

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

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In the Matter of Water Quality Certification for the  
**PACIFIC GAS AND ELECTRIC COMPANY  
SAND BAR DAM WEIR AND CABLEWAY PROJECT**

SOURCE: Middle Fork of the Stanislaus River

COUNTY: Tuolumne County

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

BY THE EXECUTIVE DIRECTOR:

**I. Project Description**

Pacific Gas and Electric Company (PG&E or Applicant) filed a water quality certification application with the Division of Water Rights (Division) on July 11, 2012, for the Sand Bar Dam Weir and Cableway Project (Project). The Project is located approximately 25 miles northeast of Angels Camp in Tuolumne County on the Middle Fork of the Stanislaus River (MFSR). The Project involves modification of the existing Sand Bar Weir and construction of a cableway on the MFSR.

On April 24, 2009, the Federal Energy Regulatory Commission (FERC) issued a license to PG&E authorizing continued operation of the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130). The license included requirements for minimum instream flows in the MFSR downstream of Sand Bar Dam (Figure 1). Accurate flow measurements are necessary to monitor compliance with the license flow requirements.

The existing rectangular weir used to measure flow was constructed and began reporting river flows in 1969 at gaging Station S-12 (United States Geological Survey [USGS] Gage No. 11293200). The six-foot wide weir is capable of measuring up to 70 cubic feet per second (cfs). The weir is integrated into the river cross section via wing wall abutments keyed into the channel that funnel flows into the USGS gage. The current weir is undersized and inadequate to measure the full range of flows in the MFSR. Modifications to the weir and installation of a cableway will allow for accurate monitoring of flows in the MFSR (Figure 2).

**II. Construction Activities**

The Project involves the following design and construction elements outlined in the water quality certification application:

1) Site Preparation and Staging:

- Mobilize tools, equipment, and materials to the weir site with the potential assistance of helicopters. Equipment includes: three pickup trucks, one concrete boom pump, one maintenance/oil truck, one mini-excavator, one smooth drum roller compactor, and one 48-inch pad drum vibratory compactor.
- Clear vegetation.
- Install public safety features such as warning signs for construction activities.
- Use temporary erosion control measures and best management practices (BMPs) to prevent polluted water and chemicals from coming into contact with the waters of the Stanislaus River.

2) Gaging Weir Modifications:

- Install a river bypass consisting of a temporary cofferdam (gravel filled yard bags, bladder dam, earthen berm, or other), and possibly notching through the right (north) wing wall of the existing gaging weir.
- Dewater an approximate area of 40 feet (ft) by 50 ft.
- Remove the existing weir and a portion of the right wing wall to accommodate widening the weir structure. It is estimated that an 18 ft by 15 ft area excavated to a depth of 4 ft to 8 ft of excavation will be required to construct the new weir. An excavator with a hydrologic ram attachment will demolish the existing concrete and boulder material and an estimated ten cubic yards of rocks and boulders will be moved within the channel for placement of the new gaging weir.
- Place approximately 25 cubic yards of concrete in channel for the gaging weir and wing wall via helicopter, line pump, or boom pump.
- Install a stilling well, level transducer, conduit, and conductors connecting the cableway to the Stanislaus intake control building and the new remote transmission unit panel. Upload step-logic routines and algorithms for stream flow monitoring.
- Remove the temporary bypass and cofferdam.

3) Cableway Installation:

- Remove vegetation and approximately six to ten trees smaller than 10-inch in base diameter for cableway towers.
- Prepare the landing areas on opposing sides of the river channel to receive the cableway tower footings and backstay anchors.

- Place approximately 40 cubic yards of concrete outside of the defined river channel above the ordinary high water level for the cableway footing and backstay anchors. Construct trail access from existing trail to cableway tower (approximately 50 feet).
- Install anti-climb fencing around the left (south) tower.

4) Post-Project Activities:

- Restore disturbed areas to pre-Project conditions.
- Use existing riprap for restoration work in the streambed; no material will be imported.

