial uses. The Deputy Director may require changes as part of any approval. WQMP Plans shall be based on actual site conditions, and at a minimum shall include:

- Description of site conditions and the proposed activity, including any dewatering and diversion activities.
- 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.

¹⁹ State Water Board Order WQ 2022-0057-DWQ and National Pollutant Discharge Elimination System No. CAS000002, and any amendments thereto. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf. Last accessed: July 3, 2026.

- Measures to collect and filter runoff from disturbed land surfaces, including sediment ponds at the sites.
- Measures to dissipate energy and prevent erosion.
- Measures that will be implemented to protect water quality and beneficial uses.
- Revegetation of disturbed areas, which shall include use of native plants and locally sourced plants and seeds.
- Description of how the Licensee will comply with the Dredge or Fill Procedures, if appropriate, or why the Dredge and Fill Procedures do not apply.
- Description of monitoring that will be performed, if appropriate.
- A monitoring, maintenance, and reporting schedule.

The Licensee shall file with FERC the Deputy Director-approved WQMP Plan(s), and any Deputy Director-approved changes 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.

1(C) Wildfire

As applicable, and if adopted and in effect, the Licensee shall comply with the conditions of the *Utility Wildfire and Similar Operations and Maintenance Activities Clean Water Act Section 401 Certification and Waste Discharge Requirements General Order* (Utility Wildfire General Order)²⁰ (State Water Board 2024c), any amendments thereto, or successor permits for Project activities covered by the order.

If the Utility Wildfire General Order is not adopted or in effect, the Licensee shall develop and implement site-specific WQMP Plans consistent with Condition 1(B) for wildfire-related impacts to Project infrastructure and activities related to the operation and maintenance of Project transmission lines and related infrastructure that are not otherwise covered by this certification with the potential to impact water quality and beneficial uses. The Licensee may use relevant portions of its *Fire Management and Response Plan* (PG&E 2024, Attachment E2, Appendix C) to comply with this condition.

CONDITION 2: Biological Resources Management

The Licensee shall implement the *Biological Resources Management Plan* as filed by PG&E with FERC on April 18, 2024 (PG&E 2024, Attachment E2, Appendix B) and the *Supplemental Fish Stocking* as filed by PG&E with FERC on April 18, 2024 (PG&E 2024, Attachment E2). Any changes to the *Biological Resource Management Plan* or *Supplemental Fish Stocking* shall be approved by the Deputy Director prior to

²⁰ This includes permits of a similar name and nature as may ultimately be adopted by the State Water Board to address wildfires and similar operations and maintenance activities for transmission lines and utility projects such as are part of the Project. The Utility Wildfire General Order is anticipated to be considered by the State Water Board in 2026. The revised draft Utility Wildfire General Order is available online at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2025/revised-draft-utility-general-order.pdf. Last accessed: July 3, 2026.

implementation. Any changes to the 2006 stocking agreement between PG&E and CDFW for stocking of additional trout in Courtright Lake and Lake Wishon shall be submitted for review and consideration of approval by the Deputy Director and FERC. The Deputy Director may require changes as part of any approval. The Licensee shall file with FERC any Deputy Director-approved changes to the *Biological Resource Management Plan* and *Supplemental Fish Stocking*. The Licensee shall implement any Deputy Director-approved changes to the *Biological Resource Management Plan* and *Supplemental Fish Stocking* upon receipt of Deputy Director and any other required approvals.

Implementation of chemical vegetation management shall comply with the *Statewide National Pollutant Discharge Elimination System (NPDES) Permit for Residual Aquatic Pesticide Discharges to Water of the United States from Algae and Aquatic Weed Control Applications* (State Water Board Order WQ 2013-0002-DWQ and NPDES No. CAG990005, as amended by Orders WQ 2014-0078-DWQ, WQ 2015-0029-DWQ, WQ 2016-0073-EXEC, Order WQ 2017-0015-EXEC, Order WQ 2020-0037-EXEC, and Order WQ 2022-056-EXEC) and any amendments thereto.

CONDITION 3: Hazardous Materials Management

The Licensee shall implement AMMs in PG&E's *Biological Resources Management Plan* AMM-5, AMM-6, AMM-7, AMM-9, and AMM-11 as they relate to hazardous substances (PG&E 2024, Attachment E2, Appendix B).

