

February 22, 2011

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

City of Eureka – PALCO Marsh Enhancement Project, Phase 1A
WDID No. 1B09113WNHU

Humboldt County

On December 30, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the City of Eureka (applicant), requesting Federal Clean Water Act, section 401, water quality certification for proposed restoration and enhancement activities within Palco Marsh. The proposed project will cause disturbances to waters of the United States associated with wetlands in the Eureka Plain Hydrologic Unit No. 110.00.

The proposed project involves implementation of the *Palco Marsh Enhancement Plan – Phase 1A Work Plan* (workplan). This workplan includes additional tasks that were not completed as part of Phase 1, tasks that were identified from the Phase 1 final monitoring report, and new enhancement tasks. All proposed project components are intended to enhance the hydrological and biological functions of Palco Marsh pursuant to the Palco Marsh Enhancement Plan.

The proposed project includes several components that will result in increased tidal exchange between Humboldt Bay and Palco Marsh (marsh) as well as increasing the tidal prism within the marsh. Additional project components are directed towards the removal of non-native invasive vegetation while increasing the extent and diversity of native vegetation and providing vegetative buffers to the marsh. These project elements are intended to improve salt marsh, brackish marsh, and freshwater marsh habitats within the marsh to increase wildlife use and diversity.

A significant component of the proposed project that is intended to improve the tidal exchange between Humboldt Bay and the marsh involves replacing an approximately 120-foot long and 24-inch diameter collapsing culvert that connects the marsh to the bay. The existing culvert will be removed and replaced with a new 148-foot long and 48-inch diameter culvert in approximately the same alignment. The new culvert will be connected with a new junction box to two existing 18-inch diameter culverts located under the pathway along Palco Marsh. The new culvert will include a new drainage inlet in an area that is currently an open water exchange area so that surface water can continue to enter this drainage system. A headwall and splash pad will be constructed at the outfall to Humboldt Bay. The existing wooden debris screen located near the existing outfall will also be removed and large rocks that have passed through the culvert will be removed from the mud flat in the vicinity of the culvert outfall. Tidal flows into and out of the marsh through this culvert will be interrupted for up to one week during construction activities.

Aggraded bay mud is currently blocking flows through the collapsing culvert and the existing mud would also block the new culvert that will be set approximately 2 feet lower in elevation than the existing culvert. Approximately 6 cubic yards of aggraded bay mud will be excavated to improve flows through the new culvert. The excavation will be approximately 2-feet wide and extend approximately 30 linear feet west from the west end of the culvert to create a small channel that will direct flows into and out of the new

culvert. The depth of the mud to be removed is approximately 4 feet at the western end of the culvert and decreases to approximately 2 feet deep near the tidal channel.

Under previous and separate authorization in 2009, a small section of new channel was hand dug from the Del Norte Street Drainage structure easterly to a section of existing channel that leads to a ponded area of the marsh at the corner of Del Norte Street and Felt Street. The purpose of the new channel is to improve circulation and water quality in the ponded area. An existing channel that runs southerly from the Del Norte Street drainage structure has also become clogged with vegetation that may need to be cleaned out of the channel periodically to maintain water circulation. The proposed project includes future maintenance activities intended to keep the Palco Marsh channels open for water circulation.

Common reed (*Phragmites australis*) is one of several invasive exotic plants that occur in the marsh. The proposed project includes activities to eradicate invasive exotic plants. The first step in the common reed eradication process is burning the plant in place during the winter months after the plant has finished storing its energy reserves in the rhizomes. Burning removes the above ground biomass and seed which facilitates more efficient herbicide application to the new growth during the following growing season. Herbicide will be applied during the growing season following the initial burn. A glyphosate herbicide licensed for use in aquatic environments will be used. Subsequent herbicide treatments will be required and it is anticipated that it will take several years to eradicate common reed. A dense planting of native wetland species will be done once the reed is eradicated.

There is also a substantial amount of other invasive exotic plants in the marsh area including but not limited to pampas grass, Himalaya berry, English ivy, Scotch broom and French broom. Removal of invasive plants is proposed in the area roughly bordered by Del Norte Street on the north, Humboldt Bay on the west, Palco Marsh on the east, and the southerly tip of Railroad Marsh on the south. Initial treatment using herbicide is proposed in order to get the problem under control. Although an herbicide licensed for use in aquatic environments is not required in most of the areas where these other exotic species occur it may be necessary in some areas due to the scope of the initial area of application. Therefore, the same glyphosate herbicide used on the common reed is proposed for use on the other exotic species during the initial control application.

The existing Del Norte Street drainage structure consists of a concrete junction box that connects five culverts. Three of the culverts are located under the railroad tracks and they connect to the tidal channel between the railroad and peninsula. A fourth culvert is located under Del Norte Street and the fifth culvert is a short section that connects the junction box to Palco Marsh. The existing tide gate on the Del Norte Street culvert prevents tidal flows from entering the Del Norte Street storm drain. That tide gate may be dysfunctional and it will be replaced if necessary. The existing tide gate on the culvert leading into the Palco Marsh is missing or not functioning properly. That tide gate will be removed if it is still in place. The Del Norte Street drainage structure will also be modified by removal of the existing unsightly fencing and installation of a less obtrusive lid type barrier. In addition, accumulated silt within the junction box will be removed by a backhoe working from the adjacent utility road.

Phase 1A activities include a dredging component to remove accumulated silt from the tidal slough channel located between Palco Marsh and the peninsula west of the marsh that restricts water from flowing into and out of the marsh. This dredging activity was

completed in 2009 under separate authorization. Additional maintenance dredging of the tidal slough may be carried out as necessary in the future.

Proposed culvert replacement activities will result in 120 linear feet and 480 square feet of temporary impacts and 20 linear feet and 80 square feet of permanent impacts to the existing culverted tidal drainage. Future channel maintenance activities will result in temporary impacts to 5,000 square feet and 1,000 linear feet of tidal channel in the marsh. Installation of the new culvert junction box will result in 30 square feet of permanent impact to wetlands. All proposed activities and associated impacts are for the purpose of wetland enhancement. Compensatory mitigation is not required.

The applicant has obtained authorization from the U.S. Army Corps of Engineers to perform the project under Nationwide Permit No. 27, pursuant to Clean Water Act, section 404. The applicant has also obtained a Coastal Development Permit. A Lake or Streambed Alteration Agreement from the California Department of Fish and Game is not required for this project.

On September 7, 2004, the City of Eureka approved a Mitigated Negative Declaration (SCH No. 2004082028) 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. Mitigation measures to avoid and minimize impacts to biological resources include avoidance of sensitive plant species, washing of heavy equipment prior to use within wetlands and prior to leaving the site if equipment was used in an area containing invasive plants; and, relocation of fish by a qualified biologist when there is a potential for fish to be present. Mitigation measures to avoid and minimize impacts to water quality include implementation of Best Management Practices for erosion and turbidity control, and for operation of heavy equipment in wetlands. The proposed project also includes monitoring, maintenance, and management activities that include botanical and hydrologic monitoring; monitoring and treatment of invasive exotic plants; repair, maintenance, or replacement of existing drainage structures; and, monitoring and cleanup of garbage.

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.