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**California Regional Water Quality Control Board  
North Coast Region  
Geoffrey M. Hales, Chairman**

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Edmund G. Brown, Jr.,  
Governor

April 5, 2011

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In the Matter of  
**Water Quality Certification**

for the

**CITY OF EUREKA – PALCO MARSH ENHANCEMENT PROJECT, PHASE 1A  
WDID No. 1B09113WNHU**

APPLICANT: City of Eureka  
RECEIVING WATER: Wetlands  
HYDROLOGIC AREA: Eureka Plain Hydrologic Unit No. 110.00  
COUNTY: Humboldt  
FILE NAME: Eureka, City of – PALCO Marsh Enhancement Project  
Phase 1A

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BY THE EXECUTIVE OFFICER:

1. On December 30, 2010, the City of Eureka (Applicant) filed an application for water quality certification (certification) under section 401 of the Clean Water Act (33 U.S.C. § 1341) with the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) for restoration and enhancement activities within Palco Marsh. The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on February 22, 2011, and posted information describing the project on the Regional Water Board's website. We did not receive any public comments on this project.
2. The 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 project components are intended to enhance the hydrological and biological functions of Palco Marsh pursuant to the Palco Marsh Enhancement Plan.

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3. The 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.
4. A significant component of the 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 the 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.
5. 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 area 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.
6. 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 project includes future maintenance activities intended to keep the Palco Marsh channels open for water circulation.

7. Common reed (*Phragmites australis*) is one of several invasive exotic plants that occur in the marsh. The 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.
8. 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 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 necessary 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 will be used on the other exotic species during the initial control application.
9. 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.
10. Phase 1A activities include a maintenance excavation 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 activity was completed in 2009 under separate authorization. Additional excavation may be carried out as necessary in the future to maintain channel depth consistent with existing culverts at the top and bottom of the tidal slough.

11. 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 activities and associated impacts are for the purpose of wetland enhancement. Compensatory mitigation is not required.
12. 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.
13. 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 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 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.
14. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. This Order is consistent with applicable federal and state antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this project.

15. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this water quality certification.

Receiving Waters: Wetlands in the Eureka Plain Hydrologic Unit No. 110.00

Filled or Excavated Area: Area Temporarily Impacted: 480 square feet of existing culverted tidal channel and 5,000 square feet of tidal channel  
Area Permanently Impacted: 80 square feet of existing culverted tidal channel and 30 square feet of wetlands

Total Linear Impacts: Length Temporarily Impacted: 120 linear feet of existing culverted tidal channel and 1,000 linear feet of tidal channel  
Length Permanently Impacted: 20 linear feet of existing culverted tidal channel

Dredge Volume: None

Latitude/Longitude: 40.78863 N/124.18468 W

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the City of Eureka – Palco Marsh Enhancement Project, Phase 1A (WDID No.1B09113WNHU), as described in the application, will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

**All conditions of this order apply to the Applicant (and all their employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the project (including the off-site mitigation lands) as related to this Water Quality Certification.**

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, section 3867.
2. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application

specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, section 2200, and owed by the Applicant.
4. The Regional Water Board shall be notified at least five working days (working days are Monday – Friday) prior to the commencement of ground disturbing activities, with details regarding the construction schedule, in order to allow staff to be present onsite during construction, and to answer any public inquiries that may arise regarding the project.
5. No debris, soil, silt, sand, bark, slash, sawdust, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this Order, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State. When operations are completed, any excess material or debris shall be removed from the work area.
6. Best Management Practices (BMPs) for sediment and turbidity control shall be implemented and in place at commencement of, during and after any project activities that could result in sediment discharges to surface water.
7. The Applicant shall prioritize the use of wildlife-friendly biodegradable (not photo-degradable) erosion control products wherever feasible. The Applicant shall not use or allow the use of erosion control products that contain synthetic materials within waters of the United States or waters of the State at any time. The Applicant shall not use or allow the use of erosion control products that contain synthetic netting for permanent erosion control (i.e. erosion control materials to be left in place for two years or after the completion date of the project). If the Applicant finds that erosion control netting or products have entrapped or harmed wildlife, personnel shall remove the netting or product and replace it with wildlife-friendly biodegradable products. The Applicant shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.
8. All activities and BMPs shall be implemented according to the submitted application and the conditions in this certification.
9. A copy of this Order and the application documents submitted by the Applicant for this certification shall be provided to all contractors and subcontractors conducting the work, and shall be in their possession at the work site.
10. The Applicant shall implement the Mitigation Measures for Biological Resources and Hydrology/Water Quality as described in the Initial Study/Mitigated Negative Declaration (SCH No. 2004082028). All annual monitoring reports and the final

monitoring report shall be provided to the Regional Water Board no later than three months after project completion.

11. All project work shall be conducted as described in this Order and in the application submitted by the Applicant. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and the Applicant may be subject to Regional Water Board enforcement actions.
12. Prior to implementing any change to the project that may have a significant or material effect on the findings, conclusions, or conditions of this Order, the Applicant shall obtain the written approval of the Regional Water Board Executive Officer.
13. If, at any time, an unauthorized discharge to surface water (including wetlands, rivers or streams) occurs, or any water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
14. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted and approved pursuant to the Porter-Cologne Water Quality Control Act or Section 303 of the Clean Water Act.
15. The Applicant shall provide Regional Water Board staff access to the project site to document compliance with this certification.
16. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable State or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the Regional Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
17. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the

existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board at the above address.

To discharge dredged or fill material under this Order, the successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, and the address and telephone number of the person(s) responsible for contact with the Regional Water Board. The request must also describe any changes to the project proposed by the successor-in-interest or confirm that the successor-in-interest intends to implement the project as described in this Order.

18. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's project description, and b) compliance with all applicable requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan).
19. The authorization of this certification for any dredge and fill activities expires on April 5, 2016. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

If you have any questions or comments please call Dean Prat at (707) 576-2801.

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Catherine Kuhlman  
Executive Officer

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Weblink: State Water Resources Control Board Order No. 2003-0017 -DWQ, General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification can be found at:  
[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

Original sent to: Ms. Lisa Shikany, City of Eureka, 531 K Street, Eureka, CA 95501-1146

Electronic  
Copy to: U.S. Army Corps of Engineers, District Engineer, 601 Startare Drive, Box 14, Eureka, CA 95501  
Ms. Jane Hicks, U.S. Army Corps., Regulatory Functions, 1455 Market Street, San Francisco, CA 94103-1398

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