**III. Regulatory Authority**

Water Quality Certification and Related Authorities

The Federal Clean Water Act (CWA) (33 U.S.C. §§ 1251-1387) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. § 1251(a).) Section 101 of the CWA (33 U.S.C. § 1251 (g)) requires federal agencies to “co-operate with the State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.”

Section 401 of the CWA (33 U.S.C. §1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with water quality certification that the project will be in compliance with specified provisions of the CWA, including water quality standards and implementation plans promulgated pursuant to section 303 of the CWA (33 U.S.C. § 1313). CWA section 401 directs the agency responsible for water quality certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the CWA and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project. The State Water Resources Control Board (State Water Board) is designated as the state water pollution control agency for all purposes stated in the CWA and any other federal act. (Wat. Code, § 13160.) The State Water Board’s Executive Director has been delegated the authority to issue a decision on a water quality certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

On July, 11, 2012, the State Water Board provided notice of receipt of a complete application for the Project to the applicable parties pursuant to California Code of Regulations, title 23, section 3858(c). The State Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the State Water Board’s website on August 2, 2012. No comments were received.

The United States Army Corps of Engineers (ACOE) has determined a Nationwide Permit 3 under section 404 of the CWA is required for the Project. The ACOE identification number for the Project is SPK-2007-02298.

Water Quality Control Plans and Related Authorities

The California Regional Water Quality Control Boards (Regional Water Boards) adopt, and the State Water Board approves, water quality control plans (basin plans) for each watershed basin in the State. The basin plans designate the beneficial uses of waters within each watershed basin, and water quality objectives designed to protect those uses pursuant to section 303 of the CWA. (33 U.S.C. § 1313.) The beneficial uses together with the water quality objectives that are contained in the basin plans and state and federal anti-degradation requirements constitute California's water quality standards.

The Central Valley Regional Water Quality Control Board (Central Valley Regional Board) adopted, and the State Water Board and the United States Environmental Protection Agency approved, the *Water Quality Control Plan for the Central Valley-Sacramento and San Joaquin River Region* (Basin Plan). The Basin Plan identifies existing beneficial uses for the Stanislaus River above New Melones Reservoir as: municipal and domestic supply; irrigation; stock watering; hydropower; warm freshwater habitat; cold freshwater habitat; wildlife habitat; contact recreation; non-contact recreation; canoeing and rafting.

The State Water Board reviewed and considered the plans and Project description provided by the Applicant. Further, the State Water Board considered the Basin Plan, the existing water quality conditions and Project-related controllable factors.

Construction General Permit

Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, may need to obtain coverage under the *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Quality Order 2009-0009-DWQ and NPDES No. CAS00002, as amended by Order No. 2010-0014-DWQ). Construction activity subject to the Construction General Permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

California Environmental Quality Act

The California Department of Fish and Wildlife (CDFW) is the lead agency for the purpose of California Environmental Quality Act (CEQA) (Cal. Pub. Resources Code, § 21000 et seq.) compliance. The State Water Board is a responsible agency under CEQA. CDFW issued a Notice of Exemption (NOE) for a Categorical Exemption under sections 15301 (Class 1) and 15303 (Class 3) of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq). CDFW filed the NOE with the State Clearinghouse on December 20, 2012. The State Water Board considered the NOE in connection with the issuance of this water quality certification and, based on its independent judgment,

agrees that the Project meets the Class 1 and 3 exemptions and no exceptions to the exemptions apply.

#### **IV. Discussion**

In order to ensure that the Project operates to meet water quality standards as anticipated, and to ensure that the Project will continue to meet state water quality standards and other appropriate requirements of state law over its lifetime, this water quality certification imposes conditions regarding monitoring, enforcement, and potential future revisions. Additionally, California Code of Regulations, title 23, section 3860 requires imposition of certain mandatory conditions for all water quality certifications, which are included in this certification.

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

State Water Board staff have reviewed and considered the environmental documents and any proposed changes incorporated into the Project are required as a condition of approval to avoid significant effects to the environment. The State Water Board will file a NOE within five days of issuance of this water quality certification.