No later than six months following issuance of a new FERC license for the Project, the Licensee shall submit a Hazardous Substance Plan to the Deputy Director for review and consideration of approval. The Deputy Director may require changes as part of any approval. The Hazardous Substance Plan may be based on the Licensee's proposal for a Hazardous Substance Plan in PG&E's Helms Pumped Storage Project, FERC Project No. 2735, Application for New License, Major Project – Existing Dam (PG&E 2024, Attachment E2). The Licensee shall consult with Central Valley Regional Water Board and State Water Board staff in developing the Hazardous Substance Plan prior to submittal to the Deputy Director for review and consideration of approval. The Licensee shall not commence Project activities with the potential to discharge hazardous substances without receiving Deputy Director approval of the Hazardous Substance Plan or an activity-specific WQMP Plan (Condition 1(B)). The Licensee shall file the Deputy Director-approved Hazardous Substance Plan, and any approved changes thereto, with FERC. The Licensee shall implement the Hazardous Substance Plan upon receipt of Deputy Director and any other required approvals, in accordance with the schedule and requirements specified therein.

Unless otherwise approved by the Deputy Director, at a minimum, the Hazardous Substance Plan shall include:

Hazardous Materials Storage

- A complete inventory of hazardous materials involved in Project activities and their general/typical location.

- Details of how hazardous materials will be used, removed, transported, and disposed of throughout the Project.
- Proposed locations for hazardous material storage, including hazardous waste. Hazardous materials shall be stored in areas that will prevent potential discharges to waters of the state.
- All hazardous materials storage areas shall include secondary containment. All containment structures shall comply with California Code of Regulations, title 27, section 20320. Secondary containment shall be specifically designed for hazardous material storage and sized to contain the largest volume of hazardous materials that could be spilled. Secondary containment shall be positioned to catch any hazardous material spills due to overfilling or any other spills that may occur.

Vehicles and Heavy Equipment

- A general list of the types of heavy equipment that will be used for Project activities, noting what Project activities the equipment is associated with and the general locations of where the equipment will be used and stored.
- Details of overwintering preparation including storage of vehicles and construction equipment, stockpiles and spoil piles, staging areas, and construction sites known at the time the plan is prepared.

Hazardous Material Spills

- A description of spill response equipment and procedures to be initiated if a spill incident occurs. Spill kits shall contain contact information for federal, state, and local officials the Licensee will contact in the event of a hazardous materials spill.
- Actions to be taken in the event of release of hazardous materials with the potential to impact surface waters.
- Notification procedures to report a spill shall include the cause of the release and measures the Licensee will implement to prevent future releases.
- The Licensee shall notify the Deputy Director and Central Valley Regional Water Board Executive Officer as soon as possible but no later than 24 hours following any hazardous material spill that reaches surface waters. The notice shall include the type and quantity of material released, cause of the release, corrective measures taken, and measures the Licensee will implement to prevent future releases. The Deputy Director may require additional actions to help prevent similar releases in the future.
- Any water contaminated by hazardous materials shall be disposed of properly off-site in a manner that does not impair water quality.
- If hazardous materials are released with the potential to impact surface waters, the Licensee shall immediately cease any activities associated with the Project that resulted in the release and implement measures to limit and clean up the release.
- Monitoring protocols to: (1) identify type and quantity of hazardous materials that enter waters of the state after a spill; and (2) ensure waters of the state are free of hazardous materials after cleanup.

Avoidance Measures and Best Management Practices

- AMMs and best management practices that will be implemented to avoid and minimize the potential for oils, greases, and other hazardous materials or contaminants to enter waterways. This shall include specific measures related to refueling and maintenance of vehicles and equipment including details of secondary containment and spill prevention protocols.

Any changes to the AMMs, best management practices, or Hazardous Substance Plan shall be submitted to the Deputy Director for review and consideration of approval and shall be approved by the Deputy Director prior to implementation. The Deputy Director may require changes as part of any approval. The Licensee shall file with FERC any Deputy Director-approved changes to the Hazardous Substance Plan. The Licensee shall implement any Deputy Director-approved changes to the Hazardous Substance Plan upon receipt of Deputy Director and any other required approvals.

CONDITIONS 4 – 25

CONDITION 4. 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 5. 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 6. 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, and local laws and ordinances and shall obtain authorization from applicable regulatory agencies prior to the commencement of activities associated with the Project.

CONDITION 7. Any requirement in this certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another local, state or federal agency, shall apply equally to the successor agency.

CONDITION 8. 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 9. 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 10. 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 11. This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.

CONDITION 12. Notwithstanding any specific provision of this certification, any plan or report developed as a condition of this certification requires review and approval by the Deputy Director, unless otherwise specified. The State Water Board's approval authority, including authority delegated to the Deputy Director or others, includes the authority to withhold approval or modify a proposal, plan, 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. Notwithstanding any other condition of this certification, if a time extension is needed to submit an item for Deputy Director or Executive Director approval, the Licensee shall submit a written request for the extension, with justification, to the designated approver no later than 60 days prior to the deadline. The Licensee shall file with FERC any Deputy Director or Executive Director-approved time extensions. The Licensee shall not implement any plan, proposal, or report until after receiving the applicable State Water Board approval and any other necessary regulatory approvals.

