



650 Capitol Mall, 5th Floor
Sacramento, CA 95814
916.445.5511 FAX 916.445.7297
<http://calwater.ca.gov>

Agenda Item: 9-11C

Meeting Dates: February 9 and 10, 2005

JOINT MEETING WITH BAY-DELTA PUBLIC ADVISORY COMMITTEE

CONSIDERATION OF A RESOLUTION APPROVING AN ECOSYSTEM RESTORATION PROGRAM GRANT AGREEMENT AMENDMENT WITH YUBA COUNTY WATER AGENCY AND AUTHORIZING THE DIRECTOR, OR DESIGNEE, TO PROCESS THE APPROVED AMENDMENT

Summary: This resolution would approve an amendment of \$4,254,967 for a 2002 Ecosystem Restoration Program grant to provide additional funds for a flow bypass project at the Narrows 2 Power Plant on the Yuba River. This would bring the total funding for the grant from the Ecosystem Restoration Program to \$8,535,567. The project that this amendment will support is described in Attachment 1.

Recommended Action: The California Bay-Delta Authority adopt the attached Resolution 05-02-04.

Background

In July 2003, the Yuba County Water Agency (YCWA) was awarded \$4,280,600 (Proposition 204, Resources Agency) to construct a 3,000 cubic-feet-per-second (cfs) synchronous bypass system to eliminate flow and temperature fluctuations from emergency and maintenance shutdowns at the Narrows 2 Hydropower Plant on the Yuba River. Providing more stable water releases to the lower Yuba River would provide better conditions for Chinook salmon, steelhead and other species.

The original cost estimates developed in 2001 have been exceeded as demonstrated by a bidding process undertaken between November 2003 and April 2004. Several factors have contributed to the increased cost including increased material costs and contingencies built into bid prices to address permit requirements and risks associated with a challenging construction project. YCWA submitted an amendment request for \$4,254,967 to help cover the cost increase. The amendment was reviewed at the ERP Amendments Workshop on September 15, 2004 and was further reviewed by the ERP Implementing Agency managers to refine the request. The ERP Implementing Agency managers support this amendment.

The total project cost for construction is \$11,645,125. YWCA provided a local cost share of 25 percent on the original grant (\$1,286,000) and is contributing a 30 percent cost share for this amendment (\$1,823,557). YCWAs total contribution is \$3,109,557

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Attachment 1 further describes the project and how it helps achieve ERPs goals. Attachment 2 describes how the project meets CEQA requirements including Authority Findings of Fact. YCWA, as lead agency, adopted a mitigated negative declaration for the project in 2004. Staff reviewed and concurred with the findings. The Authority, as a responsible agency, is asked to concur that the project will not have any significant environmental effects.

Fiscal Information

Funding Source: Proposition 50
Term: February 30, 2005 to February 30, 2008
Total Amount: \$4,254,967

List of Attachments

Attachment 1 – Ecosystem Restoration Project Description
Attachment 2 – Narrows 2 Power Plant Flow Bypass System Project Mitigated Negative Declaration and Authority Findings of Fact
Attachment 3 – Mitigated Negative Declaration
Resolution 05-02-04

Contact

Dan Castleberry
Ecosystem Restoration Program

Phone: (916) 445-0769

ECOSYSTEM RESTORATION PROJECT DESCRIPTION

Applicant Organization: Yuba County Water Agency

Proposal Title: Narrows 2 Full Flow Bypass Project

Recommended Funding: \$4,254,967

Conditions: None

General Project Description:

The Narrows 2 hydroelectric power plant is located downstream of Englebright Dam in Yuba County, California, about 20 miles northeast of Marysville and about 24 miles upstream from the confluence of the Yuba and Feather Rivers.

The Yuba County Water Agency will construct a 3,000-cfs synchronous bypass at the Narrows 2 Power Plant on the Lower Yuba River to increase survival and production of Central Valley fall-run Chinook salmon, spring-run Chinook salmon and steelhead in the lower Yuba River. The project would substantially reduce the potential for flow and temperature fluctuations and associated impacts on anadromous fish populations that could be caused by emergency and maintenance shutdowns of the Narrows 2 Power Plant. Providing more stable water releases to the lower Yuba River under the revised flow fluctuation and reduction criteria would provide better conditions for salmonids, including Chinook salmon and steelhead as well as other species.

