



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 23, 2012

Bobbi Jo McClain
U.S. Army Corps of Engineers
East Marginal Way South
PO Box 3755
Seattle, WA 98124

RE: Water Quality Certification Order #9321 for U.S. Army Corps of Engineers
Reference #PM-ER-12-7, Union Slough Levee Rehabilitation Project, Union
Slough and Snohomish River, Snohomish County, Washington

Dear Ms. McClain:

On May 31, 2012, U.S. Army Corps of Engineers submitted a request to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed Union Slough Levee Rehabilitation project.

On behalf of the State of Washington, Ecology certifies that the work described in the request 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 Rebekah Padgett at (425) 649-7129. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,


Erik Stockdale, Unit Supervisor
Northwest Regional Office
Shorelands and Environmental Assistance Program

ES:rrp:cja

Enclosure

By certified mail: 7011 0470 0003 3720 9794



cc: Jamie Bails, Washington Department of Fish and Wildlife
Laura Arber, Washington Department of Fish and Wildlife
Tammy Olson, Washington Department of Natural Resources
Tom Sibley, NOAA Fisheries
Nancy Brennan-Dubbs, U.S. Fish and Wildlife Service

e-cc: Patricia Lambert – NWRO
Paul Anderson – NWRO
Loree' Randall – HQ
Raman Iyer – NWRO
Randy Middaugh, Snohomish County Randy.Middaugh@co.snohomish.wa.us
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A) ORDER #9321
WATER QUALITY) Corps Reference #PM-ER-12-7
CERTIFICATION TO) Union Slough Levee Rehabilitation Project;
U.S. ARMY CORPS OF ENGINEERS) Union Slough and Snohomish River, Snohomish
in accordance with 33 U.S.C. 1341) County, Washington.
(FWPCA § 401), RCW 90.48.120, RCW)
90.48.260 and Chapter 173-201A WAC)

TO: U.S. Army Corps of Engineers
Attn: Bobbi Jo McClain
East Marginal Way South
PO Box 3755
Seattle, WA 98124

On May 31, 2012, U.S. Army Corps of Engineers (Corps) submitted a request to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification. 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 June 5, 2012.

The levee rehabilitation proposal includes:

- Emergency repairs: Emergency repairs completed in February 2012 included placement of Class II/III riprap on the riverward face along 88 feet, placement of spall rock on the upper portion of the backslope, and reinforcement of approximately 735 feet of the levee top with crushed rock.
- Site 1: Re-slope and work a maximum of 450 feet of levee to achieve a 1.75H:1V slope, place a 12-inch-thick filter blanket of spalls overlain with a 24-inch-thick layer of Class II riprap armor, place topsoil on top of the levee face to achieve a 6-inch-thick layer to be seed with native grass seed mix, plant a willow lift at Mean Higher High Water throughout the repair, remove noxious weeds, and hydroseed disturbed areas with a native seed mix.
- Site 2: The west site is 830 feet long, and the east site is 480 feet, for a total of 1,310 feet. Re-slope the riverward bank to achieve a 1.5H:1V slope with a 14-foot top width for vehicle access, place a 12-inch-thick layer of spall rock as a filter blanket and a 3-foot-thick layer of Class 1 riprap on the face of the levee, place topsoil on top of the levee face to achieve a 6-inch-thick layer to be seeded with native grasses, salvage sedge mats from the riverward bench within the disturbed area during low tide for placement on the levee face at a similar elevation, hydroseed disturbed areas on the levee crown and in staging areas.

Mitigation for 0.72 acre of wetland and intertidal habitat impacts will include using 1.45 acres of mitigation at the City of Everett advanced mitigation site (Smith Island/Union Slough Habitat Restoration Site), as well as on-site willow plantings at Site 1, sedge salvage at Site 2, native grass seeding at both sites above Mean Higher High Water.

The project is located at two sites on Smith Island, near Everett, Snohomish County, Washington, Union Slough and Snohomish River, Sections 4, 9, and 21, T. 29 N., R. 5W., WRIA 7.

