

August 10, 2012

**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 III Cattail Creek
WDID No. 1B12130WNHU

Humboldt County

On July 12, 2012, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Mr. Eric Nelson (applicant), refuge manager at the U.S. Fish and Wildlife Service's (USFWS) Humboldt Bay National Wildlife Refuge (Refuge), requesting Federal Clean Water Act, section 401, water quality certification for proposed activities associated with the Salmon Creek Estuary Enhancement Phase III Cattail Creek Project (project). The proposed project will cause disturbances to waters of the United States associated with seasonal wetlands, Cattail Creek, and Long Pond in the Eureka Plain Hydrologic Unit No. 110.00.

Phase I of the multi-phase Salmon Creek Estuary Enhancement 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 knick point, and reconnecting several off-channel ponds to the Salmon Creek channel. Phase II construction began in 2011 and will be completed in 2012. Phase II included realignment of a previously straightened section of the Salmon Creek channel, restoration of salt marsh habitat, construction of new stream channels and off-channel ponds to create additional fish rearing habitat, and an interconnecting stream channel between Salmon Creek and a water control structure (Middle Diversion) on Cattail Creek was constructed to facilitate movement of overwintering juvenile salmonids between these channels.

Salmon Creek is the largest freshwater inflow to the Refuge that drains to Hookton Slough. Cattail Creek is another freshwater inflow source that flows to Long Pond and eventually to Hookton Slough. In addition to flows originating in its upper watershed, Cattail Creek intercepts overland flood waters from Salmon Creek. The primary purpose of Phase III is to increase and enhance the estuarine, palustrine, and riverine environments in Cattail Creek and Long Pond. The proposed project will create 5,060 linear feet of new stream channel and 7.05 acres of stream and floodplain habitats. The proposed project will also enhance 650 linear feet of stream channel and 0.27 acre of stream and floodplain habitats. Phase III habitat enhancement goals are to: 1) improve aquatic habitat by increasing channel complexity and diversity of wetland vegetation; 2) create winter-rearing habitat for juvenile salmonids; 3) improve water quality in Cattail Creek; and, 4) improve habitat for migratory water birds.

The upper Cattail Creek project area consists of a trapezoidal channel beginning near Ranch Road and extending downstream to the Middle Diversion structure that is used to divert flow into a diversion channel and wetlands to the north or through lower Cattail Creek to wetlands and Long Pond to the west. The lower Cattail Creek project area also begins in the trapezoidal ditch beginning near Middle Diversion and then follows a

historical channel to Long Pond, a historical tidal slough that is diked off from Hookton Slough. At Hookton Slough there is a tide gate and diversion channel to convey winter flows from Long Pond to wetlands to the north. The tide gate leaks and creates a brackish water environment in Long Pond and lower Cattail Creek. The Refuge artificially maintains water levels in Cattail Creek and manages wetland areas through the manipulation of flash boards in water control structures at Long Pond and Middle Diversion.

Proposed activities to enhance upper Cattail Creek consist of realignment of the existing trapezoidal channel into 1,234 linear feet of new channel excavated in existing seasonal freshwater emergent wetlands consisting of pasture in diked former tidelands. The new channel will follow a meandering alignment with an undulating bottom profile. The new channel will contain a pilot channel designed to remain flooded at all times and variable width floodplain benches. An in-line pond will be constructed at the location of an existing wet depression. Wood structures consisting of sections of whole trees will be placed in the channel to create habitat complexity. Material excavated during channel realignment will be used to construct two ditch plugs to block portions of the existing channel where the new alignment leaves and returns to the existing channel. A connecting channel will be constructed from the realigned channel to the undisturbed central portion of the existing channel to provide additional off-channel refuge for juvenile salmonids during major storm flows. Surplus materials not used in ditch plugs will be used for maintenance and repair of levees along the bay-front side of the Refuge.

Proposed activities to enhance lower Cattail Creek consist of realignment of the existing trapezoidal channel into 4,356 linear feet of new channel that will follow a meandering alignment with an undulating bottom profile. The new channel will begin downstream of Middle Diversion and extend north where it enters a historical channel occupied by seasonal wetlands. Two existing off-channel seasonal wetland areas will be excavated and connected to the new channel to provide off-channel rearing and water bird habitat during the winter. The new channel will contain a pilot channel designed to remain flooded at all times and variable width floodplain benches. Wood structures will be placed in the channel to create habitat complexity. The new channel will re-enter the existing Cattail Creek channel and traverse along the existing channel for several hundred feet. The new channel will then turn north and eventually connect to a different existing channel that flows into Long Pond through a water control structure at the eastern end of Long Pond. Large sections of the existing Cattail Creek channel will remain intact and provide additional seasonal off-channel habitat through the connections with the new channel. Material excavated during channel realignment will be used to construct two ditch plugs to block portions of the existing channel and a guide berm on the west side of the realigned channel to separate Cattail Creek from the brackish water areas to the west, and to direct flood flows into the east end of Long Pond. Surplus materials not used in ditch plugs or the guide berm will be used on the Refuge for maintenance and repair of levees along the bay-front side of the Refuge.

The proposed project will result in temporary impacts to 650 linear feet and 0.27 acre of existing streambank and channel, and 7.55 acres of seasonal wetlands consisting of pasture in diked former tidelands. The proposed project will permanently impact 2,240 linear feet and 1.12 acre of existing streambank and channel, 0.73 acre of riparian

habitat, and 1.08 acres of seasonal wetlands in diked former tidelands. The proposed project is mostly self-mitigating as most activities are designed to increase and enhance the estuarine, palustrine, and riverine habitats of Cattail Creek and Long Pond. Phase III activities will create 5,060 linear feet and 7.05 acres of new riverine habitat, enhance 650 linear feet and 0.27 acre of existing riverine habitat, and enhance 0.68 acres of freshwater emergent wetland/pond habitat. A 0.73 acre area located south of Cattail Creek and north of Salmon Creek will be planted with riparian forest and shrub species.

The applicant has applied for authorization from the ACOE to perform the project under Individual Permit, pursuant to Clean Water Act, section 404. The applicant has also applied to California Department of Fish and Game (CDFG) for a Lake or Streambed Alteration Agreement amendment (1600-2010-0139-R1). On July 9, 2010, CDFG approved a Mitigated Negative Declaration (SCH No. 2010062030) for the 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. CDFG is preparing an addendum to the Mitigated Negative Declaration and the Regional Water Board will consider their addendum prior to making a decision on the project.

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.