Although emergency and maintenance shutdowns are infrequent, a full-flow bypass can eliminate most flow fluctuations that would result from such shutdowns. NOAA Fisheries and FERC in their evaluations have stated that impacts on listed species from flow fluctuations at the Narrows 2 Power Plant were one of the more significant concerns related to the Yuba River Development Project.

The project was first funded for design in 2001 through the Central Valley Improvement Act Anadromous Fish Restoration Program for \$299,606. YWCA then submitted a proposal to the ERP for construction in 2002. When reviewed in 2002, this project was considered a high priority by regional viewers. The Selection Panel recommended funding the project without conditions as a structural solution to an ongoing problem caused by a design omission. They felt the project would benefit multiple species on the Yuba River, including Chinook salmon and steelhead. Thus, the project received \$4,280,600 in July 2003 from Proposition 204 (Resources Agency).

The original total project cost was \$5,566,600. With \$4,280,600 granted through the ERP grant process and the remaining 25 percent contributed as a local cost share by YWCA (\$1,286,000). The current total project cost is \$11,645,125 with \$4,254,967 requested from ERP and the remaining 30 percent (\$1,823,557) to be provided as a local cost share by YWCA.

The amendment was reviewed at the ERP Amendments Workshop on September 15, 2004 and was further reviewed by the ERP Implementing Agency managers to refine the request. The ERP Implementing Agency managers support this amendment.

Additional Background Information for this request:

It is now evident that project costs will be much greater than originally anticipated. Qualification of bidders and bidding of the Narrows 2 construction work was undertaken in November 2003 through April 2004. Two bids were received, and both were considerably higher than the amount budgeted for construction from the original ERP grant and YWCA matching funds. They exceeded the Engineers Estimate, which was initially prepared about three years ago and included an escalation to 2004 price levels.

The main reasons for the higher costs are as follows:

- The bids include substantial contingency allowances to cover the cost of permitting restrictions. Recent permitting input from California Department of Fish and Game and National Marine Fisheries Service limits road access to the site for the valve structure. Building the outlet facilities without road access would significantly increase those costs.
- Increased material costs and contingencies were built into the bid prices to deal with the permit requirements and risks associated with a physically and temporally challenging construction project.
- The small number of bids from prequalified bidders (i.e. 2 out of 8) indicates that contractors are not very hungry for this work relative to other work. Therefore the bids were not very aggressive.
- Large variations in bid prices for the various items between the bidders and the Engineer's estimate are noted. In particular, Shaft Excavation, Bypass Valve Structure Concrete, and Embedded Liners show great differences. These are the items with greatest risk and it is understandable that these would have the greatest variance.
- The change in currency exchange rate of the Euro vs. the US\$ - approximately 20 percent - which affects the costs of specialty equipment such as large hydraulic valves.
- During the bidding process, contractors discussed several logistics and construction schedule approaches. To allow each contractor to propose their most efficient construction approach, YCWA provided general schedule guidance and an explanation of potential constraints due to required river flow obligations. Additionally, YCWA required liquidated damages for schedule transgressions, as YCWA has a regulatory and operational burden for operations. It is anticipated that the potential for

liquidated damages is reflected in the contractor's bid price to the extent that each contractor is uncertain of ability to meet the schedule constraints.

- The recent increase in fuel and other costs is likely reflected in the Contractor's contingency.
- Given the challenges for construction of the project (including access to the construction site and proximity to a highly sensitive river resource) it is anticipated that the bids include additional contingency for unforeseen events and/or penalty payments. YCWA has attempted to work closely with regulatory agencies, project engineers and contractors to provide as much flexibility as possible for construction approaches; however, this project remains physically and temporally challenging.

California Environmental Quality Act (CEQA): YCWA is the CEQA lead agency for the project. It adopted a mitigated negative declaration for the project on January 13, 2004 (see Attachment 2).

The California Bay-Delta Authority is a CEQA responsible agency in that it is exercising discretionary funding approval authority over the project. As such, Authority staff has considered the environmental effects of the project as shown in the mitigated negative declaration, and concurs, as set forth in the attached findings of fact, that, as mitigated, the project will not have any significant environmental effects.

FINDINGS REGARDING THE NARROWS II FULL FLOW BYPASS PROJECT

The following Findings are hereby adopted by the California Bay-Delta Authority as required by Public Resources Code sections 21081, 21081.5, and 21081.6, as well as 14 California Code of Regulations Sections 15074 and 15096.