CONDITION 13. In the event of any violation or threatened violation of the conditions of this certification, including if monitoring results indicate that Project-related activities could violate water quality objectives or impair beneficial uses, 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 or threatened violation of the conditions of this certification, the Licensee shall, by a deadline required by the Deputy Director, submit a plan that documents why the violation occurred and steps the Licensee will implement to address the violation. The Licensee shall implement the plan upon approval from the Deputy Director, and the Deputy Director may require changes as part of any approval to ensure the protection of water quality and beneficial uses or compliance with water quality control plans, policies, or other applicable requirements of state law.

CONDITION 14. The Licensee shall submit any change to the Project, including operations, facilities, technology changes or upgrades, or methodology, which may 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, unless otherwise specified. 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. If such a change would also require submission to FERC, the change must first be submitted and approved by the State Water Board unless otherwise delegated in this certification or other State Water Board approval.

CONDITION 15. This certification is contingent on compliance with all applicable requirements of the Central Valley Regional Water Board's Tulare Lake Basin Plan (Central Valley Regional Board 2018) and the State Water Board's Bay-Delta Plan, and any amendments to the aforementioned plans.

CONDITION 16. Reports and plans submitted by the Licensee for approval under this certification shall consider the effects of the Project's operations in relation to compliance with all applicable water quality control plans and policies and, as necessary, propose updates to the Project's operations to ensure protection of water quality and beneficial uses and compliance with other appropriate requirements of state law. The Deputy Director may identify the need for, and set a deadline for, submittal of a report and/or plan focused on additional assessment of potential impacts to water quality and beneficial uses that may have changed from the baseline assumptions used to develop the conditions of the certification, along with recommended changes to address the new or changed water quality control plan or policy beneficial uses and/or water quality objectives. The Deputy Director may include recommendations regarding potential actions that shall be considered by the Licensee in this report and/or plan to ensure ongoing protection of water quality and beneficial uses and compliance with other applicable requirements of state law. The Licensee shall implement the plan upon approval by the Deputy Director and any other required approvals, and the Deputy Director may require changes as part of any approval.

CONDITION 17. Unless otherwise specified by conditions in this certification, the Project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

CONDITION 18. In response to a suspected violation of any condition of this certification, the State Water Board or Central Valley 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 19. Future changes in climate projected to occur during the term of the Project's FERC license(s) may alter the baseline assumptions used to develop the

conditions of this certification and necessitate adaptive management. Reports and plans submitted by the Licensee for approval under this certification shall consider the effects of climate change on the Project's operations and, as necessary, propose updates to the Project's operations to ensure protection of water quality and beneficial uses and compliance with other appropriate requirements of state law. The Deputy Director may identify the need for, and set a deadline for, submittal of a report and/or plan focused on additional assessment of potential impacts to water quality and beneficial uses that may have changed from the baseline assumptions used to develop the conditions of the certification, along with recommended changes to address the changed climate conditions and ensure water quality and beneficial use protections. The Deputy Director may include recommendations regarding potential actions that shall be considered by the Licensee in this report and/or plan to ensure ongoing protection of water quality and beneficial uses and compliance with applicable requirements of state law. The Licensee shall implement the plan upon approval by the Deputy Director and any other required approvals, and the Deputy Director may require changes as part of any approval.

CONDITION 20. The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add or modify the conditions of this certification.

CONDITION 21. Upon request, a construction schedule shall be provided to the Deputy Director. The Licensee shall provide State Water Board and Central Valley Regional Water Board staff access to the Project's sites to document compliance with this certification.

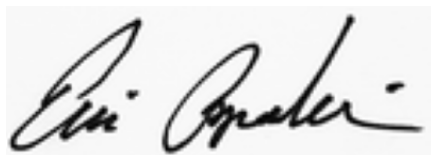
CONDITION 22. A copy of this certification shall be provided to any contractor and all subcontractors conducting Project-related work, and copies shall remain in their possession at the Project's sites. The Licensee shall be responsible for work conducted by its contractor, subcontractors, or other persons conducting work related to the Project.

CONDITION 23. The Licensee shall use analytical methods approved by California's Environmental Laboratory Accreditation Program, where such methods are available. Samples that require laboratory analysis shall be analyzed by Environmental Lab Accreditation Program-certified laboratories.

