

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Water Quality Certification For
YUBA COUNTY WATER AGENCY

**NARROWS II FULL FLOW BYPASS PROJECT
FEDERAL ENERGY REGULATORY COMMISSION
NON-CAPACITY LICENSE AMENDMENT**

SOURCE: North Yuba River

COUNTY: Yuba

WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

Yuba County Water Agency (YCWA) has applied to the Federal Energy Regulatory Commission (Commission) for a non-capacity related amendment of its license for the Yuba River Development Project, License No. 2246, in accordance with the Commission's rules under the Federal Power Act, title 18 of the Code of Federal Regulations, section 4.200 et seq.

The proposed Narrows II Full Flow Bypass Project would be implemented at the Narrows II power plant on the Yuba River in Yuba County. The power plant is immediately downstream from Englebright Dam and 20 miles northeast of Marysville. (See Attachment 1 – Project Area Map)

Background

Central Valley steelhead and spring-run Chinook salmon are listed as threatened species by National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) under the federal Endangered Species Act. The portion of the Yuba River downstream of Englebright Dam (the lower Yuba River) is inhabited by steelhead and potentially by spring-run Chinook salmon.

The Narrows II power plant is a part of the Yuba River Development Project, owned and operated by YCWA, and is a primary mechanism for releasing water to the lower Yuba River. The Narrows I power plant is owned and operated by Pacific Gas and Electric Company (PG&E).

Releases to the Lower Yuba River from Englebright Reservoir occur via three methods:

1. Controlled releases from the PG&E Narrows I Hydroelectric Project (FERC 1403);
2. Controlled releases from the Narrows II power plant; or
3. Uncontrolled releases over the top of Englebright Dam.

The Narrows II turbine has a maximum capacity of 3400 cubic feet per second (cfs). A 36-inch bypass valve with a nominal release capacity of 650 cfs is provided to maintain the downstream flow in the event that the turbine is shut down. During normal turbine operation, the bypass valve is closed and the intake gate is fully open, and all flows are discharged through the turbine.

Several emergency conditions either external to the Narrows II facility (problems with the PG&E transmission line) or internal to the facility (such as a mechanical problem or fire) may precipitate a shutdown of the turbine. Such emergency outages are rare, but do result in a shutdown of the turbine. Depending on the nature of the outage, the Narrows II control system may also close the intake gates to the penstock. Flow through the Narrows II facility may therefore change almost instantaneously from a pre-outage flow of 700 to 3400 cfs (depending on the Narrows II operating level), to 650 cfs (if the intake gate remains open and the bypass is open), to 0 cfs (if the intake closes to protect the facility). Emergency outages may cause the facility to exceed the regulatory ramping rate requirement or cause flows to fall below regulatory minimums.

In order to attempt to reduce stream flow fluctuations related to outages at the Narrows II power plant, YCWA coordinates the operations of the Narrows II power plant with PG&E's operation of the nearby Narrows I power plant, which also makes releases of water to the lower Yuba River. The combined release capacity of the Narrows II power plant's bypass system and the Narrows I power plant under full generating load is a total of 1,350 cfs.

The flow fluctuation and reduction criteria currently stated in Article 33(d), footnote 3B-G, of the Commission's license for the YCWA's Narrows II project were developed during the 1960's with the fishery data available at that time. As more data have become available, the data suggest such flow fluctuations described above may strand juvenile Chinook salmon and steelhead on dry riverbeds or in side channels separated from the lower Yuba River's main stem, or dewater Chinook salmon and steelhead redds. The Commission's Final Biological Evaluation and NOAA Fisheries' *Biological Opinion, Operations of Englebright Dam/Englebright Lake and Daguerre Point Dam on the Yuba River, California* (March 2002) stated that the impacts of these flow fluctuations on listed species were one of the significant concerns with the YCWA's operations.

YCWA recognizes that the long-term solution to flow fluctuations caused by emergency outages at the Narrows II powerhouse is the installation of a full flow bypass system. The principal objectives of the proposed flow bypass system are to:

- Make uninterrupted releases from the Narrows II facility, despite the occurrence of an emergency or other event that changes the operation of the Narrows II turbine.

- Effect no changes in reservoir operation or Narrows II intake flows from current operating protocols.
- Obtain the capability to meet all regulatory flow and flow ramping objectives with either the Narrows II turbine or Narrows II bypass.

Narrows II Full Flow Bypass Project Operation

The basic operation of the Narrows II Hydroelectric Project will be unchanged by the new full flow bypass system. The new bypass system will allow greater operating flexibility and will enable the YCWA to comply with regulatory flow and ramping requirements in all instances. The new bypass valve will be synchronized with the turbine and during shut down of the turbine under either normal or emergency conditions, the new bypass valve will open to discharge the same amount of water into the river as was being discharged by the turbine. Upon restarting of the turbine, the bypass valve will close in synch with the starting of the turbine to maintain continuous flows in the river. If the shutdown period is prolonged, the bypass valve may be independently controlled to ramp up or down to maintain the required discharge into the river. All operations of the new bypass system will not impact flow from, or operations of, Englebright Reservoir.