A. ENVIRONMENTAL REVIEW PROCESS

In January 2004, the Yuba County Water Agency (YCWA) released for public review a draft Initial Study and Mitigated Negative Declaration for constructing and operating the proposed flow bypass system and for implementing revised flow reduction and fluctuation criteria at the YCWAs Narrows 2 Power Plant. This power plant is located downstream of Englebright Dam on the Yuba River in Yuba County, California. The Project under consideration for approval by the Authority as a Responsible Agency is an environmental enhancement to an existing facility. Mitigation measures were incorporated into the project approval.

In addition to draft Initial Study and Mitigated Negative Declaration, the proposed construction and operation of the proposed flow bypass system will meet multiple environmental, operational, and regulatory criteria established by the Federal Energy Regulatory Commission, NOAA Fisheries, U.S. Army Corps of Engineers, California Department of Fish and Game Pacific Gas and Electric Company, State Water Resources Control Board, Central Valley Regional Water Quality Control Board, California Department of Water Resources Division of Safety of Dams, and the States Lands Commission. This project is consistent with the goals and objectives of the Ecosystem Restoration Program of the California Bay-Delta Authority.

B. ENVIRONMENTAL IMPACTS

A Mitigated Negative Declaration has been prepared by the YCWA as Lead Agency. The document evaluates the Project and identifies significant potential adverse impacts in the following environmental categories: Air Quality, Geology and Soils, Hydrology and Water Quality, Noise, Vegetation, Fish, and Other Wildlife Resources. The Mitigated Negative Declaration recommends mitigation measures that would avoid or reduce all of the identified significant effects to less-than-significant levels. These measures are incorporated as conditions of approval. No significant unavoidable adverse impacts are associated with approval of the Project. No statement of overriding considerations will be adopted as part of the consideration by the Authority in approving the Project.

C. SIGNIFICANT AND POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS REDUCED TO LESS-THAN-SIGNIFICANT LEVELS BY MITIGATION MEASURES INCORPORATED AS CONDITIONS OF APPROVAL

The following potentially significant adverse impacts associated with approval of the Project are reduced to a less-than-significant level by mitigation measures identified in the final Mitigated Negative Declaration and incorporated into the Project.

1. **Air Quality, Geology and Soils, Hydrology and Water Quality, And Noise:** These potentially significant impacts are predominately related to construction and are short term in nature. All the potentially significant impacts are mitigated through specific mitigations measures identified in the Mitigated Negative Declaration. These mitigation measures were developed in conformance to regulatory practices, permits, or recommendations by Feather River Air Quality Management District, the State Water Resources Board, Yuba County Water Agency, the U.S. Army Corps of Engineers, Uniform Building Code, and others.
2. **Impact on Vegetation, Fish, and Other Wildlife Resources:** Construction and operation of the Project could potentially impact vegetation communities, fish populations and other wildlife resources. Mitigation measures for protection of these resources are incorporated as part of the project design, construction plans, and operation that have been developed in consultation with State and Federal agencies. These measures include avoidance measures incorporated into permits and agreements that will assure that all biological resources will be impacted at less-than significant levels.

D. ADDITIONAL FINDINGS

1. The Authority has reviewed and considered the environmental effects of the Project as reflected in the Mitigated Negative Declaration issued by the Yuba County Water Agency.
2. The Authority finds that the Mitigated Negative Declaration is adequate for use by The Authority in its role as a Responsible Agency.
3. The Authority further finds that there are no feasible alternatives or mitigation measures within the power of the Authority, other than those previously identified in the Mitigated Negative Declaration that would substantially lessen or avoid any potential environmental effect of the Project.
4. The Project is found to be consistent with the goals and objectives of the Ecosystem Restoration Program.

5. No significant unavoidable adverse impacts are associated with approval of the Project. No statement of overriding considerations will be adopted as part of the consideration by the Authority of approving the Project.
6. The Authority hereby adopts the conditions of project approval adopted by the Yuba County Water Agency as Lead Agency in connection with issuing the Mitigated Negative Declaration deemed final. The Authority's Findings address each identified significant environmental effect of the Project in accordance with Public Resources Code section 21081.
7. The Authority hereby finds that, upon consideration of the record as a whole, there is no evidence before it that the Project has a potential for any new adverse effect on wildlife resources, or the habitat upon which the wildlife depends. Because the Project is designed to improve fisheries, in addition to the consistent and on-going coordination with the state and federal agencies that have authority for the protection of fish and wildlife resources by the lead agency, the Project will not contribute to potential cumulative development impacts to such wildlife.

