



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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March 4, 2014

Jeff Sawyer
Department of Transportation
Olympic Region
P.O. Box 47417
Olympia, WA 98504-7417

RE: Water Quality Certification Order #10570 for Corps Public Notice #NWS-2013-800-DOT for the US 101 Hoh River Erosion Site #2, Bank Stabilization in Jefferson County, Washington.

Dear Mr. Sawyer:

On August 20, 2013, the Washington Department of Transportation (WSDOT), submitted a Joint Aquatic Resources 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 US 101 Hoh River Erosion Site #2, Bank Stabilization project.

WSDOT is proposing to repair and improve an existing embankment along US 101 where the Hoh River has caused extensive roadside erosion. This location has received multiple repairs in the past using riprap to prevent the river from washing out US 101. Bank stabilization methods entail building engineered log structures (ELS) that incorporate wood to improve aquatic habitat and planting native species on top of the structures.

An additional project element entails addressing flow from an existing drainage ditch that discharges into the project where the bank is eroding. WSDOT will construct an outfall for this ditch within the ELS. Although the ditch will be tight lined upon project completion, it will maintain flow from the stormwater runoff and Allen Marsh to the Hoh River.

The project will permanently impact 0.02 acres of a Category III wetland. WSDOT will debit 0.47 acres of wetland preservation credits at the already established Nolan Creek Site as compensatory mitigation for this un-avoidable permanent impact.



Mr. Jeff Sawyer
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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 Penny Kelley at 360/407-7298. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Brenden McFarland, Section Manager
Headquarters
Shorelands and Environmental Assistance Program

by Certified Mail 7010 2780 0000 2503 3822

Enclosure

e-cc: Sandi Manning, Corps of Engineers
Warren Scarlett, Hoh Tribe
Caroline Corcoran, Ecology
Rick Mraz, Ecology
Theresa Powell, WDFW
Randy Neff, WSDOT
Dave Evans, WSDOT

IN THE MATTER OF GRANTING A) ORDER # 10570
WATER QUALITY) Corps Reference No. NWS-2013-800-DOT
CERTIFICATION TO) Stabilize an eroding bank along US 101 by
 WA Department of Transportation) building engineered log structures. The project
 in accordance with 33 U.S.C. 1341) is on US 101, MP 175.74 to MP 175.82, in
 (FWPCA § 401), RCW 90.48.120, RCW) Jefferson County, Washington.
 90.48.260 and Chapter 173-201A WAC)

Department of Transportation
 Olympic Region
 Attn: Jeff Sawyer
 P.O. Box 47417
 Olympia, WA 98504-7417

On August 20, 2013, Ecology received a Joint Aquatic Resources Permit Application (JARPA) from Washington Department of Transportation requesting a 401 Water Quality Certification (WQC). The U.S. Army Corps of Engineers (Corps) issued a public notice for the project on October 30, 2013.

WSDOT is proposing to repair and improve an existing embankment along US 101 where the Hoh River has caused extensive roadside erosion. This location has received multiple repairs in the past using riprap to prevent the river from washing out US 101. Bank stabilization methods entail building engineered log structures (ELS) that incorporate wood to improve aquatic habitat and planting native species on top of the structures.

To build the ELS, WSDOT will isolate the work area within the river by building a bulk bag dam consisting of large bags filled with WDFW approved clean streambed gravel, plastic sheeting, and a turbidity curtain installed on the downstream end of the dam. The dam will be constructed simultaneously with the temporary access road as it extends into the river. Any riprap encountered during the construction of the bulk bag dam will be moved and possibly incorporated into the ELS for ballast.

ELS construction entails excavation and driving steel pile using a vibratory hammer within the isolated work area. Impact driving will only be used if the needed depth cannot be attained using the vibratory method. Once the piles are driven, racking material will be placed in alternating layers consisting of logs with intact rootwads and slash. Voids will be filled with excavated native alluvium, smaller wood, and rock. The initial layer will be logs with the rootwads partially buried. As the ELS are built up willow fascines will be incorporated into structures. The final or top layer will be planted with native trees and shrubs.

Once the ELS are complete, the bulk bag dam and temporary access road will be removed. The bags will either be completely removed and the material may be added to the log structures or the bags will be cut open in the river and the streambed gravel will be in the river for stream habitat.

An additional project element entails addressing flow from an existing drainage ditch that discharges into the project where the bank is eroding. WSDOT will construct an outfall for this ditch within the ELS. Although the ditch will be tight lined upon project completion, it will maintain flow from the stormwater runoff and Allen Marsh to the Hoh River.

The project will permanently impact one existing wetland due to the location of the access road. This un-avoidable permanent impact will be mitigated for at the established Nolan Creek Mitigation Site.

This project is located on US 101, starting at milepost 175.74 and ending at milepost 175.82 in Jefferson County, WA.
WRIA 20 – Soleduc
Section 4 T26N R12W

AUTHORITIES

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has reviewed 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 comply with 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 WSDOT to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification

absolves WSDOT from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments resulting from project construction or operations.

