

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

In the Matter of Water Quality Certification for

**SIERRA PACIFIC INDUSTRIES
NELSON CREEK HYDROPOWER REPAIR PROJECT**

SOURCE: NELSON CREEK

COUNTY: SHASTA

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

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Acronyms and Abbreviations

<i>2020-2022 California Integrated Report</i>	<i>2020-2022 California Intergraded Report (Clean Water Act Section 303(d) List/305(b) Report)</i>
<i>Antidegradation Policy</i>	<i>Statement of Policy with Respect to Maintaining High Quality Waters in California</i>
<i>Applicant</i>	<i>Sierra Pacific Industries</i>
<i>Bay-Delta Plan</i>	<i>Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary</i>
<i>BMPs</i>	<i>Best Management Practices</i>
<i>Central Valley Regional Water Board</i>	<i>Central Valley Regional Water Quality Control Board</i>
<i>Central Valley Basin Plan</i>	<i>Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region the Sacramento River Basin and San Joaquin River Basin</i>
<i>CEQA certification</i>	<i>California Environmental Quality Act water quality certification</i>
<i>Construction General Permit</i>	<i>National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities</i>
<i>Deputy Director</i>	<i>Deputy Director of the Division of Water Rights</i>
<i>Dredge or Fill Procedures</i>	<i>State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State</i>
<i>ESA</i>	<i>Endangered Species Act</i>
<i>Executive Officer</i>	<i>Executive Officer of Central Valley Regional Water Quality Control Board</i>
<i>FERC</i>	<i>Federal Energy Regulatory Commission</i>
<i>Forest Service</i>	<i>United States Department of Agriculture-Forest Service</i>
<i>General WDRs</i>	<i>Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality (Order 2003-003-DWQ)</i>
<i>Low Threat Waiver</i>	<i>Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region</i>
<i>NPDES</i>	<i>National Pollutant Discharge Elimination System</i>
<i>NTU</i>	<i>Nephelometric Turbidity Unit</i>
<i>Project</i>	<i>Nelson Creek Hydropower Repair Project</i>

Regional Water Boards

SPI

State Water Board

USACE

USEPA

WDRs

Water Boards

Regional Water Quality Control Boards

Sierra Pacific Industries

State Water Resources Control Board

United States Army Corps of Engineers

United States Environmental Protection Agency

Waste Discharge Requirements

*State Water Resources Control Board and Regional
Water Quality Control Boards, collectively*

1.0 Project Description

Sierra Pacific Industries (SPI or Applicant) owns and operates the Nelson Creek hydropower facility, which is part of the Grasshopper Flat Project (Federal Energy Regulatory Commission [FERC] Project No. 9029). The Nelson Creek hydropower facility includes two small concrete and rock diversion dams; a 22-inch-diameter, 700-foot long, steel pipeline that conveys water diverted from East Nelson Creek to the project diversion at West Nelson Fork Creek; a 34-inch-diameter, 7,180-foot-long, steel penstock; and a 1,050-square-foot concrete-block powerhouse containing turbine-generator units with a combined hydraulic capacity of 50 cubic feet per second and a total rated capacity of 1,035 kilowatts. The Nelson Creek hydropower facility is approximately three miles northeast of the community of Big Bend in Shasta County (Attachment A, Figure 1: Nelson Creek Hydropower Repair Project Area Map).

On October 20, 2022, FERC notified SPI that erosion underneath the toe of the smaller concrete and rock diversion dam on East Fork Nelson Creek, which was identified during a dam safety inspection conducted on August 16, 2022, requires repair. To address the erosion and prevent additional damage to the diversion dam, SPI is proposing the Nelson Creek Hydropower Repair Project (Project). The Project repairs will include installation of rebar anchors and gabion structures underneath the toe in the eroded area. The gabion structures will then be filled with 6-inch to 9-inch rocks. As energy dissipators, the gabion structures will prevent future erosion of the dam toe. Once the gabion structures are filled, the void behind the gabion structures will be backfilled with concrete. Installation of rebar anchors will be done with hand tools (post-pounder) and the placement and filling of gabions will be done by hand or by an excavator operated on the bank of the creek. To backfill the void behind the gabions, a concrete truck will be required.

SPI is proposing to perform the work when East Fork Nelson Creek is naturally dewatered or when flows are low, typically in late summer and early fall, approximately between June 1, 2024, and October 15, 2024. It is anticipated that the Project will require 20 workdays to complete. In general, East Fork Nelson Creek dries each year, with only ponded water remaining in the scour below the dam. The remaining water in the scour at the toe of the dam will be pumped downstream if present at the time of construction. If bottom sediment is encountered during pumping, turbid water will be pumped to an upland location for infiltration, if needed (Attachment A, Figure 2: Containment Site Location). If there is flow in East Fork Nelson Creek present at the time of construction, water upstream of the diversion dam will be conveyed via gravity flow from the spillway gate to downstream of the work area via a 30-foot flexible pipe attached and sealed to the gate of the spillway.

Access to the Project will be via existing roads and may require some vegetation to be trimmed along the roads to allow vehicles to pass (Attachment A, Figure 3: Site Layout and Impacts to Waters of the United States). If an excavator is required to fill the gabions with rock, it may be necessary to remove one tree from the bank of the creek. The excavator will be operated on the top of the bank using a thumb to fill the gabions within the stream. Concrete will be pumped into the work area using a hose from the concrete truck, located on the existing access road.

Project implementation will require a permit from the United States Army Corps of Engineers (USACE), pursuant to section 404 of the Clean Water Act. SPI anticipates it will obtain coverage for the Project from USACE under Nationwide Permit: 17 – Hydropower Projects. The need for a section 404 permit from USACE requires SPI to obtain a Clean Water Act section 401 water quality certification (certification) from the State Water Resources Control Board (State Water Board) for the Project.

2.0 Water Rights

Table A shows SPI’s water right claim associated with the Project.

Table A. SPI’s Claimed Water Rights Related to the Project*

Application No.	Source	Priority Date	Place of Storage or Diversion	Purpose of Use
E000021	East and West Forks Nelson Creek	06/29/1988	Point of Direct Diversion at East and West Forks Nelson Creek	Power

* Information is from the State Water Board’s electronic Water Rights Information Management System.

3.0 Regulatory Authority

3.1 Water Quality Certification and Related Authorities

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

Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit that may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will comply with specified provisions of the Clean Water Act, including water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Clean Water Act section 401 directs the agency responsible for certification to prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with “any other appropriate requirement of State law.” (33 U.S.C. §1341(d).) Section 401 further provides that certification conditions shall become conditions of any federal license or permit for the project. (*Ibid.*)

The State Water Board is the state agency responsible for 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. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

Water Code section 13383 authorizes the State Water Board to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements” and obtain “other information as may be reasonably required” for activities subject to certification under section 401 of the Clean Water Act. For activities that involve the diversion of water for beneficial use, the State Water Board delegated this authority to the Deputy Director of the Division of Water Rights (Deputy Director), as provided for in State Water Board Resolution No. 2012-0029 (State Water Board 2012). In the *Redelegation of Authorities* memo issued by the Deputy Director on April 20, 2023, this authority is redelegated to the Assistant Deputy Directors of the Division of Water Rights (State Water Board 2023a).