DATE: November 26, 2003

TO: Responsible and Trustee Agencies, Interested Parties, and Organizations

SUBJECT: **NOTICE OF AVAILABILITY AND INTENT TO ADOPT AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE NARROWS 2 POWERPLANT FLOW BYPASS SYSTEM PROJECT**

The Yuba County Water Agency (YCWA) has directed the preparation of and intends to adopt a Mitigated Negative Declaration for the proposed project in compliance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines. YCWA is the lead agency for the proposed project under CEQA.

Project Location: The proposed project would be implemented at the Narrows 2 Powerplant on the Yuba River in Yuba County. The powerplant is immediately downstream from Englebright Dam and 20 miles northeast of Marysville.

Description of the Proposed Project: YCWA is proposing to construct and operate a 3,000-cubic-foot-per-second synchronous flow bypass system and implement revised flow reduction and fluctuation criteria at the Narrows 2 Powerplant. The improvements would eliminate or substantially reduce flow fluctuations and associated impacts on anadromous fish populations in the lower Yuba River that could be caused by emergency and maintenance shut-downs of the powerplant and provide more stable water releases and water temperatures in the lower Yuba River than YCWA's current Federal Energy Regulatory Commission (FERC) license requires.

The Agency has directed the preparation of an initial study/mitigated negative declaration (IS/MND) on the proposed project in accordance with the requirements of CEQA. An IS/MND describes the project and its potential impacts on the environment and preliminarily concludes that any significant impacts that may result from the proposed project can be avoided, eliminated, or reduced to a level that is less than significant by the adoption and implementation of specified mitigation measures.

Public Review Period: The IS/MND is being circulated for public review and comment for a review period of 33 days starting November 26, 2003. Written comments should be submitted no later than December 29, 2003, to the following address:

Curt Aikens
General Manager
Yuba County Water Agency
1402 D Street
Marysville, CA 95901

Copies of the IS/MND may be reviewed at the same address during normal business hours. Your views and comments on how the project may affect the environment are welcomed.

MITIGATED NEGATIVE DECLARATION

PROJECT: Narrows 2 Powerplant Flow Bypass System Project

LEAD AGENCY: Yuba County Water Agency

AVAILABILITY OF DOCUMENTS: The initial study for this mitigated negative declaration is available for review at the Yuba County Water Agency office.

PROJECT DESCRIPTION: The Yuba County Water Agency (YCWA) is proposing to construct and operate a 3,000-cubic-foot-per-second synchronous flow bypass system and implement revised flow reduction and fluctuation criteria at the Narrows 2 Powerplant. The project would involve the installation within the existing powerhouse facility of a turbine shutoff valve that would enable operators to shut down the turbine and allow water to be diverted through a bypass tunnel in the event of a powerplant shutdown for maintenance or emergency purposes. The turbine shutoff valve and the new flow bypass valve would be synchronized to maintain constant flow (to a maximum of 3,000 cfs) to the river as the shutoff valve or turbine wicket gates close or open. The turbine shutoff valve would close for all emergency conditions that previously caused the intake gate to close, and the new flow bypass valve would then open to permit a relatively smooth transfer of flow from the turbine to the bypass into the lower Yuba River. Implementation of the proposed bypass system and revised flow criteria would maintain more stable releases from the powerplant during emergency and maintenance shutdowns at the same flow rate as was being discharged before the shutdown occurred and make the flow fluctuation and reduction criteria stated in YCWA's FERC license more protective of downstream fish species than the criteria presently stated in that license.

YCWA has directed the preparation of an initial study/mitigated negative declaration (IS/MND) on the proposed project in accordance with the requirements of the California Environmental Quality Act (CEQA). An IS/MND describes the project and its potential impacts on the environment and preliminarily concludes that any significant impacts that may result from the proposed project can be avoided, eliminated, or reduced to a level that is less than significant by the adoption and implementation of specified mitigation measures.

FINDINGS: An initial study has been prepared to assess the proposed project's potential effects on the environment and the significance of those effects. Based on the initial study, the Agency has determined that the proposed project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

- The project would have no significant environmental effect related to aesthetics, agricultural resources, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or utilities and service systems.
- Mitigation would be implemented to reduce potentially significant impacts on air quality (construction-related emissions), biological resources (possible disturbance of special-status species or their habitat), geology and soils (soil erosion during construction), hazards and hazardous materials (spills during construction), and hydrology and water quality (effects from erosion and spills during construction) to less-than-significant levels.