CONDITION 24. The Licensee shall ensure no net loss of wetland or riparian habitat functions and is responsible for compliance with the Dredge or Fill Procedures (State Water Board 2019b and 2021) and any amendments thereto, and Water Code sections 16200-16201.

CONDITION 25. Certification that the Project will be protective of water quality and beneficial uses in compliance with state and federal water quality standards and other appropriate requirements of state law is dependent upon the conditions and limitations imposed by this certification; however, to ensure the validity of this certification upon any challenge that is not addressed by another condition of this certification, the provisions of this certification are severable. If any provision of this certification is found invalid, affects the validity of the certification, or would result in a determination that the State Water Board has waived its section 401 certification authority for the Project, the remainder of this certification shall not be affected. Upon remand from determination on

administrative or judicial review that a provision of this certification is invalid or affects the validity of the certification, the State Water Board may adopt an alternative term that addresses the water quality issue while avoiding the invalidity.



Eric Oppenheimer
Executive Director

July 24, 2026

Date

Attachment: Attachment A: Maps and Figures

8.0 References

Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board). 2018. Water Quality Control Plan for the Tulare Lake Basin (Tulare Lake Basin Plan). Revised May 2018 (with Approved Amendments). Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/. Last accessed: July 3, 2026.

Federal Energy Regulatory Commission (FERC). 2025. Request for Treatment of Document as a Comprehensive Plan, Pursuant to Section 10(a)(2)(A) of the Federal Power Act. May 1, 2025. Retrieved from: https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20250501-3018. Last accessed: July 3, 2026. PG&E. 2024. Helms Pumped Storage Project FERC Project No. 2735 Application for New License, Major Project. Volumes I–II.

PG&E. 2025. Helms Pumped Storage Project, FERC Project No. 2735-104, Request for Clean Water Act Section 401 Water Quality Certification. July 25, 2025.

State Water Resources Control Board (State Water Board). 1968. Statement of Policy with Respect to Maintaining High Quality Waters in California. Resolution 68- 16. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf. Last accessed: July 3, 2026.

State Water Board. 2012. Delegation of Authority to State Water Resources Control Board Members Individually and to the Deputy Director for Water Rights. Resolution 2012-0029.

State Water Board. 2018. Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). Resolution 2018-0059.

State Water Board. 2019b. State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State (Procedures). Resolution 2019-0015.

State Water Board. 2021. Confirmation That the “State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State” (1) Are in Effect as State Policy for Water Quality Control for All Waters of The State and (2) Shall be Applied via the Inland Surface Waters and Enclosed Bays and Estuaries Plan to only Waters of The United States. Resolution 2021- 0012. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2021/rs2021-0012.pdf. Last accessed: July 3, 2026.

State Water Board. 2022a. Construction Stormwater General Permit Order 2022-0057-DWQ. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf. Last accessed: July 3, 2026.

State Water Board. 2022b. Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Residual Aquatic Pesticide Discharges to Waters of the United States From Algae and Aquatic Weed Control Applications. Order WQ 2013-0002-DWQ and NPDES No. CAG990005, as amended by Order WQ 2014-0078-DWQ, Order WQ 2015-0029-DWQ, Order WQ 2016-0073-EXEC, Order WQ 2017-0015-EXEC, Order WQ 2020-0037-EXEC, and Order WQ 2022-0056-EXEC.

State Water Board. 2023. Redelegation of Authorities Memorandum. April 20, 2023.

State Water Board. 2024a. 2024 California Integrated Report for Clean Water Act Sections 303(d) and 305(b). Available at: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html. Last accessed: July 3, 2026.

State Water Board. 2024b. *Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed*. October 25, 2024. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2024/draft-sacdelta-bdplan-updates.pdf. Last accessed: July 3, 2026.

State Water Board. 2024c. Revised Draft Utility Wildfire and Similar Operations and Maintenance Activities Clean Water Act Section 401 Certification and Waste Discharge Requirements General Order. Available at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/statewide-utility-wildfire-mitigation-general-order.html. Last accessed: July 3, 2026.

State Water Board. 2025a. *Revised Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed*. July 24, 2025. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/docs/rev-draft-sacdelta-bdplan-updates.pdf. Last accessed: July 3, 2026.

State Water Board. 2025b. Revised Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed. December 12, 2025. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2025/h/dec2025-rev-draft-sacdelta-bdplan.pdf. Last accessed: July 3, 2026.

Stantec. 2025a. Initial Study, Helms Pumped Storage Project, FERC Project No. 2735. May 19, 2025.

Stantec. 2025b. Draft Mitigated Negative Declaration, Helms Pumped Storage Project, FERC Project No. 2735. July 31, 2025.