Procedure, Application, and Noticing

On June 29, 2023, SPI filed a certification application with the State Water Board under section 401 of the Clean Water Act. On July 29, 2023, 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 in response to this notice.

On May 15, 2024, State Water Board staff requested comments from the Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board) on the certification application. (See Cal. Code Regs., tit. 23, § 3855, subd. (b)(2)(B).) Central Valley Regional Water Board staff did not provide comments.

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 (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin* (Central Valley Basin Plan) (Central Valley Regional Water Board 2019) and the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan) (State Water Board 2018)¹.

Water quality control plans designate the beneficial uses of water to be protected (such as municipal and domestic supply, industrial, agriculture, and fish and wildlife habitat), 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

¹ Based on the Project’s limited scope, duration, and distance from the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, impacts to water quality objectives listed for waterbodies in the Bay-Delta Plan are not anticipated to occur from Project activities.

objectives. (Wat. Code, §§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans and applicable state and federal anti-degradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and anti-degradation requirements. (*PUD No. 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

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

Central Valley Basin Plan

The Central Valley Regional Water Board adopted, and the State Water Board and USEPA approved, the Central Valley Basin Plan. The Central Valley Basin Plan designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses. The Central Valley Basin Plan specifies that the beneficial uses of any specifically identified waterbody generally apply to its tributary streams. The Central Valley Basin Plan identifies existing beneficial uses for East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) as: municipal and domestic supply; agricultural supply; hydropower generation; water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; and wildlife habitat. Additionally, the Central Valley Basin Plan identifies potential beneficial uses for East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) as: warm water habitat.

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 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 beneficial uses in the Bay-Delta Plan are: municipal and domestic supply; industrial service supply; industrial process supply; agricultural supply; groundwater recharge; navigation; water contact recreation; noncontact 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 2018, the Bay-Delta Plan was updated to adopt new and revised Lower San Joaquin River flow objectives and revised southern Delta salinity objectives.

The State Water Board is developing Bay-Delta Plan amendments focused on the Sacramento River and its tributaries, Delta eastside tributaries, Delta outflows, and interior Delta flows. This effort is referred to as the Sacramento/Delta Update to the Bay-Delta Plan. 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. Accordingly, the Sacramento/Delta Update to the Bay-Delta Plan would provide for a flow regime that supports a connected and functioning ecosystem linking and integrating inflow, cold water habitat, Delta outflow, and interior Delta flow measures with complementary physical habitat restoration and other nonflow measures. Changes are proposed to the water quality objectives, including narrative and/or numeric flow objectives, and the program of implementation for those objectives, as well as changes to monitoring, reporting, and assessment requirements. Water users on Bay-Delta tributaries would bear responsibility for achieving flow and other flow-based objectives (State Water Board 2023b).

Antidegradation Policy

The State Water Board's [Statement of Policy with Respect to Maintaining High Quality Waters in California](#) (Antidegradation Policy)² (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 (40 C.F.R. § 131.12 (a)(1)), which requires "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."

In March 2019, the State Water Board submitted to FERC the plans and policies included in the state's comprehensive plan for orderly and coordinated control, protection, conservation, development, and utilization of the water resources of the state. This submission included the Central Valley Basin Plan, the Bay-Delta Plan, the Antidegradation Policy, and other applicable plans and policies for water quality control (FERC 2020).

² State Water Board Resolution No. 68-16 and any amendments thereto. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf Accessed on March 25, 2024.

3.3 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)³ (State Water Board 2022a) is not anticipated for this Project. Project proponents must obtain coverage under the Construction General Permit for activities that disturb one or more acres of soil, or that disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. Coverage is required pursuant to Clean Water Act sections 301 and 402, which prohibit certain discharges of stormwater containing pollutants except in compliance with a NPDES permit. (33 U.S.C. §§ 1311, 1342(p); 40 C.F.R. pts. 122, 123, and 124.) The Project is expected to result in temporary impacts to 0.018 acres of stream channel habitat.

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

The [State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State](#) (Dredge or Fill Procedures)⁴ (State Water Board 2019 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, compliant with the *California Wetlands Conservation Policy*, Executive Order W-59-93. SPI must comply with the Dredge or Fill Procedures when conducting dredge or fill activities that may impact waters of the state, including wetlands.

³ State Water Board Order No. 2009-0009-DWQ and NPDES No. CAS000002, as amended by Order No. 2010-0014-DWQ, Order No. 2012-0006-DWQ, Order No. 2022-0057-DWQ, and any amendments thereto. Available at: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html Accessed on March 25, 2024.

⁴ The Dredge or Fill Procedures and any amendments thereto. Available at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html. Accessed on March 25, 2024.

3.5 Clean Water Act Section 303(d) Listing

On January 19, 2022, the State Water Board adopted the [2020-2022 California Integrated Report \(Clean Water Act Section 303\(d\) List/305\(b\) Report\)](#)⁵ (2020-2022 California Integrated Report) (State Water Board 2022b) and it was approved by USEPA on May 11, 2022. The 2020-2022 California Integrated Report does not list the East Fork Nelson Creek hydrological subarea as an impaired waterbody.

3.6 General Waste Discharge Requirements or Waiver

Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality (Order 2003-0003-DWQ; General WDRs) (State Water Board 2003) are suitable for regulating low volume discharges with minimal pollutant concentrations. Additionally, the Central Valley Regional Water Board adopted [Resolution R5-2023-0061](#), establishing a *Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region (Low Threat Waiver)* (Central Valley Regional Water Board 2023). Discharges that may be regulated under General WDRs or waiver of WDRs include wells/boring waste, clear water discharges, small dewatering projects, and miscellaneous projects (e.g., small inert solid waste disposal operations, cooling discharge). As applicable, the Applicant will need to obtain coverage under the General WDRs or comply with the Central Valley Regional Water Board's Low Threat Waiver.

4.0 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to discretionary projects that may cause a direct or indirect physical change in the environment. (Pub. Resources Code, §§ 21000 et seq.) When proposing to undertake or approve a discretionary project, state agencies must comply with the procedural and substantive requirements of CEQA. The State Water Board determined that the Project is categorically exempt from CEQA under Class 1, existing facilities (Cal. Code Regs, tit. 14, § 15301) and Class 4 minor alterations to land (Cal. Code Regs, tit, 14, § 15304). No exceptions to the applicable exemptions apply. The State Water Board plans to file a Notice of Exemption with the State Clearinghouse 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 and its activities will comply with water quality requirements. This section also includes, as necessary, citations to federal, state, or tribal laws that authorize the conditions and sets forth citations to applicable regulatory authority. Section 3.0 also

⁵ 2020-2022 California Integrated Report. Available at: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html Accessed on March 25, 2024.

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 Central Valley Basin Plan, 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, sections 3830 et seq., set forth state regulations pertaining to certifications. In particular, section 3856 sets forth information that must be included in certification requests, and section 3860 sets forth standard conditions that shall be included in all certification actions.

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 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 the Project activities that may impact waters of the state.

Fish and Game Code section 5937 requires any owner of a 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.

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 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, prevent degradation of water quality, and help ensure compliance with state and federal water quality requirements.