- Although there are no known cultural resources that might be disturbed, cultural resources best management practices included to address the potential for discovering archaeological or paleontological resources and/or human remains during the construction phase of the project.
- The project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, reduce the number or restrict the range of a special-status species, or eliminate important examples of California history or prehistory.
- The project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The project would not have environmental effects that are individually limited but cumulatively considerable.
- The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.
- No substantial evidence exists that the project would have a negative or adverse effect on the environment.
- The project incorporates all applicable mitigation measures, as listed below and described in the initial study.
- This mitigated negative declaration reflects the independent judgment of the lead agency.

The following mitigation measures will be implemented by the Agency to avoid or minimize potential environmental impacts. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to a less-than-significant level.

- Mitigation Measure AQ-1: Implement Applicable Measures to Reduce Short-Term Construction-Generated Emissions
- Mitigation Measure GEO-1: Obtain Geotechnical Analysis of the Project Site and Implement Measures to Stabilize Slopes
- Mitigation Measure GEO-2: Implement Standard Erosion and Sedimentation Control Measures, Obtain Authorization under the National Pollutant Discharge Elimination System, and Prepare and Implement a Sedimentation Prevention Plan
- Mitigation Measure HM-1: Prepare and Implement a Hazardous Materials Control Plan
- Mitigation Measure N-1: Design and Implement Blasting Specifications to Limit Noise Exposure for Nearby Receptors

Questions or comments regarding this mitigated negative declaration and initial study may be addressed to:

Curt Aikens
General Manager
Yuba County Water Agency
1402 D Street
Marysville, CA 95901

In accordance with Section 21082.1 of the California Environmental Quality Act, the Yuba County Water Agency has independently reviewed and analyzed the initial study and mitigated negative declaration for the proposed project and finds that the initial study and mitigated negative declaration reflect the independent judgment of the Agency. The lead agency further finds that the project mitigation measures will be implemented as stated in the mitigated negative declaration.

I hereby approve this project:

Curt Aikens, General Manager

Yuba County Water Agency

Date

Agenda Item: 9-11C
Meeting Date: February 9 and 10, 2005

**CALIFORNIA BAY-DELTA AUTHORITY
RESOLUTION 05-02-04**

**CONSIDERATION OF A RESOLUTION APPROVING AN ECOSYSTEM
RESTORATION PROGRAM GRANT AGREEMENT AMENDMENT WITH YUBA
COUNTY WATER AGENCY AND AUTHORIZING THE DIRECTOR, OR DESIGNEE,
TO PROCESS THE APPROVED AMENDMENT**

WHEREAS, the Ecosystem Restoration Program presents a comprehensive vision for improving and increasing aquatic and terrestrial habitats and improving ecological functions in the Bay-Delta ecosystem; and

WHEREAS, those State and Federal agencies with CALFED Program restoration funds have coordinated their efforts to solicit for and select the best projects to implement the Ecosystem Restoration Program, with assistance of the staff from the California Bay-Delta Authority; and

WHEREAS, the Authority has received appropriation of Proposition 50 funds to implement the Ecosystem Restoration Program; and

WHEREAS, the Authority may distribute funds through grants and may amend those grants; and

WHEREAS, the proposed amendment listed below constitutes an eligible project for purposes of receiving Ecosystem Restoration Program funds under Proposition 50; and

WHEREAS, the proposal proposed amendment listed below meets the objectives of the CALFED Program; and

WHEREAS, the Authority has considered the environmental effects of the Narrows 2 Full Flow Bypass Project as shown in the mitigated negative declaration prepared by the Yuba County Water Agency, the lead agency for the project, and concurs that, as mitigated, the project will not have any significant environmental effects; and

NOW, THEREFORE, BE IT RESOLVED that the Authority hereby adopts the findings of fact for the Narrows 2 Full Flow Bypass Project included as Attachment 2 to the staff report; approves the proposed amendment to the Yuba County Water Agency for the project; authorizes the Director, or designee, to process the approved amendment, subject to availability of appropriated funds; and directs the Director, or designee to file a Notice of Determination with regard to the project.

CERTIFICATION

The undersigned Assistant to the California Bay-Delta Authority does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Authority held on February 9, 2005.

Dated: _____

Jamie Cameron-Harley
Assistant to the California Bay-Delta Authority