Stantec. 2025c. Final Mitigated Negative Declaration, Helms Pumped Storage Project, FERC Project 2735. July 2026.

United States Forest Service. 2025. Forest Service Preliminary Terms and Conditions Provided Under Section 4(e) of the Federal Power Act in Connection with the Application for Relicensing of the Helms Pumped Storage Project (FERC Project No. 2735-104). July 11, 2025.

**HELMS PUMPED STORAGE PROJECT
WATER QUALITY CERTIFICATION**

**ATTACHMENT A:
Maps and Figures**

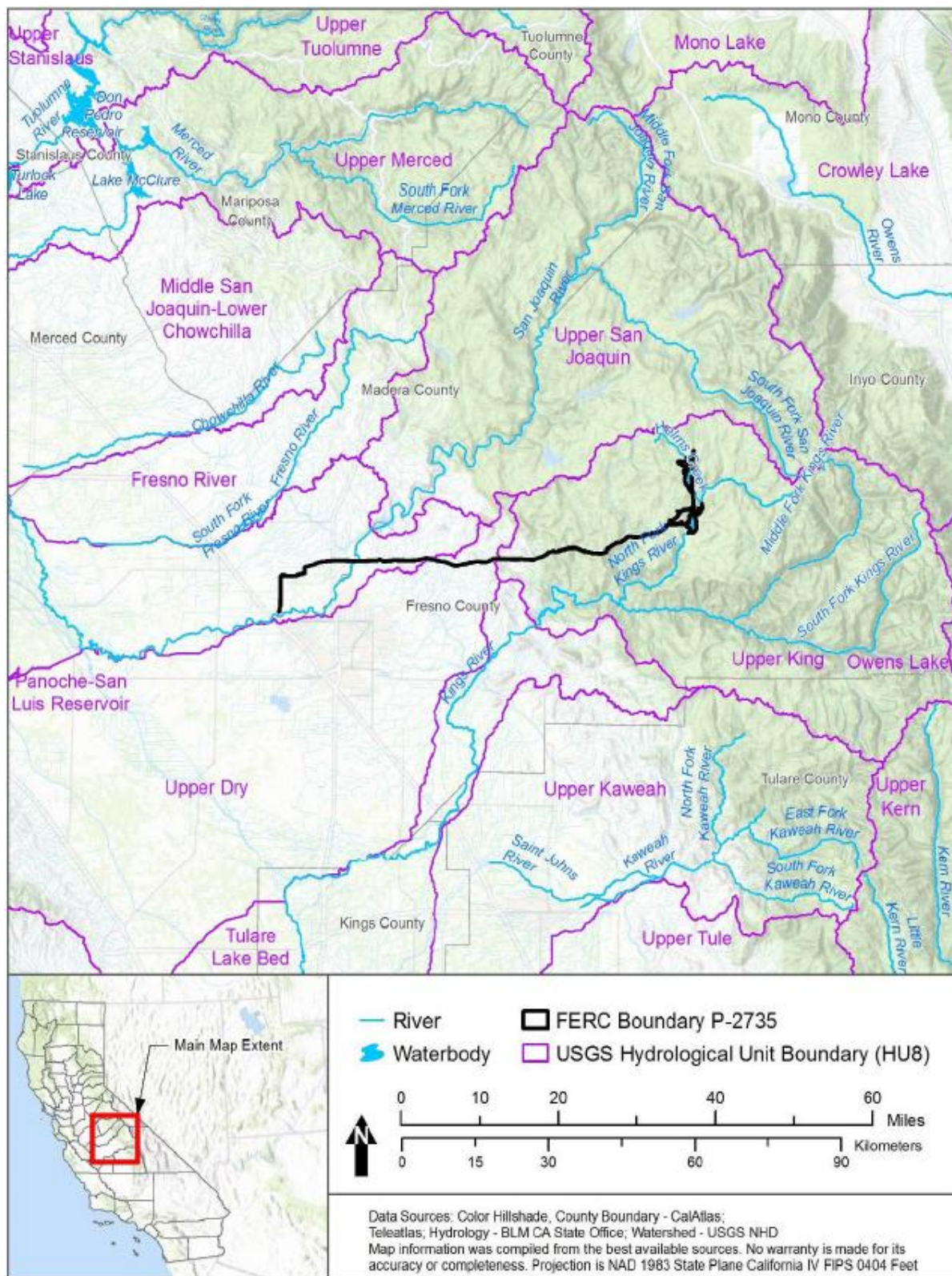


Figure 1. Kings River watershed and vicinity (PG&E 2024, Exhibit E).