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**ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE PACIFIC GAS AND ELECTRIC COMPANY SAND BAR DAM WEIR AND CABLEWAY PROJECT** will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if PG&E complies with the following terms and conditions during the Project activities certified herein.

**CONDITION 1** All BMPs described in the application for water quality certification and supplemental information are hereby incorporated by reference into the conditions of this water quality certification. Notwithstanding any more specific conditions in this water quality certification, the Applicant shall comply with all measures described in the water quality certification application and its supplements.

**CONDITION 2** Control measures for erosion, excessive sedimentation and turbidity shall be implemented and in place at the commencement of and throughout any ground clearing activities, excavation, or any other Project activities that could result in erosion or sediment discharges to surface waters. Erosion control blankets, liners with berms, and/or other erosion control measures shall be used for any stockpile of excavated material to control runoff resulting from precipitation, and prevent material from contacting or entering surface waters.

**CONDITION 3** Construction materials, debris, spoils, soil, silt, sand, bark, slash, sawdust, rubbish, steel, other organic or earthen material, and any other substances from any Project activities shall be prevented from entering surface waters. All construction debris and trash shall be contained and regularly removed from the work area to the staging area during construction activities. Upon completion, all Project-generated debris, building materials, excess material, waste, and trash shall be removed from all the Project sites for disposal at an authorized landfill or other disposal site in compliance with State and local laws, ordinances, and regulations.

**CONDITION 4** Project activities shall not cause an increase in turbidity downstream of the Project area greater than those identified in the Basin Plan except as provided for in this condition. Waters shall be free of changes in turbidity (due to Project activities) that cause nuisance or adversely affect beneficial uses. Except for in-water working periods discussed at the end of this condition, increases in turbidity shall not exceed background levels (natural turbidity measured in Nephelometric Turbidity Unit [NTUs] prior to the start of Project activities) by more than the thresholds identified below and as outlined in the Basin Plan:

<b>Background Level or Natural Turbidity</b>	<b>Downstream Turbidity (after starting construction)</b>
Less than 1 NTU	Total turbidity shall not exceed 2 NTU
Between 1 and 5 NTU	Increases shall not exceed 1 NTU
Between 5 and 50 NTU	Increases shall not exceed 20 percent
Between 50 and 100 NTU	Increases shall not exceed 10 NTUs
Greater than 100 NTU	Increases shall not exceed 10 percent

Monitoring shall occur every hour during Project construction in the MFSR. If monitoring shows that turbidity has exceeded the specified turbidity levels outlined in this condition, construction will cease and the violation will be reported immediately to the State Water

Board's Deputy Director for Water Rights (Deputy Director) and the Central Valley Regional Board's Executive Officer (Executive Officer). Construction may not re-commence without the permission of the Deputy Director.

Standard turbidity limits may be eased during in-water working periods to allow a turbidity increase of up to 15 NTU over the background turbidity as measured in surface waters 300 feet downstream from the working area. For in-water working periods, turbidity shall not exceed 15 NTU over background turbidity for more than four consecutive hours or 24 hours total for the Project.

**CONDITION 5** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be maintained onsite at all locations where such equipment is used or staged.

**CONDITION 6** Onsite containment for storage of chemicals classified as hazardous shall be kept away from watercourses and include secondary containment and appropriate management as specified in California Code of Regulations, title 27, section 20320.

**CONDITION 7** Copies of this water quality 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 8** The Deputy Director and the Executive Officer shall be notified one week prior to the commencement of ground disturbing activities. Upon request, a construction schedule shall be provided to agency staff in order for staff to be present onsite to answer any public inquiries during construction and to document compliance with this water quality certification. The Applicant must provide State Water Board and Central Valley Regional Board staff access to the Project site to document compliance with this water quality certification.

