

October 6, 2015

**Public Notice for Water Quality Certification and/or Waste  
Discharge Requirements (Dredge/Fill Projects)**

**California Department of Parks and Recreation  
Benbow Dam Removal Project  
40.0659, -123.801<sup>1</sup>  
WDID No. 1B15096WNHU, ECM PIN CW-816823**

**Humboldt County**

On July 24, 2015, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the California Department of Parks and Recreation (CDPR), requesting Federal Clean Water Act, section 401, Water Quality Certification (certification) for activities related to the proposed Benbow Dam Removal Project (Project).

**Project Description**

The purpose of the Project is to facilitate fish passage and improve aquatic habitat by removing the Benbow Dam from the South Fork Eel River. The dam is located in the Benbow Lake State Recreation Area, approximately 2 miles south of the town of Garberville.

The Benbow Dam is approximately 60-feet-wide, by 300-feet-long, by 20-feet-high, and spans the width of the South Fork Eel River. During the summer months of June through September, prior to 2007, approximately 40 steel I-beams would be inserted into vertical sockets in the dam spillway. Wooden flashboards would then be placed between the I-beams to add additional nine feet of height above the spillway crest. An approximately 123-acre recreational lake would form behind the dam after the flashboards were installed, typically between mid-June and Mid-September.

The Benbow dam is a fish passage impediment. Dam removal would improve access to approximately 100 river miles (437 square miles) of upstream aquatic habitat.

Construction would be completed in two phases. Construction Phase I activities include, but are not limited to:

- Relocation of fish and amphibians;
- Demolition and removal of the cableway anchorage system, utilizing the existing gravel access road on the slope above the north bank;
- Construction staging;

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<sup>1</sup> WGS84 datum

- Construction access road construction. An approximately 2,000-foot-long by twelve-foot-wide construction access road would be constructed within a minimum of 50 feet away from the wetted South Fork Eel River perimeter at the time of construction, except at crossings. The road and construction entrance would start at the east, approximately where Benbow Lake Road meets the southbound 101 on-and off-ramps, and would continue west between the Benbow Lake State Recreation Area parking area and South Fork Eel River, before continuing onto the gravel bar where the East Fork of the South Fork Eel River (EFSF) empties into the South Fork Eel River. The access road would then cross the EFSF, continue west to the end of the gravel bar before crossing the South Fork Eel River to a gravel bar on the left bank of the South Fork Eel River, immediately upstream of the dam;
- Installation of temporary bridges and/or culverts at the EFSF and on the South Fork Eel River, both upstream of the dam;
- Day use area boat ramp removal;
- Installation of pumping/dewatering facilities to remove water from the work area and to provide water for dust control;
- Construction of a siltation basin downstream of the work area to handle water from the work area;
- Diversion of the South Fork Eel River to the north, around the work area;
- Excavation and removal of buried concrete along the left bank upstream of the dam;
- Removal of cableway and anchorage systems from both banks to ground surface;
- Removal of the winch house and storage building from the top of the left bank;
- Excavation and demolition of the southern dam section; and
- River bank grading and installation of erosion control.

Construction Phase II activities include, but are not limited to:

- Relocation of fish and amphibians;
- Diversion of the South Fork Eel River to the south, around the work area;
- Installation of pumping/dewatering facilities to remove water from the work area and to provide water for dust control;
- Construction of a siltation basin downstream of the work area to handle water from the work area;
- Installation of a temporary flatcar bridge across the diversion channel;
- Excavation and demolition of the northern dam section;
- Grading and re-contouring of the river channel after dam removal;
- Removal of the construction access road, including de-compaction; and
- Invasive plant removal and riparian vegetation planting along the South Fork Eel River left bank upstream of the Benbow dam, and to the east of the EFSF.

The concrete dam would be broken apart using explosives, a hydro-expansive grout, or other appropriate material. The exact material and method would not be chosen until after the construction contract is awarded. The Regional Water Board would require a dam fracturing plan for review and approval prior to commencement of dam removal, as a

condition of 401 water quality certification. The Regional Water Board will review the plan to ensure that the material proposed is the least environmentally damaging practicable alternative, that appropriate best management pollution prevention practices are proposed, and that an appropriate water quality monitoring program is in place to identify any pollutants that may be generated by dam fracturing activities.

