



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

July 9, 2008

REGISTERED MAIL
RB 252 945 678 US

The Department of Interior
United States Fish and Wildlife Service
Nisqually National Wildlife Refuge Complex
ATTN: Jean Takekawa
100 Brown Farm Road
Olympia, WA 98516

RE: Water Quality Certification Order No. **5707** for the Nisqually National Wildlife
Refuge Estuary Restoration, Thurston County, Washington.

Dear Ms. Takekawa:

On February 25, 2008, the Department of Interior, United States Fish and Wildlife Service, Nisqually National Wildlife Refuge Complex submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Nisqually National Wildlife Refuge Estuary Restoration project. The project proposes the restoration of approximately 762 acres of Puget Sound estuarine habitat and 37 acres of riparian surge plain habitat, enhancement of 246 acres of freshwater wetlands, reconnection of approximately 21.4 miles of the Nisqually River and 3 miles of McAllister Creek with adjacent floodplain wetlands within the Nisqually National Wildlife Refuge in Thurston County, Washington. Project construction will be sequenced over 3-4 years. The Department of Ecology issued a Public Notice for the proposed project on May 28, 2008.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.



If you have any questions, please contact Lori Ochoa at (360) 407-6926. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Paula Ehlers, Section Manager
Southwest Regional Office
Shorelands and Environmental Assistance Program

PE:LO:dn
Enclosure

cc: Koko Ekendiz, Corps of Engineers
Florian Leischner, Nisqually Indian Tribe
Cindy Wilson, Thurston County
Margie Schirato, WDFW
WSDOT
WADNR

e-cc: Loree' Randall, Ecology/HQ
Brad Murphy, Ecology/SWRO SEA
Deb Cornett, Ecology/SWRO WQ
Kevin Farrell, Ecology/SWRO SEA
Lori Ochoa, Ecology/SWRO SEA

IN THE MATTER OF GRANTING A) ORDER # 5707
WATER QUALITY)
CERTIFICATION TO) Nisqually National Wildlife Refuge Estuary
The Department of Interior) Restoration, Thurston County, Washington.
United States Fish and Wildlife Service)
Nisqually National Wildlife Refuge)
Complex)
in accordance with 33 U.S.C. 1341)
(FWPCA § 401), RCW 90.48.120, RCW)
90.48.260 and Chapter 173-201A WAC)

TO: The Department of Interior
United States Fish and Wildlife Service
Nisqually National Wildlife Refuge Complex
ATTN: Jean Takekawa
100 Brown Farm Road
Olympia, WA 98516

On February 25, 2008, the Department of Interior, United States Fish and Wildlife Service submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification for the Nisqually National Wildlife Refuge Estuary Restoration project. A public notice regarding the request was distributed by Ecology for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on May 28, 2008.

The proposed project will take place within the Nisqually National Wildlife Refuge (NNWR) in McAllister Creek, the Nisqually River, and Puget Sound at 100 Brown Farm Road, Olympia, Thurston County, Washington 98516; Sections 31 & 32, 6 & 38, Townships 19 North and 1 North, Range 1 East; WRIA 11, Nisqually Watershed.

The proposed work includes restoration of 762 acres of estuary and 37 acres of surge plain riparian habitat, enhancement of 246 acres of freshwater wetlands, reconnection of approximately 21.4 miles of estuarine slough systems currently within the dike, and reconnection of approximately 2.3 miles of the Nisqually River and 3 miles of McAllister Creek with adjacent floodplain wetlands.

The work will be accomplished by constructing a new set-back exterior dike and interior levees for freshwater wetlands and removing to grade the existing exterior dike and using the material to fill the existing borrow ditch. The new exterior levee will measure up to 9700 linear feet using up to 85000 cubic yards of fill and would surround the existing building complex. The exterior dike will be configured at the southern end of the project area to direct future flood water from the Nisqually River into estuary habitat and the McAllister Creek system through a swale. A 48" tidegate will be installed in the north end of the McAllister Creek overflow channel to allow water to continue to drain from I-5 and lands south of I-5. The new interior levee will be constructed measuring up to 5800 linear feet using up to 2300 cubic yards of fill. The two levees

would be constructed using fill obtained from within the refuge and by excavating a 10 acre and a 23 acre area that would then be at a lower elevation than the surrounding wetland thereby creating additional freshwater wetland diversity. The wetlands would remain as seasonal wetland with a slightly different hydroperiod due to the change in elevation.

The Applicant will remove the existing nearly 5-miles of levee that currently surrounds the NNWR. Some areas of rip rap will be removed and large tidal channels will be reconnected to historic sloughs as the exterior dike is taken down.

The existing 5 ½ mile Brown Farm Dike Trail will be replaced with a shorter, reconfigured trail. Part of the new trail will be on top of the new set back dike and part if will be a new elevated boardwalk system supported by concrete forms secured by several pin piles.

