

July 9, 2010

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

USFWS, Humboldt Bay National Wildlife Refuge – Salmon Creek Estuary Enhancement
Phase II
WDID No. 1B10009WNHU

Humboldt County

On February 3, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Eric Nelson (applicant), refuge manager at the U.S. Fish and Wildlife Service's (USFWS) Humboldt Bay National Wildlife Refuge (HBNWR), requesting Federal Clean Water Act, section 401, water quality certification for proposed activities associated with the Salmon Creek Estuary Enhancement Project Phase II (project). The proposed project will cause disturbances to waters of the United States associated with Humboldt Bay in the Eureka Plain Hydrologic Unit No. 110.00.

The primary purpose of the proposed project is to increase and enhance estuarine and tidal environments in the Salmon Creek Unit of the HBNWR which includes Salmon Creek, Cattail Creek, and Long Pond. Phase I of this multi-phase project was constructed in 2006 and 2007. Phase I increased Salmon Creek's tidal prism, tidal connectivity, and tidal influence by replacing tide gate structures, constructing a new tide gate structure in the Salmon Creek overflow area, excavating an upstream channel nick point, and reconnecting several off-channel ponds to the Salmon Creek channel.

Proposed Phase II activities include realignment of the Salmon Creek channel, restoration of salt marsh habitat, construction of several new stream channels and off-channel ponds to create additional fish rearing habitat, and a stream channel connection with Cattail Creek will be established to further expand the network of channels and estuarine area in lower Salmon Creek. Phase II activities will increase estuarine habitat by creating 4,605 linear feet of new channels and enhancing approximately 5,300 linear feet of existing tidal channels to augment Salmon Creek's artificial drainage system of channelized ditches. The proposed network of tidally influenced channels and off-channel ponds is intended to increase aquatic habitat diversity, as well as establish a suite of vegetative cover types ranging from salt marsh to submergent-emergent aquatic and riparian vegetation.

Diked former tidelands within an existing overflow area were previously reconnected to Hookton Slough with installation of the new tide gate during Phase I. The overflow area will continue to be enhanced during Phase II by raising the surface elevation of approximately 14 acres of subsided land within the overflow area in order to enhance the areas ability to support salt marsh vegetation. Approximately 80 percent of the earthen material excavated during Phase II activities will be used to raise the elevation in the overflow area and for construction of a low elevation levee along Cattail Creek that is designed to prevent Salmon Creek's floodplain flows from being captured by Cattail Creek. The remaining excavated materials will be used for maintenance and repair of the HBNWR's existing perimeter dikes. Proposed Phase II activities have been separated into eight discrete activity areas including six stream reaches, a

backwater channel, and the overflow area. Channel construction work will begin at the downstream end of Reach 6 and progress in the upstream direction to Reach 1.

Construction of Phase II will result in direct impacts to Salmon Creek at three locations for the purpose of habitat restoration. Riparian vegetation will be cleared along a 300 linear foot section of streambank that will be excavated in order to widen the stream channel so that it can accommodate a larger tidal prism. The existing Salmon Creek channel will be blocked off at the upstream end of the channel and flows will be routed into the newly constructed channel. The downstream end of the existing Salmon Creek channel will stay connected to the downstream tidal channels. An existing drainage ditch that is connected to lower Salmon Creek that completely drains on the ebbing tide will be temporarily blocked off to facilitate excavation in dry conditions. This drainage ditch will eventually become the downstream outlet of the new Salmon Creek channel. All other proposed pond and channel excavation and grading activities will occur in dry pastures that have been classified as seasonal freshwater wetlands based on their location within the coastal zone. Phase II activities also include the removal of invasive *Spartina* vegetation, excavation of interior levees, construction of rock grade-control structures in portions of the constructed stream channel, installation of large wood structures in streams and ponds for habitat, installation of wood-willow revetment along a section of streambank, and replanting riparian and wetland vegetation throughout the disturbed project areas.

Two tide gates that control tide water access into Salmon Creek will be closed during construction of Phase II to facilitate excavation in drier conditions. Ongoing fish presence monitoring in lower Salmon Creek by the USFWS and the California Department of Fish and Game (CDFG) has documented that due to high salinity and low dissolved oxygen, salmonids do not occupy the lower Salmon Creek during the summer low flow period. Therefore, implementation of Phase II is not likely to adversely impact listed salmonid species as they are not expected to be present.

The proposed project will result in temporary impacts to 1,300 linear feet and 0.121 acre of streambank and channel, and 14 acres of existing mudflat in the overflow area that will be enhanced by raising the area to an elevation suitable for sustaining salt marsh vegetation. The proposed project will permanently impact 2.05 acres of riparian vegetation for the purpose of widening existing stream channels and creating new stream channels. All appropriate streambank areas, floodplain areas, and a new 0.9 acre floodplain containment levee structure along Cattail Creek will be revegetated with a variety of riparian species including alder, cottonwood, Sitka spruce, willows, and understory vegetation. Approximately 6.06 acres of existing seasonal wetlands, consisting of pasture in diked former tidelands, will be permanently impacted for the purpose of creating approximately 3,605 linear feet (3.06 acres) of new stream channels, and creating approximately 3 acres of ponds to provide additional off-channel habitat. Approximately 0.26 acre of seasonal wetlands will also be created by removing an existing levee to the elevation of the adjacent seasonal wetlands.

The applicant has applied for authorization from the ACOE to perform the project under Nationwide Permit Nos. 3, 27, and 33, pursuant to Clean Water Act, section 404. The

applicant has also applied to CDFG for a Lake or Streambed Alteration Agreement. The CDFG has prepared a Draft Initial Study and Mitigated Negative Declaration (SCH No. 2010062030) for the project in order to comply with CEQA. The public review period for the Draft Initial Study and Mitigated Negative Declaration ends on July 8, 2010. The Regional Water Board has considered the draft 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 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 activities including maps and detailed 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.