State Water Resources Control Board Regulatory Authority

The Federal Clean Water Act (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).) Clean Water Act section 101(g) (33 U.S.C. §1251(g)) requires federal agencies to "cooperate with state and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources."

Clean Water Act section 401 (33 U.S.C. §1341) requires every applicant for a federal license or permit to provide the responsible federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act, including Water Quality Standards and Implementation Plans. (33 U.S.C. §1313.) Clean Water Act section 401 directs the state agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project.

The State Water Resources Control Board (State Water Board) is the agency responsible for water quality certification in California (Wat. Code, § 13160) and has delegated this function to the Executive Director by regulation. (Cal. Code Regs., tit. 23, § 3838, subd.(a).)

The California Regional Water Quality Control Boards have adopted, and the State Water Board has approved, Water Quality Control Plans (Basin Plans) for each watershed basin in accordance with provisions of section 303 of the Clean Water Act, related to the establishment of water quality standards and planning. (33 U.S.C. §1313.) Basin Plans identify beneficial uses of the waters within each region.

California Environmental Quality Act Compliance

YCWA is the lead agency for the California Environmental Quality Act (CEQA) review for this Project. YCWA issued for public comment an initial study evaluating the possible environmental impacts of installation and operation of the Narrows II Full Flow Bypass Project and implementation of YCWA's proposed flow fluctuation and reduction criteria. Subsequent to the public comment period, YCWA adopted and certified a mitigated Negative Declaration on January 13, 2004 and filed a Notice of Determination with the State Office of Planning and Research on January 15, 2004.

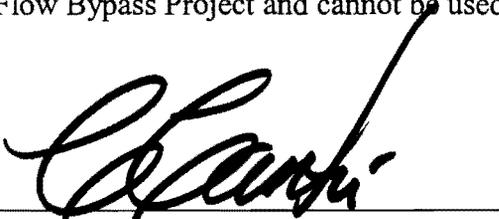
The State Water Board, acting as the responsible agency pursuant to CEQA, adopted YCWA's mitigated Negative Declaration for the project that included conditions necessary to avoid significant environmental effects. Those conditions are included as conditions for this certification.

ACCORDINGLY, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT THE CONSTRUCTION AND OPERATION OF THE YUBA COUNTY WATER AGENCY 'S NARROWS II FULL FLOW BYPASS PROJECT will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided it complies with the following additional terms and conditions during the prosecution of the work certified herein.

1. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and title 23 of the California Code of Regulations (commencing with § 3867).
2. The State Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
3. Notwithstanding any more specific conditions in this certification, the project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
4. Except for activities permitted by the U.S. Army Corps of Engineers under section 404 of the Clean Water Act, soil, silt or other organic or earthen materials shall not be placed where such materials could pass into surface waters or surface water drainage courses. Any aggregate base material and riprap used shall be clean rock that is free from visible organic or earthen material.
5. In order to protect the beneficial use designations identified in the Sacramento River Basin Plan, the authorized construction and operation activities pursuant to this certification shall not add the following substances to surface waters:

- a. Taste or odor-producing substances to impart undesirable tastes to domestic and municipal water supplies or odors to fish flesh or other edible products of aquatic origin or cause nuisance or adversely affect beneficial uses;
 - b. Perceptible floating material including, but not limited to, solids, liquids, foams or scums which could result in degradation of water quality;
 - c. Suspended or settleable material in concentrations that cause a nuisance or adversely affect beneficial uses;
 - d. Oil, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water;
 - e. Toxic pollutants present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health; and,
 - f. Coliform organisms attributable to human wastes.
6. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under state 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 assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any 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. In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
7. This certification does not authorize any act that results in the taking of a threatened or endangered species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this certification or water rights held by YCWA, YCWA shall obtain authorization for the take prior to any construction or operation of the project and shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this certification.

8. YCWA shall obtain a geotechnical analysis of the project site, performed by a qualified soil scientist or geologist, that evaluates the site's geologic and geotechnical conditions and identifies measures to ensure that construction activities do not destabilize rock slopes in the project area or otherwise contribute to increased risk of landslide. YCWA shall require the construction contractor to implement the identified slope stabilization measures as part of construction specifications for the project. Such measures may include temporary or permanent retaining walls, fencing, and appropriate construction and blasting techniques.
9. YCWA shall require the contractor to consult with the Regional Water Quality Control Board regarding the need for a National Pollutant Discharge Elimination System (NPDES) General Permit. In addition, the contractor shall comply with any required NPDES General Permit conditions for discharges associated with construction activity or storm water pollution prevention and for site-specific erosion and sedimentation control measures.
10. YCWA shall submit a sedimentation prevention plan to the Chief of the Division of Water Rights, California Department of Fish and Game (DFG) and NOAA Fisheries for review and comment. The final plan shall be approved by the Chief of the Division of Water Rights, DFG and NOAA before the onset of construction-related activities.
11. YCWA shall require the construction contractor to prepare and implement a hazardous materials control plan. The plan shall identify all potential hazardous materials that will be used during construction activities. The plan shall also identify staging areas where hazardous materials will be stored during construction and shall include an accidental spill prevention and response plan. The plan shall identify measures to prevent accidental spills from leaving the site and methods for responding to and cleaning up spills before they spread beyond the spill area or to drainages. The plan shall be reviewed and approved by the Chief of the Division of Water Rights and YCWA and shall be implemented as needed during construction.
12. This certification is only for the non-capacity related amendment of the Yuba River Development Project (YRDP), License No. 2246 described above as the Narrows II Full Flow Bypass Project and cannot be used for any other certification for License No. 2246.