Project construction will be sequenced over 3-4 years. Construction of the new exterior dike and removal of some of the existing structures and roads within the proposed estuary restoration area will occur in 2008. In 2009, work will consist primarily of decommissioning the Brown farm Dike and construction of the interior levees. Construction of a boardwalk and observation deck will occur in 2009/2010.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 303, 306, and 307);
2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW, and with other applicable state laws; and,
3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260 Chapter 173-200 WAC and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

A. General Conditions:

1. For purposes of this Order, the term "Applicant" shall mean the Department of interior, United States Fish and Wildlife Service, Nisqually National Wildlife Refuge Complex, and its agents, assignees and contractors.
2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Southwest Regional Office Attn: Federal Permit Coordinator, P.O. Box 47775, Olympia, WA 98504-7775. Any submittals shall reference Order No. **5707**.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on February 25, 2008 and as amended on June 23, 2008. The Applicant will be out of compliance with this Order and must reapply with an updated application if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
4. Within 30 days of receipt of an updated JARPA Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
5. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
6. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
7. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (*e.g.*, violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
8. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.
9. Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars (\$10,000.00) per violation for each day of continuing noncompliance.

B. Water Quality Conditions:

1. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-200(1)(e)(i).
2. Turbidity shall be assessed and recorded at a minimum of every four (4) hours during daylight hours when in-water activities are being conducted. Monitoring points shall be at the point of compliance as specified in WAC 173-201A-200(1)(e)(i), which allows a 300 feet temporary area of mixing downstream from the in-water activities. The Applicant must visually monitor (and photo document) the water for any visual signs of turbidity at the point of compliance.
 - a. For this project, the following is considered to be an exceedance of the water quality turbidity standard:
 - i. If project-related turbidity is visible 300 feet downstream from the in-water activity.
3. If water quality exceedances are observed outside of the point of compliance, work shall cease immediately and the Applicant or the contractor shall assess the cause of the water quality problem and take immediate action to stop, contain, correct the problem and/or prevent further water quality turbidity exceedances. If an exceedance occurs, the Applicant shall follow the protocols and notification procedures below:
 - a. Notification of exceedances that are detected through water quality monitoring shall be made to Ecology within 24 hours of occurrence. Notification shall be made per Condition A2 above. The Applicant shall, at a minimum, provide Ecology with the following information:
 - i. A description of the nature and cause of non-compliance, including the quantity and quality of any unauthorized discharges;
 - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance; and
 - iii. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.
 - iv. In addition, within five (5) days after notification of an exceedance, the Applicant shall submit a written report to Ecology that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, photographs, and any other pertinent information.
4. Mitigation and/or additional monitoring may be required if water quality standards are not met.

C. Timing Requirements:

1. This Order is valid until all compliance requirements in this document have been met.

D. Notification Requirements:

1. The Applicant shall provide written notification (FAX, e-mail or mail) to Ecology's Southwest Regional Office Federal Project Coordinator in accordance with condition A.2 above for the following activities:
 - a. At least three (3) days prior to the pre-construction meeting
 - b. At least three (3) days prior to the onset of any work on site
 - c. At least three (3) days prior to the onset of in-water work, including wetlands
 - d. Immediately following a violation of the state water quality standards or any condition of this Order.
 - e. Within fourteen (14) days after completion of construction.

NOTE: These notifications shall include the Applicant's name, project name, project location, the number of this Order, contact and contact's phone number.

E. Construction Conditions:

General Construction Conditions:

1. Erosion and sediment control devices (Filter or silt fences, etc.) and other BMP's intended to trap sediment on-site shall be in place before starting project construction and shall be maintained throughout construction until the site is stabilized.
2. All work in and near the water shall be done so as to minimize turbidity, erosion, and other water quality impacts.
3. No petroleum products, fresh concrete, lime or concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.
4. All debris or deleterious material resulting from construction shall be properly contained and disposed of at an approved upland location so that it cannot enter waters of the state.
5. All work within the project limits shall be clearly marked/staked prior to construction. Clearing limits, travel corridors and stockpile sites shall be clearly marked. Sensitive areas and buffers that are to be protected from disturbance shall be marked so as to be clearly visible to equipment operators. All project staff shall be trained to recognize construction fencing or flagging that identifies sensitive area boundaries. Equipment shall enter and operate within the marked clearing limits corridors and stockpile areas.
6. All equipment used below the ordinary high water line shall utilize bio-degradable hydraulic fluid.
7. Appropriate Best Management Practices (BMP's) shall be implemented to minimize track-out during construction.
8. Turbid water generated from construction activities, including turbid dewatering water, shall not be discharged directly into waters of the state. Clean dewatering water that has

been tested and confirmed to meet water quality standards may be discharged directly to waters of the state.