When preparing the conditions in this certification, State Water Board staff reviewed and considered the following information:

- SPI's June 29, 2023 application for certification (SPI 2023a) including its Attachments (Attachments A – E) and clarifying information submitted by email on September 21, 2023 (SPI 2023b);
- Beneficial uses, water quality objectives, and implementation measures and programs described in the Central Valley Basin Plan;

- Applicable water quality information, permits, policies, objectives, implementation measures, and programs (e.g., Dredge or Fill Procedures, etc.);
- Project-related controllable factors; and
- Other information in the record.

This certification is issued pursuant to the final 2023 Clean Water Act Section 401 Water Quality Certification Rule (Fed. Reg. 66558-66666 (September 27, 2023) [amending 40 C.F.R. Parts 121, 122, 124]) that went into effect on November 27, 2023 (2023 Rule), but also complies with the previous 2020 Rule that was in effect for portions of 2020-2023 should it reemerge as a result of litigation or any other reason. To the extent FERC or the USACE considers any certification condition to include requirements outside the substantive scope of USEPA’s *Clean Water Act Section 401 Certification Rule*, 85 Fed. Reg. 42,210 (July 13, 2020) (2020 Rule), the 2020 Rule—including but not limited to 40 C.F.R. §§ 121.1(f) and (n), 121.3, 121.7(d)(1), and 121.9(b)—is inconsistent with federal law and controlling case law. The 2023 Rule restores the scope of certification “that is consistent with not only the statutory language and congressional intent but also longstanding [USEPA] guidance and decades of Supreme Court case law.” (Fed. Reg. 65591-66606 [Scope of Certification].) 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 and “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.) USEPA replaced the 2020 Rule because, among other faults, it “may prevent state and tribal authorities from adequately protecting their water quality,” “may result in a state or tribe’s certification or conditions being permanently waived as a result of non-substantive and easily fixed procedural concerns,” and “may limit the flexibility of certifications and permits to adapt to changing circumstances.” (86 Fed. Reg. 29,543-29,544 (June 2, 2021).) 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.

5.1 Rationale for Condition 1: Project Activities

As described in Section 5.0, this certification is granted based on the application and supporting information and is subject to requirements of the Porter-Cologne Water Quality Control Act. Condition 1 requires SPI to implement the Project as described in its June 29, 2023 certification application (SPI 2023a) and supplemental information, and as modified by the conditions of this certification. Condition 1 will help ensure that the Project is implemented in a manner that protects water quality objectives and avoids unreasonable impacts to beneficial uses. Any changes to the Project description that are inconsistent with the Project application and supplemental information (e.g., emails) SPI provided to the State Water Board prior to certification issuance could impact the

findings, conclusions, and conditions of the certification and may necessitate the filing of an amendment or new application as well as trigger additional environmental review.

Additionally, Condition 1 requires SPI to maintain minimum instream flows, as required by the Grasshopper Flat Project FERC license and as stated in SPI's application. (SPI 2023a.) Reduced minimum instream flows have the potential to impact water quality and associated beneficial uses of Nelson Creek, as identified in the Central Valley Basin Plan. Existing and potential beneficial uses in East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) that may be impacted by the Project's activities include: water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; wildlife habitat; and warm water habitat (potential beneficial use). Minimum instream flow discharges directly impact water quality and associated beneficial uses. Fish and Game Code section 5937 requires any owner of a 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. Maintaining minimum instream flows ensures protection of water quality and aquatic resources throughout Project implementation.

5.2 Rationale for Condition 2: Water Quality Monitoring

The construction work for the Project may result in direct impacts on water quality in East Fork Nelson Creek. The proposed work includes water-adjacent construction and, in the event water is present at the time of construction, it may include dewatering and other in-water work. Specific Project activities that may impact water quality include, but are not limited to: (1) erosion control; (2) dewatering the work area; and (3) concrete used to backfill the eroded area. Water quality parameters that may be impacted by such activities include turbidity and pH. The monitoring requirements of Condition 2 are consistent with the Water Boards' authority to investigate waters of the state, including for quality, and to require necessary monitoring and reporting pursuant to Water Code sections 13267 and 13383. The monitoring requirements of Condition 2 are necessary to ensure water quality is not impacted.

Existing and potential beneficial uses in East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) that may be impacted by the Project's impacts on water quality include: water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; wildlife habitat; and warm water habitat (potential beneficial use).

5.3 Rationale for Condition 3: Erosion and Sediment Control

Condition 3 requires implementation of erosion and sediment control measures to help ensure water quality standards are met during Project construction. Erosion and sedimentation can contribute to degradation of the waters of the United States and waters of the state; therefore, it is necessary to implement actions to eliminate or limit such discharges to protect water quality and associated beneficial uses. Project activities, including stockpiling, installation of rebar, and other ground disturbing

activities, have the potential to cause erosion of riparian habitat and increased sedimentation in East Fork Nelson Creek.

Existing and potential beneficial uses of East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) that may be impacted by increased erosion and sedimentation include, but are not limited to: water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; wildlife habitat; and warm water habitat (potential beneficial use).

5.4 Rationale for Condition 4: Hazardous Materials Management

Hazardous materials management is essential to ensure hazardous materials are properly stored, transported, and managed in the Project area to avoid the discharge of hazardous materials to surface waters. Such discharges could result in impacts to beneficial uses, including impacts to aquatic resources and their habitats. Condition 4 requires SPI to implement measures to address hazardous materials management for the protection of water quality and beneficial uses.

The Project involves construction that involves concrete work and may include heavy equipment that requires refueling and servicing. Site 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. 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. Condition 4 is required pursuant to Water Code section 13264, which prohibits any discharge that is not specifically authorized in this certification.

The Central Valley Basin Plan includes narrative water quality objectives for oil, grease, and other hazardous materials: *“Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, 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 2019).

Existing and potential beneficial uses in East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) that may be impacted by hazardous materials include: water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; wildlife habitat; and warm water habitat (potential beneficial use).

5.5 Rationale for Condition 5: Diversion and Dewatering

The Project includes the potential dewatering of East Fork Nelson Creek if flow is present at the time of construction. Dewatering involves re-routing flow from the spillway gate to downstream of the work area and allowing the work area to passively

drain. If ponded water is present in the eroded scour beneath the toe of the diversion structure, a pumped diversion will be required to dewater the work area before construction can occur. Dewatering activities have the potential to affect water quality parameters and beneficial uses by causing an alteration in turbidity in East Fork Nelson Creek. If a cofferdam or other artificial barriers are needed, Condition 5 requires SPI to implement diversion and dewatering measures to ensure the protection of East Fork Nelson Creek water quality and associated beneficial uses during Project activities.

If sediment is encountered when the ponded water beneath the scour is being pumped, turbid water, which has the potential to impact water quality, will be pumped to an upland location. Compliance with the requirements outlined in General WDRs or Low Threat Waiver, as necessary, ensures that all discharges associated with the Project pose minimal risk to water quality and meet the necessary regulatory standards.

Existing and potential beneficial uses in East Fork Nelson Creek (Pit River – Mouth of Hat Creek to Shasta Lake) that may be impacted by dewatering, diversion, and related activities include, but are not limited to: water contact recreation; non-contact water recreation; cold freshwater habitat; cold spawning, reproduction, and/or early development; warm spawning, reproduction, and/or early development; wildlife habitat; and warm water habitat (potential beneficial use).