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, 302, 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 meet the 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.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

A. General Conditions:

- A1. For purposes of this Order, the term "Applicant" shall mean U.S. Army Corps of Engineers and its agents, assignees and contractors.
- A2. For purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Northwest Regional Office, Attn: 401/CZM Federal Project Manager, 3190 160th Avenue SE, Bellevue, WA 98008-5452. Any submittals shall reference Order #9321 and Corps Reference #PM-ER-12-7.
- A3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on May 31, 2012. 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.
- A4. 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.
- A5. 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.
- A6. 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.
- A7. 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.
- A8. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins at the project or mitigation sites.

- A9. 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.
- A10. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

B. Mitigation Conditions:

- B1. The Applicant shall mitigate wetland impacts as described in § 6d (pages 6-7) and § 7g (page 9) of the May 31, 2012 JARPA submitted by the Applicant, or as modified by this Order, or revised and approved by Ecology. The City of Everett (City) shall withdraw 1.45 acres of intertidal wetland within the City's Smith Island/Union Slough Habitat Restoration Site to compensate for the loss of 0.72 acre of estuarine Category II wetland and intertidal habitat. Willow lifts will be installed at Site 1 and sedge mats will be salvaged and placed at the toe of the levee at Site 2 to hasten the re-establishment of native plant communities.
- B2. The Applicant shall submit any changes to the proposed mitigation in writing to Ecology (see A2) for review and approval before work begins.
- B3. Within 30 days of completion of levee repairs at Site 2, all fill associated with the levee repair, including access roads and staging areas, shall be removed from wetlands and the wetlands restored, unless otherwise approved by Ecology. To ensure proper restoration, the Applicant's wetland professional must supervise wetland fill removal and restoration.
- B4. An As-Built Report documenting the levee rehabilitation at Site 1 and 2 must be prepared when site construction is completed. The Report shall include the following:
- a. Drawings that clearly identify in plan view and cross-section levee rehabilitation as constructed.
 - b. Drawings and a description of any changes to the levee rehabilitation that occurred during construction.

A copy of the As-Built Report for the Union Slough Levee Rehabilitation Sites 1 and 2 shall be sent to Ecology per Condition A2 within 60 days of completing site construction, and in no case later than December 31, 2012.

Implementation

- B5. Unless otherwise approved by Ecology in writing, the Applicant shall complete the withdrawal of mitigation credits before the impacts to wetlands occur.

- B6. Proof of Mitigation Credit Withdrawal: Prior to impacting wetlands, including buffers, associated with the construction of the project, the Applicant shall submit the following to Ecology:
- a. A copy of the credit transaction report listing Ecology Order #9321, the Order issuance date, and the debited credits verifying credit withdrawal from the Smith Island Habitat Restoration Project.
 - b. Documentation that credits applied to the project have been registered, with Ecology Order #9321 and the Order issuance date, at the Snohomish County Auditor's office.
- B7. Until the Applicant has received written notice from Ecology that the mitigation has been fully implemented, the Applicant's obligation under Condition B1 to mitigation for wetland impacts is not met.
- B8. Mitigation Contingency Measures: If the Applicant is unable to implement the mitigation measures as proposed and approved by this Order, including Conditions B9 – B11 below, the Applicant shall submit to Ecology for its review and written approval a plan for alternative mitigation. The alternative mitigation plan shall be submitted to Ecology per Condition A2.

Willow Lift Conditions

- B9. Willow lifts shall be installed at Site 1 as shown in Plate number C-102 of plan sheets for Union Slough Levee Rehabilitation: Snohomish County Diking District 5 (DD5), Union Slough and Snohomish River, by US Army Corps of Engineers, Seattle District, dated May 23, 2012.

Sedge Mat Conditions:

- B10. Sedge mats shall be salvaged at Site 2 from within the levee repair footprint prior to construction and placed along the waterward toe of the repaired slope.
- a. During levee construction, sedge mats will be placed on the backslope of the levee for temporary storage. While being stored, sedge mats shall be kept moist.
- B11. Sedge mats shall be anchored in place at Site 2 at a similar elevation to the pre-construction location.