**CONDITION 9** The Applicant must take all responsible measures to protect the beneficial uses of waters of the Stanislaus River and its tributaries. This water quality certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project has or could soon be in violation of water quality objectives, the associated Project activities shall cease immediately and the Deputy Director and the Executive Officer shall be notified within three days. Associated activities may not resume without approval from the Deputy Director.

**CONDITION 10** Flow requirements as described in Condition 3 of the water quality certification for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) shall be maintained throughout the Project.

**CONDITION 11** No unset cement, concrete, grout, damaged concrete, concrete spoils, or wash water used to clean concrete surfaces shall contact or enter surface waters or be allowed to percolate into Project area soils. Any area containing wet concrete shall be completely bermed and isolated. The berm shall be constructed of sandbags or soil and shall be lined with plastic to prevent seepage. No leachate from truck or grout mixer cleaning stations shall percolate into Project area soils. Cleaning of concrete trucks or grout mixers shall be performed off-site or in such a manner that affected wash water and associated debris is captured, contained and disposed of in compliance with state and local laws, ordinances and regulations. Washout areas shall be of sufficient size to completely contain all liquid and waste concrete or grout generated during washout procedures. Hardened concrete or grout shall be disposed at an authorized landfill, in compliance with state and local laws, ordinances and regulations.

**CONDITION 12** All imported riprap, rocks, and gravel used for construction shall be pre-washed. Wash water generated on-site shall not contact or enter surface waters. Wash water shall be contained and disposed of in compliance with state and local laws, ordinances, and regulations.

**CONDITION 13** Unless otherwise specified in this water quality certification or at the request of the Deputy Director, data and/or reports must be submitted electronically in a format accepted by the State Water Board to facilitate the incorporation of this information into public reports and the State Water Board's water quality database systems in compliance with California Water Code section 13167.

**CONDITION 14** The State Water Board reserves the authority to modify the conditions of this water quality certification: (1) if monitoring results indicate that continued operation of the Project could violate water quality objectives or impair the beneficial uses of the MFSR or its tributaries; (2) to coordinate the operations of this Project and other hydrologically connected water development projects, where coordination of operations is reasonably necessary to achieve water quality standards or protect beneficial uses of water; or (3) to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the CWA.

**CONDITION 15** Notwithstanding any more specific conditions in this water quality 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 16** This water quality 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 & Game Code §§ 2050-2097) or the federal ESA (16 U.S.C. §§ 1531 - 1544). If a "take" will result from any act authorized under this water quality 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 water quality certification.



**CONDITION 17** In the event of any violation or threatened violation of the conditions of this water quality certification, the violation or threatened violation is subject to all remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the CWA, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this water quality certification.

**CONDITION 18** In response to a suspected violation of any condition of this water quality certification, the Deputy Director or the Executive Officer may require the holder of any federal permit or license subject to this water quality certification to furnish, under penalty of perjury, any technical or monitoring reports the Deputy Director deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. (Wat. Code §§ 1051, 13165, 13267 and 13383). The State Water Board may add to or modify the conditions of this water quality certification as appropriate to ensure compliance.

**CONDITION 19** No construction shall commence until all necessary federal, state, and local approvals have been obtained.

**CONDITION 20** Any requirement in this water quality certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

**CONDITION 21** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this water quality certification, to the Deputy Director for prior review and written approval. If the Deputy Director is not notified of a significant change to the Project, it will be considered a violation of this certification.

**CONDITION 22** Nothing in this water quality 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.

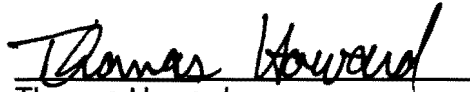
**CONDITION 23** The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to modify any of the conditions of this water quality certification.