5.6 Rationale for Condition 6: Aquatic Biological Resource Protections

Condition 6 requires SPI to implement aquatic wildlife measures (e.g., worker environmental awareness training, pre-construction surveys, and fish rescue) as described in the Alternative Analysis referenced in Section Eight of its certification application and described in its Biological Assessment. Preconstruction surveys for special status species will also be conducted if dewatering activities are needed or construction activities will occur during nesting bird season (February 1 to August 31). Condition 6 also requires SPI to compensate for permanent impacts to riparian and stream channel habitat in compliance with the Dredge or Fill Procedures described in Section 3.4 of this certification.

Project dewatering and construction activities have the potential to adversely impact habitat and interfere with native aquatic species that depend on aquatic food or live in riparian or wetland habitats in the Project area.

During Project construction there is a potential for impacts to aquatic species. Implementation of aquatic resource protection measures required by Condition 6 will avoid unreasonable impacts to water quality and beneficial uses related to fish and habitat and will support a dam owner's requirement under Fish and Game Code section 5937 to maintain fish in good condition below a dam.

5.7 Rationale for Condition 7: Notice of Project Start and Project Completion Report

Condition 7 requires SPI to notify Central Valley Regional Water Board and State Water Board staff prior to implementing Project activities and to submit a Completion Report

following construction completion to document Project compliance with the certification requirements. The Completion Report will inform the Deputy Director of compliance with water quality objectives and protection of beneficial uses during Project implementation. This condition will allow for implementation, if necessary, of measures to limit or prevent any violations and/or impacts to water quality and beneficial uses.

5.8 Rationale for Conditions 8 through 26

This certification imposes additional conditions regarding Project approvals, monitoring, enforcement, and potential future revisions. This section explains why a condition is necessary to assure that the authorized activities will comply with water quality requirements, and cites to federal, state, or tribal law that authorizes the condition. (40 C.F.R. § 121.7(d)(1).) The statements in this section correspond with the conditions set forth in Conditions 8 through 26. In addition, the code citations, plans, and policies that support issuance of this certification are described in Sections 3.0 and are not duplicated in this section but are incorporated herein. Conditions 8 through 26 are necessary to protect the beneficial uses of waters of the state identified in water quality control plans, prevent degradation of water quality, and help ensure compliance with state and federal water quality requirements.

Condition 8 is necessary to comply with Water Code section 13167 and Conditions 9 through 12 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 an 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 8 requires electronic data submittal in a compatible format with existing system specifications. Compliance with this condition enhances the accessibility of data and transparency of regulatory actions. This allows regulatory agencies and the public to better assess compliance and understand water quality trends or data anomalies by compiling data and making it readily available.

Pursuant to the California Endangered Species Act (ESA) (Fish & G. Code, §§ 2050 et seq.) and federal ESA (16 U.S.C. §§ 1531 et seq.), Condition 9 of the certification does not authorize any act which results in the taking of a threatened, endangered, or candidate species.

An applicant for certification is required to identify other licenses, permits, and agreements in the application. In the event an applicant for certification needs authorization from the state or federal authorities, California Code of Regulations, title 23, section 3856, subdivision (e), requires that the applicant provide copies of “any final and signed federal, state, and local licenses, permits, and agreements (or copies of the draft documents, if not finalized) that will be required for any construction, operation, maintenance, or other actions associated with the activity. If no final or draft document

is available, a list of all remaining agency regulatory approvals being sought shall be included.” Water Code section 13160, subdivision (b)(1) allows the State Water Board to issue a certification when there is “reasonable assurance that an activity of any person subject to the jurisdiction of the state board will comply with applicable requirements” of state and federal law. To help ensure the integrity of the certification process and its focus on the protection of water quality and compliance with other applicable state requirements, Condition 10 serves to notify applicants that there may be additional applicable federal, state, or local laws or ordinances with which they must comply.

Because agency organization and authorities change over time, Condition 11 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 12 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 13 through 15 are necessary to assure that any activity 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. Condition 13 is a standard condition that “shall be included as conditions of all certification actions” pursuant to California Code of Regulations, title 23, section 3860, subdivision (a). This condition places the permittee on notice that the certification action may be modified or revoked following administrative or judicial review. Condition 14 is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(b). This condition clarifies the scope of the certification’s application and ensures that any applicant for a federal license or permit, which may result in a discharge into navigable waters, is subject to the appropriate State certification. Condition 15 is a standard condition that “shall be included as conditions of all water quality certification actions” pursuant to California Code of Regulations, title 23, section 3860(c). This fee requirement condition is also required pursuant to California Code of Regulations, title 23, section 3833(b), which requires payment of fees by those 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 16 through 26 are necessary to ensure that the Project operates to meet water quality standards and other appropriate requirements of state law, or that adjustments are made to ensure continued compliance with water quality standards in light of new information, changes to the Project, or changes to the standards themselves.

This certification requires monitoring, reporting, and analysis as important elements to ensure that the Project activities will comply with state and federal water quality requirements and other appropriate requirements of state law. Conditions 16, 17, and 18 provide for extensions of time to comply with requirements, prevention or remedy of violations, and notification of changed conditions to ensure compliance and prevent violations of water quality standards. In the event of non-compliance, modified conditions may be necessary to return the Project to compliance and prevent violation of water quality standards. Conditions 19 and 20 require the Applicant to comply with the Central Valley Basin Plan and to take all reasonable measures to protect water quality and beneficial uses, in accordance with plans adopted pursuant to state and federal water laws. Water Code section 13267 authorizes the State Water Board to require any person or entity who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste to furnish, under penalty of perjury, technical or monitoring reports when necessary to investigate the quality of any waters of the state. Condition 21 requires such reports that are necessary to ensure compliance with water quality standards.

Condition 22, related to site access requirements, is authorized pursuant to the Water Boards' authority to investigate the quality of any waters of the state, including specific site access authorized under Water Code section 13267 and 13383. Site access is needed to ensure compliance with the certification and associated protection of water quality and beneficial uses. Condition 23 requires site personnel and agencies to be familiar with the content of the certification and availability of the document at the Project site. This condition is required to assure that site personnel are familiar with the conditions needed to protect water quality and any authorized activity 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 24 requires that SPI use analytical methods approved by California's Environmental Laboratory Accreditation Program, when available, to ensure that such analyses are done in a consistent, approved manner.

Condition 25 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.

In the event that any provision of this certification is found invalid, Condition 26 ensures that all other provisions 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 by this certification, the Project will be protective of state and federal water quality standards and other appropriate requirements of state law.

7.0 Water Quality Certification Conditions

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

CONDITION 1 Project Activities

Unless otherwise modified by conditions of this water quality certification (certification) or approved by the Deputy Director of the Division of Water Rights (Deputy Director), Sierra Pacific Industries (SPI or Applicant) shall implement the Project: (1) as described in SPI's June 29, 2023 certification application, including the Alternative Measures referenced in Section Eight of the certification application (SPI 2023a); (2) as described in clarifying information submitted by SPI in email on September 21, 2023 (SPI 2023b); and (3) as modified by the conditions of this certification.