9. Turbid water shall be routed to an upland location to allow removal of fine sediment and other contaminants. The discharge outfall method shall be designed and operated so as not to cause erosion or scour in state waters, banks, or vegetation.
10. The Applicant shall have a boat available and on site during in-water activities to retrieve any debris entering the water.

Equipment Staging and Maintenance:

11. Staging area will be located a minimum of 50 feet and, where practical, 200 feet from waters of the state, including wetlands.
12. Machinery and equipment used during construction shall be serviced, fueled, and maintained in a confined area in order to prevent containment to waters of the state. Fueling areas will be provided with adequate spill containment.
13. The Applicant shall establish a separate contained area for washing down vehicles and equipment, which does not have any possibility of draining to surface waters and wetlands. No wash water containing sediments, oils, grease, or other hazardous materials resulting from wash down of the work area, tools, and equipment including concrete delivery trucks or other equipment used for concrete work shall not be discharged into state waters or storm drains.
14. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc. shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into waters of the state.

Outlet Channel Construction, Tidegate Installation and Replacement, and Culvert Installation and Replacement:

15. All new channel construction and culvert work shall be conducted in the dry or in isolation from stream flow by installing a bypass flume or culvert or by pumping the stream flow around the work area. The stream diversion system shall be designed and operated so as not to cause erosion in the stream channel or on the banks of the waterbody in which the work is being conducted.
16. All channel stabilization work and materials shall be in place prior to introducing the stream flow into the new channel.
17. Re-introduction of water into the new channel shall be done gradually and at a rate not higher than the normal stream flow in order to minimize the mobilization of sediments and fines into downstream waters.
18. Culverts shall be installed and maintained to avoid inlet scouring and to prevent erosion of stream banks downstream of the project site.

F. Restoration Monitoring and Reporting:

1. Post-construction monitoring will be conducted as described in the *Nisqually National Wildlife Refuge Estuary Restoration Project Monitoring Framework* Document.

2. The goals of the monitoring program are:
 - a. Implementation Monitoring: Ensure that the project components are constructed as designed and document and deviations from the design.
 - b. Effectiveness Monitoring: Determine if the project objectives are being met.
 - c. Adaptive Management: Provide information critical for adaptive management.
3. Objectives of the post-construction monitoring include:
 - a. Restore estuarine habitat to desired future conditions outlined in the Comprehensive Conservation Plan.
 - b. Protect, restore, and enhance riparian habitat in the Nisqually River delta to provide foraging and breeding habitat for migratory and resident land birds and fish.
 - c. Protect, restore, and enhance a mosaic of freshwater wetlands and grasslands within the new exterior dike as foraging and nesting habitat for migratory and resident bird species, mammals, and native amphibians.
4. Reports generated from project monitoring in each year that monitoring is conducted shall be submitted to Ecology's Southwest Regional Office Federal Project Coordinator in accordance with condition A.2. above.

G. Emergency/Contingency Measures:

1. The Applicant shall develop a spill prevention and containment plan for this project, and shall have spill cleanup materials and an emergency call list available on site.
2. Any work that is out of compliance with the provisions of this Order, or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters, including wetlands, or onto land with a potential for entry into state waters, is prohibited. If these occur, the Applicant or operator shall immediately take the following actions:
 - a. Cease operations that are causing the compliance problem.
 - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
 - c. In the event of finding distressed or dying fish, the applicant shall collect fish specimens and water samples in the affected area within the first hour of the event. These samples shall be held in refrigeration or on ice until the applicant is instructed by Ecology on what to do with them. Ecology may require analyses of these samples before allowing the work to resume.
 - d. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

- e. Immediately notify Ecology's Southwest Regional Spill Response Office at (360) 407-6300 and the Washington State Department of Fish and Wildlife of the nature of the problem, any actions taken to correct the problem, and any proposed changes in operations to prevent further problems.
3. If at any time during work the proponent finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the proponent shall immediately notify Ecology's Southwest Regional Spill Response Office at 360 407-6300.

H. Appeal Process:

You have a right to appeal this Order. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 - 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals Coordinator
PO Box 47608
Olympia, WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

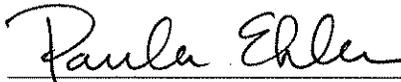
3. And send a copy of your appeal to:

Lori Ochoa
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

*For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>
To find laws and agency rules visit the Washington State Legislature Website:
<http://www1.leg.wa.gov/CodeReviser>*

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Ch. 43.21B RCW.

DATED this 9 day of July, 2008 at Lacey, Washington.



Paula Ehlers, Section Manager
Shorelands and Environmental Assistance Program
Department of Ecology
Southwest Regional Office
State of Washington