According to CDPR, a high degree of geomorphic continuity up and downstream of the dam has been maintained due to the seasonal dam operation and the presence of dam fish passage slots. Sediment accumulations upstream of the dam are limited to an approximately 9,700 cubic yard gravel bar on the left bank, which would be used to fill the scour hole formed below the dam. Lowering of flood waters due to dam removal would reduce upper-river bank saturation and increase bank stability.

The proposed Project would cause disturbances to the South Fork Eel River in the Benbow Hydrologic Subarea (Basin Plan Hydrologic Planning Area No. 111.32). The South Fork of the Eel River supports three special-status salmonid species: federally- and state-threatened Southern Oregon/Northern California Coast (SONCC) Evolutionary Significant Unit (ESU) coho salmon (*Oncorhynchus kisutch*); federally-threatened California Coastal (CC) ESU Chinook salmon (*Oncorhynchus tshawytscha*); and federally-threatened Northern California (NC) ESU steelhead trout (*Oncorhynchus mykiss*).

### **Impacts**

The proposed Project would result in approximately 9.4 acres (3,660 linear feet) of temporary impacts to the South Fork Eel River as a result of dam removal, construction access, riparian planting, river diversion, and river grading activities.

One alder and one willow would be removed in the riparian area of the South Fork Eel River to provide room for the construction access road.

Diversion channels utilizing native cobble, gravel berms, and plastic sheeting would be constructed each construction season to divert river flows around the work area. Channels would be constructed to accommodate flows of 700 cubic feet per second.

### **Avoidance and Minimization for Aquatic Species**

Construction would not occur prior to June 15 in either construction season to avoid and minimize impacts to salmonids. In the spring prior to construction, yellow-legged frog egg masses would be relocated where discovered within 500 feet of the proposed work areas. Exotic plants on the left bank of the dam would also be removed by hand prior to ground disturbance.

### **Construction Timing**

Project construction is proposed to begin June 15, 2016, and be completed by October 31, 2016. Riparian planting would occur between fall 2016, and spring 2017.

### **Total Maximum Daily Load and Water Impairment**

The South Fork Eel River is identified as impaired for sediment and temperature under Clean Water Act section 303(d). The United States Environmental Protection Agency established a Total Maximum Daily Load (TMDL) for the South Fork Eel River in 1999. CDPR would utilize appropriate erosion control, sediment control, and site management best management practices to control pollutants during construction and the drainage improvements would result in a net reduction in sediment contributions. Project implementation would not reduce effective shade nor cause an increase in stream temperatures. This certification would not certify any activities that would contribute to the Eel River sediment or temperature impairment, and would be consistent with and implement the South Fork Eel River TMDL.

### **Disturbed Ground Area**

Project implementation would result in greater than one acre of disturbed soil area. CDPR would apply for coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ) and prepare a Stormwater Pollution Prevention Plan detailing best management practices to control pollution within the Project area during construction.

### **Other Agency Permits**

Caltrans has applied to the United States Army Corps of Engineers for an Individual Permit, pursuant to CWA, section 404. Caltrans has applied for a Section 1600 Streambed Alteration Agreement from the California Department of Fish and Wildlife. CDPR has requested a Project Biological Opinion from the National Oceanic and Atmospheric Administration (NOAA).

### **CEQA**

As lead agency, CDPR prepared an Initial Study/Mitigated Negative Declaration for the Project (SCH 2015092025) in order to comply with the California Environmental Quality Act. The Mitigated Negative Declaration has not yet been adopted by CDPR.

### **Public Comments**

Regional Water Board staff are proposing to regulate this Project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. In addition, staff will consider all phone calls and comments submitted in writing and received within a 21-day comment period that begins on the first date of issuance of this notice and ends at 5:00 p.m. on the last day of the comment period. If you have any questions or comments, please contact staff member Brendan Thompson at (707) 576-2699 or [Brendan.Thompson@waterboards.ca.gov](mailto:Brendan.Thompson@waterboards.ca.gov) within 21 days of the posting of this notice.

The information contained in this public notice is only a summary of CDPR's proposed activities. The Regional Water Board's Project file includes the application for certification

and additional details of the proposed Project, including maps and design drawings. Project documents and any comments received are on file and may be reviewed or copied at the Regional Water Board office, 5550 Skylane Boulevard, Suite A, Santa Rosa, California. Appointments are recommended for document review. Appointments can be made by calling (707) 576-2220.

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