

February 11, 2009

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

Etna, City of – Etna Creek Fishway and Water Diversion Improvements Project
WDID No. 1A08173WNSI

Siskiyou County

On December 8, 2008, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the City of Etna (applicant), requesting Federal Clean Water Act, section 401, Water Quality Certification for activities related to the Etna Creek Fishway and Water Diversion Improvements Project. The proposed project will cause disturbances to waters of the United States associated with Etna Creek in the Scott Valley Hydrologic Subarea No. 105.42.

The proposed project is located at the City of Etna's existing dam and water diversion facility on Etna Creek, approximately two miles southwest of the City of Etna. The existing dam is an 8-foot tall by approximately 70-foot wide concrete barrier owned and maintained by the City of Etna to divert surface water from Etna Creek to the City's water treatment facility located approximately 1.7 miles away. The diverted surface water is the sole municipal water supply for the City of Etna.

Proposed improvements to the dam and associated facilities include: relocating and widening the dam's weir past the point of diversion so that flows within a new fish ladder (fishway) will be adequate for fish passage throughout the year; removal and reconstruction of the existing intake structure and sediment basin; replacement of the existing fish screen with a screen that meets National Oceanic and Atmospheric Administration guidelines; flaring the dam's apron to ensure safer passage for fish cresting the spillway; installation of a sluice gate on a 12-inch diameter bypass pipe; installation of a staff gage adjacent to the diversion facility to measure streamflow; and construction of security fencing around these facilities. The applicant also proposes to rehabilitate the deteriorating concrete dam crest and modify its configuration to prevent flood damage to the new fishway structure. Modifications include reducing the dam crest width from 70 feet to 65 feet, which will in turn increase the 100-year base flood elevation at the diversion by approximately 1.3 feet. The upper 6 to 10 inches of the diversion crest will be sawcut, removed, and replaced at approximately the same elevation. The existing concrete floodwall on the west bank of the creek will be elevated by approximately two feet to adjust for the new base flood elevation.

The fish passage component of the proposed project entails removal of the existing Alaskan steep-pass fishway and construction of a concrete step-and-pool fishway designed for salmonids, stream type, and dam elevation. The existing fishway currently provides the only passage across the dam for both adult and juvenile salmonids. Steep-pass fishways provide poor passage for adult salmonids. The proposed fishway was designed in consultation with California Department of Fish and Game staff and will allow for fish passage during at least 90 percent of flow conditions, including both high and low flows. Construction of the new fishway structure will require excavation of

approximately 575 square feet of streambed and streambank for the footprint of the new structure.

In addition to the proposed work on the dam and construction of the fishway, the applicant proposes to stabilize the eroded streambank located immediately downstream of the dam. Approximately 40 cubic yards of rock riprap will be placed along 30 linear feet of the right streambank. A 4-foot deep, 6-foot wide, and 30-foot long toe-trench will be excavated along the base of the eroded slope to provide greater stability for the rock riprap during high flows. Bioengineered bank stabilization techniques were considered but not incorporated into the proposed design because the energy associated with anticipated flows over the dam crest and the potential for additional bank scour were determined to be too large for a bioengineered bank stabilization structure.

Eight trees greater than 6-inches diameter at breast height (dbh) will be removed along the stream's left bank for installation of the fishway. Once cleared of vegetation, the area will be used as a temporary access route to the creek channel. An excavator will be walked across the creek at low flows (between August 1 and November 15) to a temporary work area located adjacent to the eroded streambank. Prior to excavating the toe-trench and placement of the rock riprap, a sediment barrier will be installed around the temporary work area to minimize potential impacts to water quality. After the toe-trench has been excavated and the riprap is placed, the sediment barrier will be removed and the excavator will be walked back across the creek and out of the stream channel. A second sediment barrier will then be installed adjacent to the proposed fishway and the footprint for the fishway, fish screen, and sediment basin will be excavated. Following construction of those facilities, the sediment barrier will be removed downstream of the dam and identical water quality control measures will be established upstream of the dam. The excavator will re-enter the stream channel upstream of the dam to re-establish the upstream pool. Due to the amount of gravel, cobble and rock that has accumulated behind the dam over many years, an approximately 60-foot by 35-foot area will be excavated to a depth of three feet, resulting in the removal of approximately 220 yards of material. After the pool has been established and the excavator and sediment barrier are removed from the stream channel, work on the diversion intake and floodwall structures will be completed. Flows will be temporarily diverted through the newly constructed intake and fishway so that work on the crest of the dam can be completed. Upon completion, the diversion will be removed and revegetation of the site will occur.

Proposed streambank stabilization and fishway construction activities will result in permanent impacts to 1175 square feet (0.03 acre) and 70 linear feet of streambank. Proposed temporary stream diversion activities and streambed excavation activities upstream of the dam will result in temporary impacts to approximately 2,100 square feet (0.05 acre) and 30 linear feet of streambed. Compensatory mitigation for impacts to riparian vegetation is required. Revegetation of the site will occur at a ratio of three native tree specimens planted for each tree removed that is over 6-inches dbh. Noncompensatory mitigation includes the use of best management practices for

sediment and turbidity control, for use of concrete in a stream channel, and for operation of heavy equipment in a stream channel.

The applicant has applied for authorization from the United States Army Corps of Engineers to perform the project under Nationwide Permit No. 3 (File No. 400412), pursuant to Clean Water Act, section 404. The Applicant has also applied to the California Department of Fish and Game for a Lake or Streambed Alteration Agreement. On September 4, 2007, the City of Etna approved a mitigated negative declaration (SCH No. 2007072134) for the proposed project in order to comply with CEQA. The Regional Water Board has considered the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The proposed project is scheduled for construction between August 1, 2009 and November 15, 2009, and is expected to take 76 working days to complete.

The information contained in this public notice is only a summary of the applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed project including maps and design drawings. The application and Regional Water Board file are available for public review.

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 comments submitted in writing and received at this office by mail during a 21-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions, please contact staff member Dean Prat at (707) 576-2801 within 21 days of the posting of this notice.