Additionally, as described in the dewatering section of its certification application, the Applicant shall comply with all minimum instream flow requirements below East Fork Nelson Creek diversion structure, as stated in the Federal Energy Regulatory Commission (FERC) license for the Grasshopper Flat Project (FERC Project No. 9029), throughout Project implementation.

CONDITION 2 Water Quality Monitoring

If water is flowing in East Fork Nelson Creek at the time Project activities are implemented, water quality monitoring shall occur during in-water work and water adjacent work with the potential to result in a discharge to surface waters. At a minimum, water quality monitoring shall be performed during dewatering of the work area; discharge of any seepage water; rewatering; removal of accumulated material in East Fork Nelson Creek; installation of rebar at the toe of the diversion dam; installation of gabions; installation and removal of cofferdams, if needed; and concrete work (e.g., the use of concrete to backfill the void behind the gabions). If water is present during in-water construction work, the Applicant shall, at a minimum, monitor for turbidity and pH. Monitoring for turbidity and pH shall be conducted during construction activities at least every four hours when water is present. Additionally, the Applicant shall continuously monitor for visual construction-related pollutants (e.g., oils, greases, fuels) throughout Project activities.

Water Quality Objectives: The Applicant is responsible for complying with the applicable water quality objectives established in the Central Valley Regional Water Quality Control Board's (Central Valley Regional Water Board) *Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin* (Central Valley Basin Plan) (Central Valley Regional Water Board 2019). The current water quality objectives for turbidity and pH, as listed in the Central Valley Basin Plan are summarized below for reference.

Turbidity: The Applicant shall not increase turbidity to levels that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributed to controllable water quality factors shall not exceed the following limits:

- Where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), controllable factors shall not cause downstream turbidity to exceed 2 NTU.
- Where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU.
- Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
- Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
- Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

Turbidity shall be measured using a maximum 24-hour averaging period.

pH: pH shall not be depressed below 6.5 nor raised above 8.5. If the natural pH level is below 6.5 or above 8.5, the Applicant shall provide the Deputy Director with information establishing and supporting the natural pH level at least one week in advance of commencing any Project construction activities beyond monitoring. The Deputy Director may require the use of the pH range 6.5 to 8.5 if the Deputy Director determines the supporting information is insufficient for use of a natural pH level outside of the 6.5 to 8.5 range. Additionally, if the natural pH level is below 6.5, the Applicant shall not depress the pH below the natural level. If the pH level is above 8.5, the Applicant shall not raise pH above the natural level.

Monitoring Locations: If water is present at the time of construction, monitoring shall be conducted upstream outside the influence of the Project and no greater than 300 feet downstream of the Project area. The Applicant shall take a global positioning system measurement and a photograph for each proposed monitoring location and provide them to the Central Valley Regional Water Board and State Water Resources Control Board (State Water Board) staff at least one week prior to starting in-water work. The Deputy Director may require the Applicant to use other locations if the submitted locations are inadequate.

Reporting: The Applicant shall submit monitoring results as part of the Project Completion Report (Condition 7). Monitoring results shall include: (1) monitoring data; (2) a description of the equipment, frequency, methods, and quality assurance/quality control process implemented for water quality monitoring; and (3) any water quality objective exceedances or other information necessary to interpret the results.

Reporting of Exceedances of Water Quality Objectives: In the event of an exceedance of turbidity or pH water quality objectives as listed in the Central Valley Basin Plan, and any amendments thereto, the Applicant shall immediately cease any activities that may have resulted in the exceedance and implement corrective measures. The Applicant shall notify the Deputy Director and the Executive Officer of

the Central Valley Regional Water Board (Executive Officer) promptly, and in no case more than 24 hours following an exceedance of any water quality objective. The notice shall include the cause of the exceedance, measures taken to correct the exceedance, and measures the Applicant will implement to prevent a future exceedance. The Deputy Director may require additional actions to help prevent similar exceedance in the future. The Applicant may resume work upon approval from the Deputy Director.

Modifications to Water Quality Monitoring Requirements: The Applicant may request modifications to the water quality monitoring provisions described in this condition. The Applicant shall submit the request to the Deputy Director for review and consideration of approval at least two weeks prior to: (1) starting water-adjacent work; or (2) the desired start date of modified water quality monitoring. The request shall include the proposed modifications and supporting rationale. The Deputy Director may require modifications as part of any approval. The Applicant shall not implement the modifications until approved by the Deputy Director.

CONDITION 3 Erosion and Sediment Control

Unless otherwise approved by the Deputy Director, prior to the commencement of, during, and after any ground-disturbing activities or any other Project activities that could result in erosion or sediment discharges to surface water, the Applicant shall implement the erosion and sediment control best management practices (BMPs) as stated in SPI's June 29, 2023 certification application, Attachment D: Army Corps Pre-Construction Notification (SPI 2023a), as modified or augmented below:

- Storage or parking of equipment shall be prohibited within 100-feet of riparian and wetland habitat. Stockpiles, portable equipment, vehicles, and supplies shall be restricted to the designated construction staging areas that shall be located outside of wetlands, surface waters, and riparian habitat. If more than 0.25 inch of rain or snow is forecast during Project activities, all stockpiles shall be covered with plastic and surrounded with sediment control technologies or berms to prevent sediment run-off.
- If turbid water is pumped to an upland location, it shall not be pumped to a location with the potential to run off into surface waters.
- Imported materials shall be washed prior to use. If materials are washed on-site, washing shall occur, and wash water shall be stored away from any waterway and either disposed of off-site in a manner that does not affect water quality or used for dust abatement.
- After construction activities are complete, any temporary fill or construction debris shall be removed, and disturbed areas restored to their preconstruction conditions. Site restoration shall include use of native plantings.
- The Applicant shall inspect the Project site for signs of excessive erosion or other water quality impairment throughout the Project and following Project completion.

CONDITION 4 Hazardous Materials Management

Unless otherwise approved by the Deputy Director, the Applicant shall implement hazardous materials⁶ BMPs described in SPI's June 29, 2023 certification application, Attachment D: Army Corps Pre-Construction Notification (SPI 2023a), and applicable measures in the United States Department of Agriculture-Forest Service *Water Quality Management for Forest System Lands in California, Best Management Practices* (Forest Service 2000), Forest Service *National Best Management Practices for Water Quality Management on National Forest System Lands* (Forest Service 2012), and as listed below:

- Caution shall be used when handling and/or storing hazardous materials near waterways. Appropriate materials shall be on site to prevent and manage spills to prevent impacts to surface waters. When not in use, hazardous materials shall be stored in a manner that prevents hazardous materials from spilling on the ground or reaching surface waters. Containment 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 most likely volume of hazardous materials that could be spilled. Secondary containment must be positioned to catch any hazardous material spills due to overflowing or any other spills that may occur.
- Construction equipment refueling and/or maintenance shall be conducted in a manner that prevents fuels or oils from spilling on the ground or reaching waterways. Service and refueling areas shall include secondary containment including drip pans and/or placement of absorbent material. In the event a spill is not captured by the secondary containment, it shall be considered hazardous waste and must be removed and disposed of in accordance with local and state requirements.
- When not in use, equipment shall be stored in upland areas outside the ordinary high-water mark of East Fork Nelson Creek in the staging area as described in Alternative Analysis of the Project certification application (SPI 2023).
- Stationary equipment (e.g., excavators) within 100 feet of waterways shall be parked over secondary containment.
- Any water contaminated by hazardous materials shall be stored according to items listed above in this condition and disposed of properly off-site in a manner that does not impair water quality.
- Wet concrete or cement shall not be placed when water is present. Concrete or cement shall be completely cured before coming into contact with waters of the United States or waters of the state. Any surface water that contacts wet

⁶ Hazardous materials include, but are not limited to: petroleum products, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to water quality and beneficial uses.

concrete or cement shall be pumped out and disposed of in accordance with applicable laws and regulations.

