



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



**Linda S. Adams**  
Secretary for  
Environmental Protection

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**Arnold  
Schwarzenegger**  
Governor

August 4, 2010

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In the Matter of

**Water Quality Certification**

for the

**USFWS – HUMBOLDT BAY NATIONAL WILDLIFE REFUGE, SALMON CREEK  
ESTUARY ENHANCEMENT, PHASE II  
WDID No. 1B10009WNHU**

APPLICANT: Eric Nelson, U.S. Fish and Wildlife Service  
RECEIVING WATER: Salmon Creek, Cattail Creek, Long Pond, and wetlands  
HYDROLOGIC UNIT: Eureka Plain Hydrologic Unit No. 110.00  
COUNTY: Humboldt  
FILE NAME: USFWS – Humboldt Bay National Wildlife Refuge, Salmon  
Creek Estuary Enhancement, Phase II

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BY THE EXECUTIVE OFFICER:

1. On February 3, 2010, the U.S. Fish and Wildlife Service, Humboldt Bay National Wildlife Refuge (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 activities associated with the Salmon Creek Estuary Enhancement Project Phase II (project). The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on July 9, 2010, 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 primary purpose of the project is to increase and enhance estuarine and tidal environments in the Salmon Creek Unit of the Humboldt Bay National Wildlife Refuge (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.

**California Environmental Protection Agency**

*Recycled Paper*

3. 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 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.
4. 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. 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.
5. 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 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.

6. 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.
7. The 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 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.
8. 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.
9. On July 9, 2010, the 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.
10. 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.

11. 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 Water: Salmon Creek, Cattail Creek, Long Pond, and wetlands in the Eureka Plain Hydrologic Unit No. 110.00

Filled or Excavated Area: Area Temporarily Impacted: 0.121 acre of streambank and channel, and 14 acres of mudflat  
Area Permanently Impacted: 6.06 acres of seasonal wetlands consisting of pasture in diked former tidelands

Total Linear Impacts: Length Temporarily Impacted: 1,300 linear feet of streambank and channel, and 2.05 acres of riparian corridor  
Length Permanently Impacted: None

Created Stream Channel: Area Created: 3.06 acres of new stream channel  
Length Created: 3,605 linear feet of new stream channel

Created/Enhanced Wetland Areas: 3 acres of ponds will be created, 14 acres of mudflat will be enhanced to increase salt marsh habitat, and 0.26 acres of seasonal wetlands will be restored by removing an existing levee

Dredge Volume: None

Latitude/Longitude: 40.67693 N/124.20598 W

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the USFWS – HBNWR, Salmon Creek Estuary Enhancement Phase II (WDID No. 1B10009WNHU), 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:

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. All activities and BMPs shall be implemented according to the submitted application and the conditions in this certification.
8. 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.
9. The Applicant shall implement the Mitigation Measures for Biological Resources and Hydrology/Water Quality as described in the Initial Study/Mitigated Negative Declaration.
10. The Applicant shall implement the Department of Fish and Game Mitigation Monitoring and Reporting Program submitted June 10, 2010 and shall submit copies of all Status Reports and the Final Mitigation Report to the Regional Water Board.
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 August 4, 2015. 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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Original to: Mr. Eric Nelson, P.O. Box 756, Loleta, CA 95551

cc: Mr. Aldaron Laird, Trinity Associates, 980 7<sup>th</sup> Street, Arcata, CA 95521

Electronic

Copies to: U.S. Army Corps of Engineers, District Engineer, 601 Startare Drive, Box 14, Eureka, CA 95501

Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 1455 Market Street, San Francisco, CA 94103-1398