C. Water Quality Condition:

- C1. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-210(1)(e)(i).

- C2. In-Water Construction Water Quality Sampling and Monitoring: A Water Quality Protection and Monitoring Plan (Plan) shall be developed and implemented. A copy of the Plan shall be submitted to Ecology at least 15 days prior to start of construction for Ecology review and approval per Condition A2.

The Plan shall include the following minimum requirements:

- a. Locations of samples: Locations of water quality sampling sites shall be identified and described in the Plan and on a map of the project area. At a minimum, sampling shall take place at the point of compliance as specified in WAC 173-201A-210(1)(e)(i), which allows a 150-foot temporary area of mixing for turbidity resulting from disturbance of in-place sediments in Union Slough and Snohomish River. Background samples shall be collected outside the area of influence of the in-water work. Background samples shall be collected at the same frequency as the point of compliance samples.
- b. Number of samples: Number and frequency of water quality samples to be taken.
- c. Parameter to be sampled: Turbidity shall be sampled for this project.
- d. Equipment: Sampling for turbidity is to be accomplished using a turbidometer properly calibrated according to the operator's manual.
- e. Best Management Practices (BMPs): A description of the BMPs that will be used during construction to protect water quality.
- f. Detection of exceedances: Water quality standards for turbidity in "Excellent Quality" waters are as follows: turbidity shall not exceed 5 NTU over background conditions when the background is 50 NTU or less, or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. If exceedances of this standard at the point of compliance specified in WAC 173-201A-210(1)(e)(i) is detected through water quality sampling and monitoring, the Applicant shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem. After such an event, the Applicant shall assess the efficacy of the site BMPs and update or improve the BMPs used at the work site in an effort to reduce or prevent recurrence of the turbidity exceedance.
- g. Reporting: If no exceedances are detected, results of water quality sampling, as determined by the Plan, shall be forwarded to Ecology on a monthly basis in accordance to Condition A2.

- h. Notification of exceedances: Notification of exceedances that are detected through water quality sampling shall be made to Ecology within 24 hours of occurrence. Notification shall be made with reference to Order #9321, Attn: 401/CZM Federal Project Manager, by telephone at (425) 649-7129 or (425) 649-7000, or by fax to (425) 649-7098. The Applicant shall, at a minimum, provide Ecology with the following information:
- i. A description of the nature and cause of exceedance.
 - ii. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance.
 - 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 exceedance, turbidity results and location, photographs, and any other pertinent information.

D. Conditions for Construction Activities:

- D1. Construction stormwater, sediment, and erosion control best management practices (BMPs; *e.g.*, filter fences, etc.) suitable to prevent exceedances of state water quality standards shall be in place before starting construction at the site.
- D2. Sediment and erosion control measures shall be inspected and maintained prior to and during project implementation.
- D3. All waste material such as construction debris, silt, excess dirt or overburden resulting from this project shall be properly disposed of on land so that it cannot enter a waterway or cause water quality degradation to state waters.
- D4. Machinery and equipment used during construction shall be serviced, fueled, and maintained upland, unless otherwise approved by Ecology, in order to prevent contamination to any surface water.
- D5. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal, and shall not be discharged into state waters or storm drains.

- D6. Clean Fill Criteria: Applicant shall ensure that fill (topsoil) placed for the proposed project does not contain toxic materials in toxic amounts.

In-Water Conditions:

- D7. Work below the Ordinary High Water Mark (OHWM) shall be minimized in both time and area and shall take place in the lowest possible tides in accordance with the approved construction schedule in order to minimize turbidity. Project activities shall not occur when the project area, including the work corridor, is inundated by tidal waters.
- D8. Sedge mat removal shall only occur at low tides in order to avoid in-water excavation.
- D9. Riprap shall be placed individually into the water and quarry spalls shall be placed in small quantities in order to minimize turbidity.
- D10. Work in or near the water that may affect fish migration, spawning, or rearing shall cease immediately upon a determination by Ecology that fisheries resources may be adversely affected.
- D11. All debris or deleterious material resulting from construction shall be removed from the beach area and bed and prevented from entering waters of the state.
- D12. All trash and unauthorized fill, including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass and paper, below the OHWL in and around the applicant project area, shall be removed and deposited above the limits of flood water in an approved upland disposal site.
- D13. The waterward face of the rock bulkhead shall follow the contour of the existing natural bankline.
- D14. Bank slope of the repaired segment shall be the same as, or no steeper than, the adjacent uneroded and unslumped banks.
- D15. Bank sloping shall be accomplished in a manner that avoids release of overburden material into the water. Overburden material resulting from the project shall be deposited upland so it will not re-enter the water.
- D16. Bank protection material shall not constrict the flow and cause any appreciable increase (not to exceed 0.2 feet) in backwater elevation (calculated at the 100-year flood) or channel-wide scour, and shall be aligned to cause the least effect on the hydraulics of the stream.

- D17. Bank protection material shall be clean, angular rock, and shall be installed to withstand 100- year peak flows. River gravels or other round cobbles shall not be used as exterior armor. Bank protection work shall be restricted to work necessary to protect the eroding and slumping bank.
- D18. Bank protection and filter blanket material shall be placed from the bank.
- D19. Beach area depressions created during project activities shall be reshaped to pre-project beach level upon project completion.
- D20. All trenches, depressions, or holes created in the beach area shall be backfilled prior to inundation by tidal waters. Trenches excavated for base rocks may remain open during construction. However, fish shall be prevented from entering such trenches.
- D21. All natural habitat features on the beach larger than 12 inches in diameter, including trees, stumps, and logs, shall be retained on the beach following construction. These habitat features may be moved during construction if necessary.
- D22. If sand, gravel, and other coarse excavated material are to be temporarily placed where it will come into contact with tidal waters, this material shall be covered with filter fabric and adequately secured to prevent erosion and/or potential entrainment of fish.
- D23. Equipment shall be operated to minimize turbidity. During excavation, each pass with the bucket shall be complete.

E. Emergency/Contingency Measures:

- E1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.
- E2. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of petroleum products or any other material into waters of the state.
- E3. 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 state waters.
- E4. 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, or onto land with a potential for entry into state waters, is prohibited. If these occur, the Applicant shall immediately take the following actions:

- a. Cease operations at the location of the violation or spill.
- b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
- c. Notify Ecology of the failure to comply. All oil spills shall be reported immediately to Ecology's 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events to Ecology's 401/CZM Federal Project Manager at (425) 649-7129 or (425) 649-7000.
- d. Submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

F. Timing Requirements

- F1. In-water work may begin immediately and shall be completed by October 31, 2012.
- F2. This Order expires five (5) years from the date of issuance of this Order.

G. Reporting and Notification Requirement Conditions

- G1. Applicant shall provide notice to Ecology's 401/CZM Federal Project Manager:
 - a. At least three (3) days prior to the start of construction.
 - b. Within 14 days after completion of construction at the project site.

Notification, referencing Corps Reference #PM-ER-12-7, Order #9321 can take place by telephone to (425) 649-7129 or (425) 649-7000, fax to (425) 649-7098, or in writing.

- G2. If the project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit per Condition A2 a written construction status report and submit status reports every 12 months until construction is complete.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

| Street Addresses | Mailing Addresses |
|--|---|
| Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 | Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 |
| Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501 | Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903 |



Erik Stockdale, Unit Supervisor
Wetlands/401 Unit
Shorelands and Environmental Assistance Program
Northwest Regional Office

7-23-2012

July 23, 2012

ATTACHMENT A

**U.S. ARMY CORPS OF ENGINEERS
UNION SLOUGH LEVEE REHABILITATION PROJECT
Water Quality Certification Order #9321**

**Statement of Understanding of
Water Quality Certification Conditions**

I have read and understand the conditions of Order #9321 Section 401 Water Quality Certification for the U.S. Army Corps of Engineers Union Slough Levee Rehabilitation Project. I have also read and understand all permits, plans, documents, and approvals associated with the project referenced in this Order.

Signature

Date

Title

Company