**CONDITION 24** This water quality certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).

**CONDITION 25** This water quality 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 water quality certification application was filed pursuant to California Code of Regulations, title 23,

section 3855, subdivision (b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

**CONDITION 26** This water quality certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, chapter 28.

  
Thomas Howard  
Executive Director

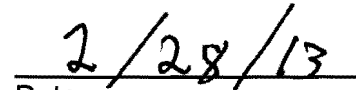
  
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Figure 1: Overview of Project Area in Relation to Spring Gap-Stanislaus Hydroelectric Project Features

Figure 2: Project Site

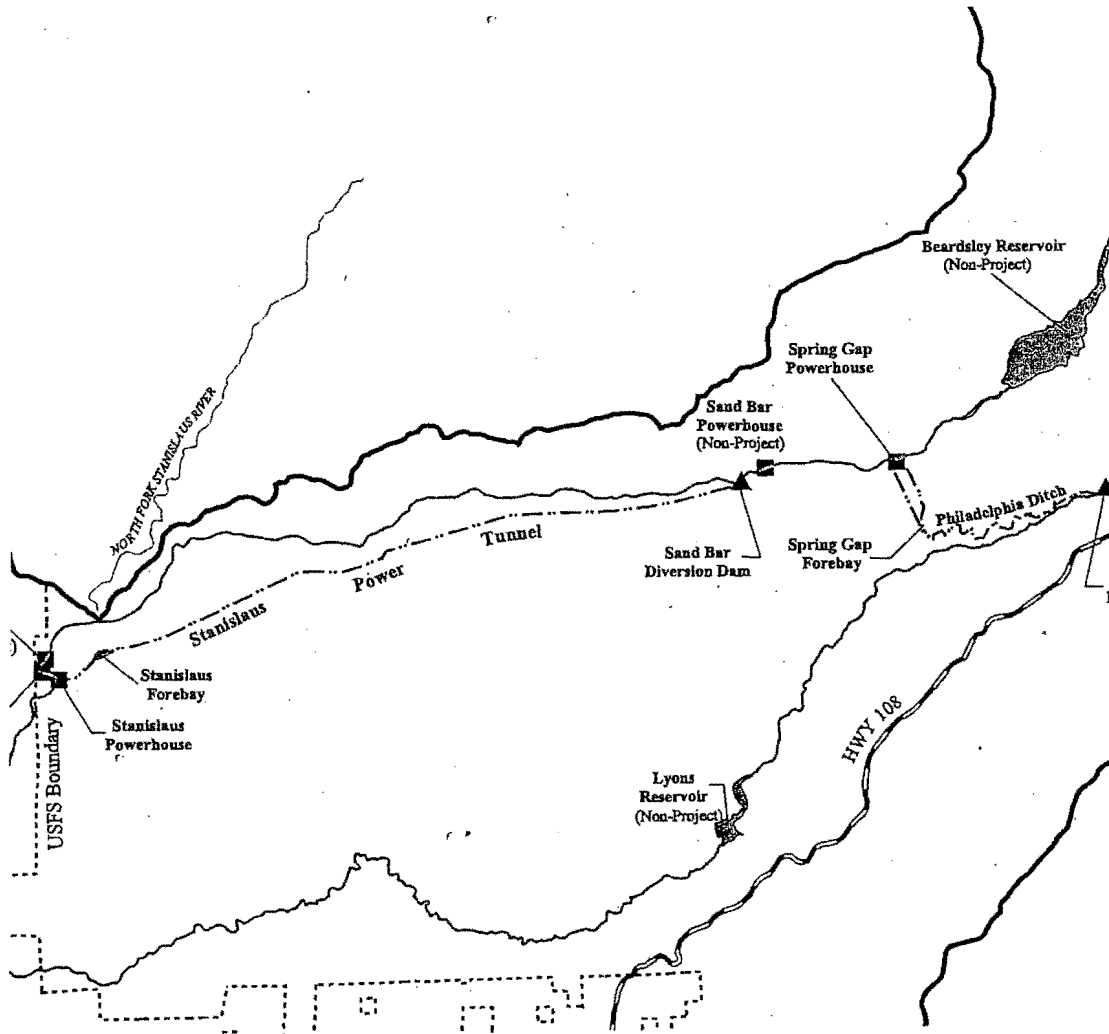


Figure 1: Overview of Project Area in Relation to Spring Gap-Stanislaus Hydroelectric Project Features