- Prior to Project construction, all staff and personnel of contractors and subcontractors shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including hazardous materials spill prevention and response measures. The training shall include identification and reporting to the appropriate onsite person of any visual observations that may indicate a water quality impairment (e.g., oil sheen, etc.).
- All construction and maintenance waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials (including equipment lubricants, solvents, and cleaners), shall be removed to an appropriate waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.
- The Applicant shall immediately cease any activities that result in the release of a hazardous material and implement measures to limit and clean up the release of hazardous materials. The Applicant shall report the release and actions taken to the Deputy Director, Executive Officer, and any other applicable agencies within 24 hours of the event. The Deputy Director may require implementation of additional actions in response to the information provided following a release of hazardous materials or other information indicating a threat to water quality or beneficial uses.

CONDITION 5 Diversion and Dewatering

The dewatering of East Fork Nelson Creek is planned if water is present at the time of construction or for water ponded in the eroded scour beneath the toe of the diversion structure. In the event that pumps and/or a cofferdam or other artificial barrier are needed to dewater East Fork Nelson Creek or the scour hole or to maintain a dry work area following initial dewatering, the Applicant shall implement the Diversion/Dewatering Plan (Dewatering Plan) as described in SPI's June 29, 2023 certification application (SPI 2023a) as clarified in SPI's September 21, 2023 email (SPI 2023b), and as modified or augmented below.

- All pumps shall be appropriately screened to prevent entrainment of aquatic species.
- As soon as it is determined that installation of a cofferdam/other artificial barrier is needed to maintain a dry work area, the Applicant shall notify the Deputy Director. The notification shall indicate what measures will be implemented to ensure the protection of water quality and beneficial uses. The notification shall also include the location of the cofferdam/other artificial barrier and schedule for installation and removal. The Deputy Director may require modifications.
- Any temporary pumps, cofferdam/other artificial barrier being constructed, maintained, placed in operation, or removed shall not impede flow in East Fork Nelson Creek below the Project area. If flow is present at the time of construction, the Applicant shall at all times ensure sufficient water is allowed to pass downstream of the Project area to maintain beneficial uses and water

quality protections, including required minimum instream flows (Condition 1). Construction, dewatering, and removal of pumps or temporary cofferdam/other artificial barrier shall not violate water quality standards in the Central Valley Basin Plan or other certification provisions.

- Any cofferdam/other artificial barrier shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel.
- No more than 14 days following completion of construction, the Applicant shall remove the cofferdam/other artificial barrier.
- This certification does not authorize permanent water diversion of flow from the receiving water or any other permanent dewatering measure.

If necessary, for the discharge of ponded water to land, the Applicant shall work with the Central Valley Regional Water Board to obtain coverage under Water Quality [Order No. 2003-0003-DWQ](#), *Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality* (General WDRs) or comply with Central Valley Regional Water Board [Resolution R5-2023-0061](#): *Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region (Low Threat Waiver)*.

Any revisions or modifications to the Dewatering Plan, including the above measures, must be approved by the Deputy Director prior to implementation. The Deputy Director may require modifications as part of any approval of revisions or modifications to the Dewatering Plan.

CONDITION 6 Aquatic Biological Resource Protections

To reduce potential impacts to aquatic biological resources during Project implementation, and unless otherwise approved by the Deputy Director, the Applicant shall implement the aquatic wildlife measures described in the Alternative Analysis referenced in Section Eight of its certification application, as described in its Biological Assessment, and as modified and augmented below:

- Lake and Streambed Alteration Agreement. If a California Department of Fish and Wildlife Lake and Streambed Alteration Agreement is issued for this Project and includes provisions for fish rescue and relocation, the more stringent requirement of this certification or the agreement shall apply.
- Environmental Awareness Training: Environmental awareness training shall be provided to all personnel prior to commencing work. The training shall, at a minimum, include:
 - A review of special-status species (including pictures) with the potential to occur in the Project area.
 - A review of special-status habitat including primary constituent elements (e.g., type of water body and elevation) of each habitat.

- A review of any avoidance and protection measures that will be implemented to minimize the potential for effects to these species and habitats.
- A review of applicable elements of the Project certification to ensure personnel implement measures to protect water quality and beneficial uses.
- **Wetland Protections:** The Project will result in temporary impacts to stream channel habitat. The Project is anticipated to have temporary impacts to approximately 0.018 acres of the stream channel along East Fork Nelson Creek. The Applicant shall notify the Deputy Director of any update to the estimated temporary and permanent impacts if they vary from what is noted in this provision. The Applicant shall provide the Deputy Director with documentation of compliance with the provisions of the [*State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*](#) (Dredge or Fill Procedures)⁷ (State Water Board 2019 and 2021) as part of the Completion Report (Condition 7).

The Applicant shall direct its staff and all contractors to: (a) avoid disturbance of sensitive species and areas; and (b) to stop work and contact the qualified biologist upon discovery of a special-status species in the Project area.

CONDITION 7 Notice of Project Start and Project Completion Report

At least seven days prior to starting Project activities, the Applicant shall notify the Central Valley Regional Water Board and State Water Board staff that Project activities are anticipated to begin and provide a brief description of the anticipated schedule for completion of the Project.

Within 60 days of Project completion, the Applicant shall provide the Deputy Director with a Project Completion Report that comprehensively summarizes:

- Project activities performed;
- Compliance with each condition of this certification and details of any failure to meet the certification requirements;
- Details of any incident of unset cement, concrete, grout, damaged concrete, concrete spoils, or wash water used to clean concrete surfaces entering surface waters, including information on the location and clean up actions taken;
- Final inspection information with details to ensure the Project area cleanup was satisfactorily completed; and
- Details of Project-related adverse impacts to beneficial uses, if applicable.

⁷ The Dredge or Fill Procedures and any amendments thereto. Available at: https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html. Accessed on March 25, 2024.

The Deputy Director may require the Applicant to implement corrective actions in response to the information provided in the Project Completion Report or other information in the record. The Applicant shall provide any additional information or clarification requested by the Deputy Director related to the Project Completion Report or other information in the record. Upon request from State Water Board staff, the Applicant shall meet with staff to discuss the Project Completion Report.

CONDITIONS 8 – 26

CONDITION 8. Unless otherwise specified in this certification or at the request of the Deputy Director, data and/or reports shall be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with California Water Code section 13167.

CONDITION 9. This certification does not authorize any act which results in the take 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 Applicant, the Applicant must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Applicant is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this certification.