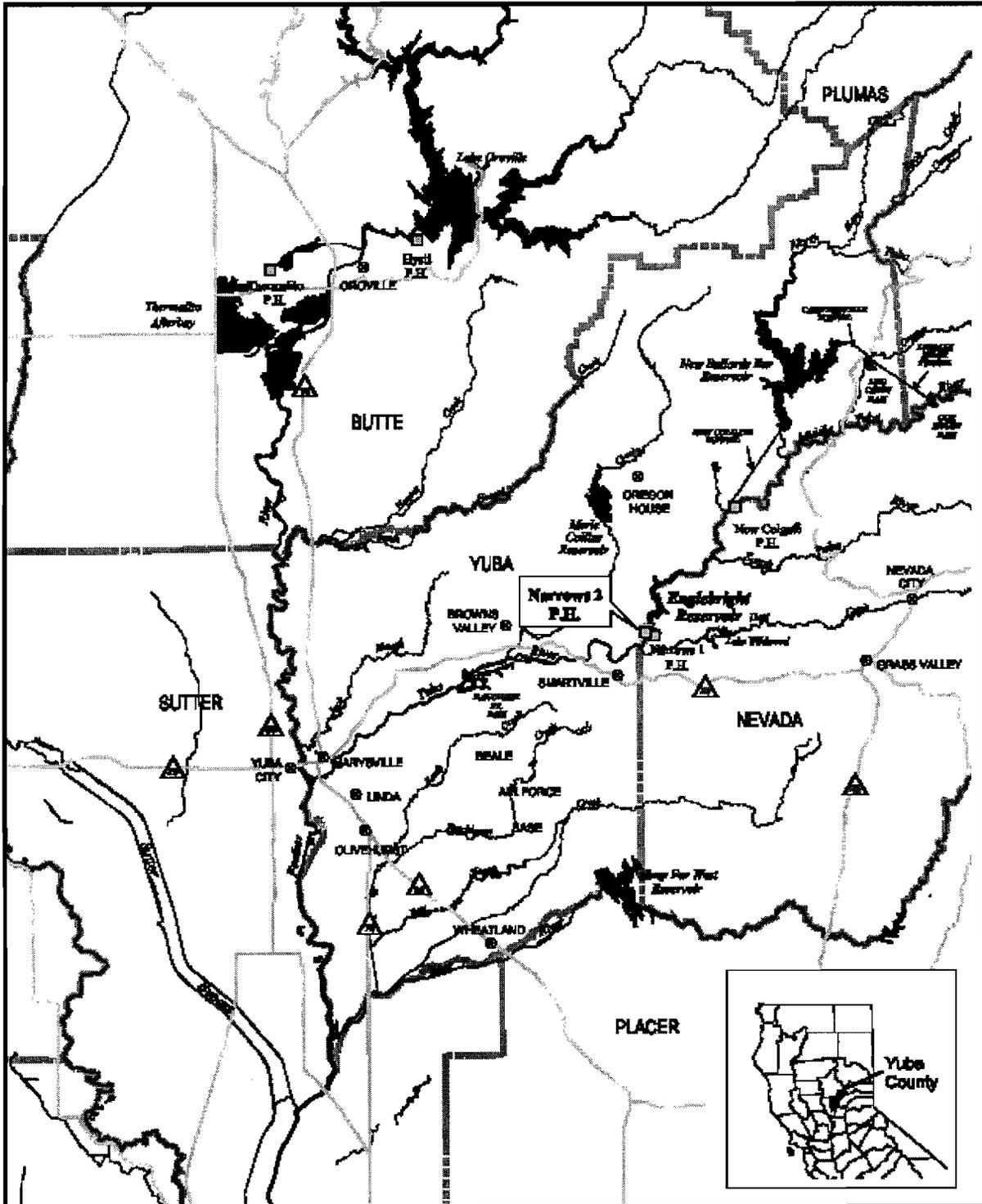


Celeste Cantú
Executive Director

Date: **SEP 14 2005**

Attachment 1 - Project Area Map

Attachment 1



Source: Bookman-Edmonson 2002

LEGEND □ Powerhouse
 — County Boundary