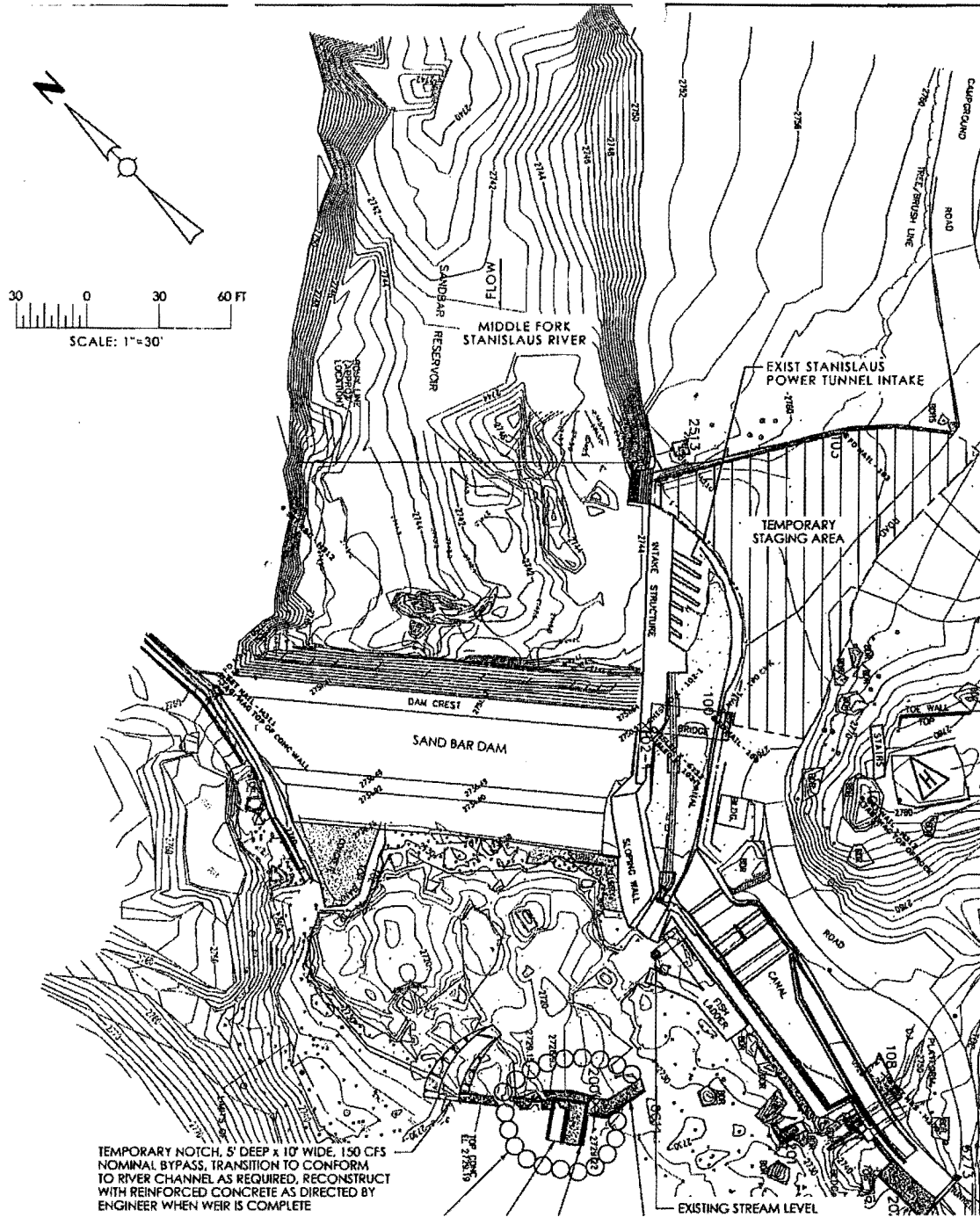


Figure 2: Project Site