CONDITION 10. This certification shall not be construed as replacement or substitution for any necessary federal, state, and local approvals. The Applicant is responsible for compliance with all applicable federal, state, or local laws or ordinances and shall obtain authorization from applicable regulatory agencies prior to the commencement of Project activities.

CONDITION 11. 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, will apply equally to the successor agency.

CONDITION 12. Nothing in this certification shall be construed as State Water Board approval of the validity of any water rights, including pre-1914 or riparian claims. The State Water Board has separate authority under the Water Code to investigate and take enforcement action, if necessary, to prevent any unauthorized or threatened unauthorized diversions of water.

CONDITION 13. 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 14. 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 15. This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.

CONDITION 16. Notwithstanding any more specific provision of this certification, any plan or report developed as a condition of this certification requires review and approval by the Deputy Director. The State Water Board's approval authority, including authority delegated to the Deputy Director or others, includes the authority to withhold approval or to require modification of a plan, proposal, or report prior to approval. The State Water Board may take enforcement action if the Applicant fails to provide or implement a required item in a timely manner. If a time extension is needed to submit an item for Deputy Director approval, the Applicant shall submit a written request for the extension, with justification, to the Deputy Director no later than 15 days prior to the deadline. The Applicant shall not implement any plan, proposal, or report until after the applicable State Water Board approval and any other necessary regulatory approvals.

CONDITION 17. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to 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 Applicant shall, by a deadline required by the Deputy Director, submit a plan that documents why the violation occurred and steps the Applicant will implement to address the violation. The Applicant shall implement the plan upon approval from the Deputy Director, and the Deputy Director may require modifications as part of any approval.

CONDITION 18. The Applicant shall submit any change to the Project, including, operations, facilities, technology changes or upgrades, or methodology, which could have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for prior review and written approval. The State Water Board shall determine significance and may require consultation with other state and/or federal agencies. If the State Water Board is not notified of a change to the Project, it will be considered a violation of this certification.

CONDITION 19. This certification is contingent on compliance with all applicable requirements of the Central Valley Basin Plan.

CONDITION 20. Unless otherwise specified by conditions in this certification, Project activities shall be conducted in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act. The Applicant shall take all

reasonable measures to protect the beneficial uses of waters of the state, including East Fork Nelson Creek.

CONDITION 21. 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, & 13383.)

CONDITION 22. Upon request, a construction schedule shall be provided to State Water Board and Central Valley Regional Water Board staff. The Applicant shall provide State Water Board and Central Valley Regional Water Board staff access to Project sites to document compliance with this certification.

CONDITION 23. A copy of this certification shall be provided to any contractor and all subcontractors conducting Project-related work, and copies shall remain in their possession at the Project site. The Applicant shall be responsible for work conducted by its contractor, subcontractors, or other persons conducting Project-related work.

CONDITION 24. The Applicant 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 25. The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add to or modify the conditions of this certification.

CONDITION 26. Certification that the Project will be protective of 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. 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 invalidity.



Eric Oppenheimer
Executive Director

June 26, 2024
Date

8.0 References

- Central Valley Regional Water Quality Control Board (Central Valley Regional Board). 2019. *Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region the Sacramento River Basin and San Joaquin River Basin (Central Valley Basin Plan)*. Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201902.pdf. Accessed on June 25, 2024.
- Central Valley Regional Board. 2023. Waiver of Waste Discharge Requirements (WDRs), Reports of Waste Discharge (RWDs), and/or Water Recycling Requirements (WRRs) for Specific Types of Discharge Within the Central Valley Region (Low Threat Waiver). Resolution No R5-2023-0061. Available at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2023-0061.pdf. Accessed on June 25, 2024.
- Federal Energy Regulatory Commission. 2024. [List of Comprehensive Plans](https://cms.ferc.gov/media/comprehensive-plans). Available at: <https://cms.ferc.gov/media/comprehensive-plans>. Accessed on June 24, 2024.
- Sierra Pacific Industries (SPI) 2023a. Application for Water Quality Certification for the Nelson Creek Hydropower Repair Project. June 29, 2023.
- SPI. 2023b. Application Supplemental Information email. Submitted September 21, 2023.
- State Water Resources Control Board (State Water Board). 1968. *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Resolution No. 68-16. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf. Accessed on June 25, 2024.
- State Water Board. 2003. *Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality (General WDRs)*. Water Quality Order No. 2003-0003-DWQ. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf. Accessed on June 24, 2024.
- State Water Board. 2012. *Delegation of Authority to State Water Resources Control Board Members Individually and to the Deputy Director for Water Rights*. Resolution No. 2012-0029. Available at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0029.pdf. Accessed on June 25, 2024.
- State Water Board. 2018. *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan)*. Available at: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf. Accessed on June 25, 2024.

- State Water Board. 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Resolution No. 2019-0015 and any amendments thereto. Available at:
https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html. Accessed on June 25, 2024.
- 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 No. 2021-0012. Available at:
https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2021/rs2021-0012.pdf. Accessed on June 25, 2024.
- State Water Board. 2022a. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit). Water Quality Order No. 2022-0057-DWQ and NPDES No. CAS000002 and any amendments thereto. Available at:
https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html. Accessed on June 25, 2024.
- State Water Board. 2022b. 2020-2022 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/2020_2022_integrated_report.html. Accessed on June 25, 2024.
- State Water Board. 2023a. *Redelegation of Authorities Memorandum*. April 20, 2023.
- State Water Board. 2023b. San Francisco Bay/Sacramento – San Joaquin Delta Estuary (Bay-Delta) Program - Update of the Bay-Delta Plan: Delta Outflows, Sacramento River and Delta Tributary Inflows, Cold Water Habitat and Interior Delta Flows Webpage. Available at:
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/comp_review.html. Accessed on June 25, 2024.
- United States Environmental Protection Agency (USEPA). 2023. *Final 2023 CWA Section 401 Water Quality Certification Improvement Rule*. Available at:
<https://www.epa.gov/cwa-401/final-2023-cwa-section-401-water-quality-certification-improvement-rule>. Accessed on June 25, 2024.
- United States Forest Service. 2012. National Best Management Practices for Water Quality Management on National Forest System Lands. Volume 1: National Core BMP Technical Guide (FS-990a). April 2012. Available at:
https://www.fs.usda.gov/sites/default/files/FS_National_Core_BMPs_April2012_sb.pdf. Accessed on June 25, 2024.

**ATTACHMENT A:
PROJECT OVERVIEW FIGURES**

**WATER QUALITY CERTIFICATION
FOR
NELSON CREEK HYDROPOWER REPAIR PROJECT**

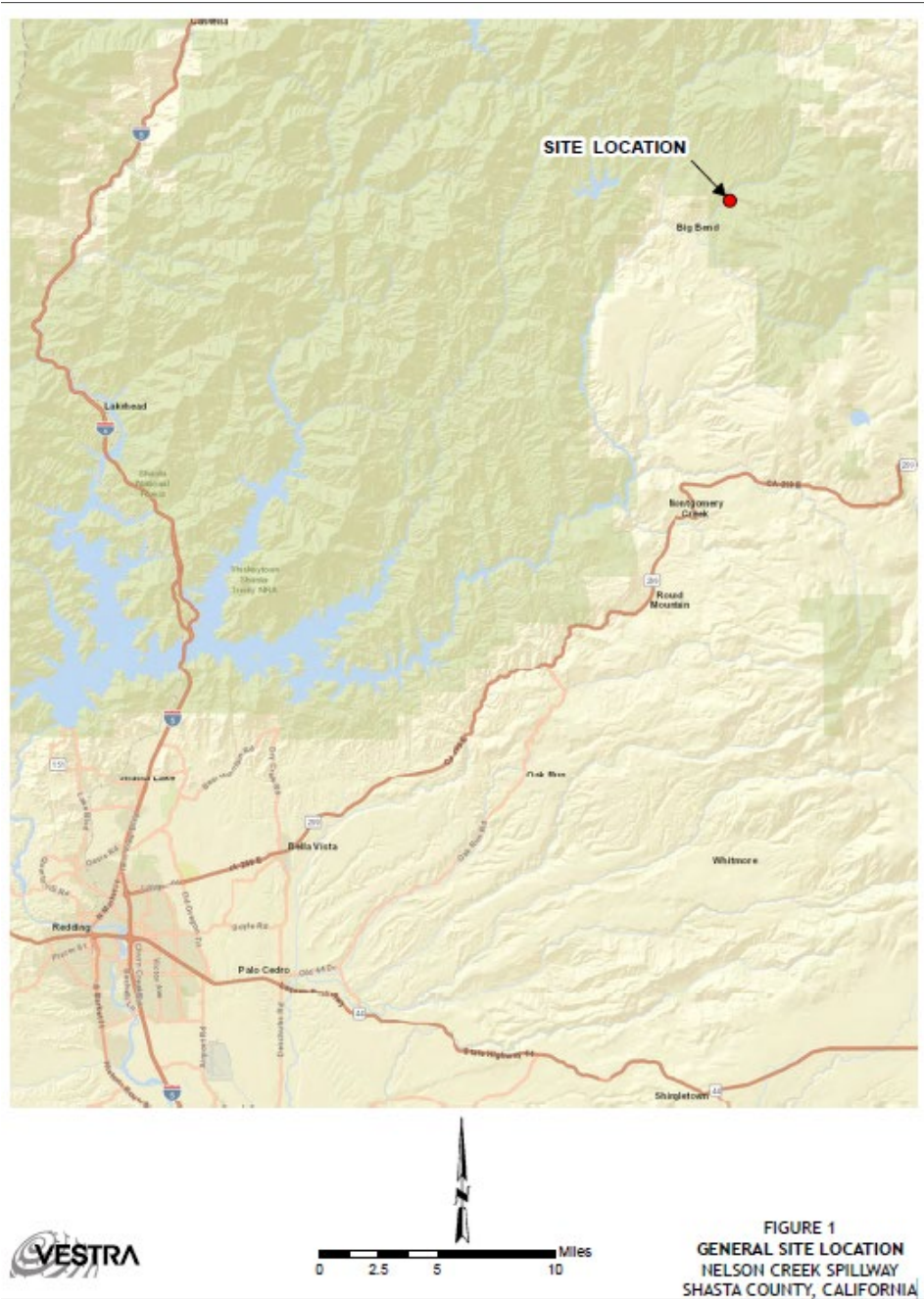


Figure 1. Nelson Creek Hydropower Repair Project Area Map



Figure 2. Nelson Creek Upland Location for Infiltration

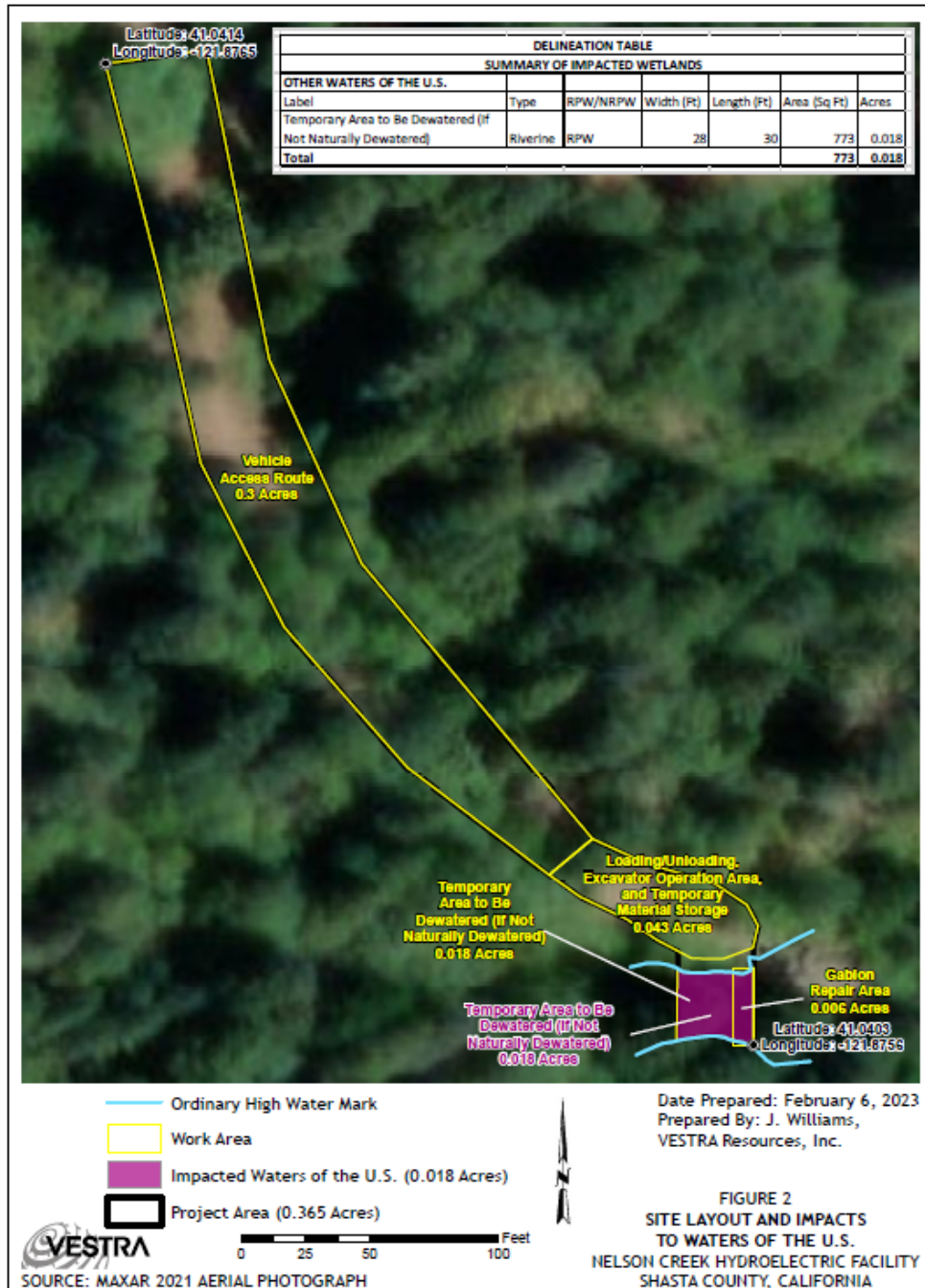


Figure 3 Nelson Creek Hydropower Repair Project Site Overview