A. General Conditions

1. In this Order, the term "Applicant" shall mean the Washington State Department of Transportation and its agents, assignees, and contractors.
2. All submittals required by this Order shall be sent to Ecology's Headquarters Office, Attn: Federal Project Coordinator, P.O. Box 47600, Olympia, WA 98504 or via e-mail (preferred), if possible, to the Coordinator assigned to this project. The submittals shall be identified with Order No. 10570 and include the Applicant's name, project name, project location, the project contact and the contact's phone number.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on August 20, 2013. The Applicant will be out of compliance with this Order and must submit an updated JARPA 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 any updated information, 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. This Order shall be rescinded if the Corps of Engineers does not issue an individual Section 404 permit.
6. The Applicant shall send (per A.2.) a copy of the final individual Section 404 permit to Ecology's Federal Project Coordinator within two weeks of receiving it.
7. The Applicant shall keep copies of this Order 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.
8. 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.
9. 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.

10. The Applicant shall ensure that all project engineers, contractors, and other workers at the project site with authority to direct work 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 signatory that s/he has read and understands the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins.
11. 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.
12. Failure of any person or entity to comply with the Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

B. Notification Requirements

1. Notification shall be made via phone or e-mail (e-mail is preferred) to Ecology's Federal Project Coordinator. Notifications shall be identified with Order No. 10570 and include the Applicants name, project name, project location, project contact and the contact's phone number.
 - a. Immediately following a violation of state water quality standards, spill to waters of the state or when the project is out of compliance with any of this Orders conditions.
 - i. In addition to the phone or e-mail notification, the Applicant shall 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.
 - b. At least ten (10) days prior to all pre-construction meetings
 - c. At least ten (10) days prior to conducting initial in-water work activities for each in-water work window established in the most current HPA.
 - d. At least seven (7) days within project completion.

C. Timing

1. This Order will expire five (5) years from the date of issuance of the Corps permit.
2. In-water work is subject to a fishery closure window determined by Washington Department of Fish & Wildlife's Hydraulic Project Approval (HPA). All in-water work

shall be completed within the work window identified in the most current HPA issued for this project.

D. Water Quality Monitoring & Criteria

1. Hoh River is categorized as Core Summer Habitat and the criteria of the categorization apply as described in WAC 173-201A-200 (1), except as specifically modified by this Order.
2. Consistent with WAC 172-201A-400, this Order authorizes temporary turbidity mixing zones for the following activities per Table 1 below:

Table 1

Activity	Point of Compliance
Kicker Structure	1800 feet
Temporary Access Road*	1800 feet
Bulk Bag Isolation Dam Installation*	1800 feet
Bulk Bag Isolation Dam Removal	1800 feet

*Installation of the bulk bag isolation dam and the temporary access road will occur simultaneously.

3. The Applicant shall submit a Water Quality Monitoring and Protection Plan (WQMPP) to the Federal Project Coordinator for review and approval at least 20 days prior to beginning work for each activity below the ordinary high water line (OHWL), in-water and over-water. **Work is not authorized to begin until approval is received.** At a minimum, the WQMPP shall include:
 - a. The names(s) and phone numbers (s) of the Pollution control inspector and the person responsible for on-site monitoring and report;
 - b. The BMPs and procedures to be used to protect water quality during specific proposed below the ordinary high water mark, in-water and over-water activities;
 - c. A water sampling plan for turbidity, which include sample locations and frequency;
 - d. Sampling locations for turbidity shall include, but are not limited to; background, half the distance to the point of compliance and at the point of compliance, unless otherwise approved by Ecology.
 - e. A map with numbered or named sampling locations associated with the in-water work activities.
 - f. Contingencies during in-water work activities
4. Ecology must approve, in writing, any changes or additions to the WQMPP.

5. Monitoring results shall be submitted monthly to the Ecology Federal Project Coordinator, per condition A.2.
6. Mitigation and/or additional monitoring may be required if the monitoring results indicate that the water quality standards have not been met.

E. Construction

General Conditions

1. The Applicant shall comply with the conditions of the current Construction Stormwater Permit (National Pollutant Discharge Elimination System – NPDES) issued for this project.
2. Within the project limits¹ all environmentally sensitive areas including, but not limited to, wetlands, wetland buffers, and mitigation areas shall be fenced with high visibility construction (HVF) prior to commencing construction activities. Construction activities include equipment staging, materials storage, and work vehicle parking. *Note: This condition does not apply to activities such as pre-construction surveying and installing HVF and construction zone signage.*
 - a. All field staff shall be trained to recognize HVF, understand its purpose and properly install it in the appropriate locations.
 - b. HVF shall be maintained until all work is completed for each project or each stage of a staged project.
3. All clearing limits, stockpiles, staging areas, and trees to be preserved shall clearly be marked prior to commencing construction activities and maintained until all work is completed for each project.
4. No petroleum products, fresh concrete, lime or concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.
5. All construction debris, excess sediment, and other solid waste material shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.
6. Turbid de-watering water associated with in-water work shall not be discharged directly to waters of the state, including wetlands. Turbid de-watering water shall be routed to an upland area for on-site or off-site settling.
7. Clean de-watering water associated with in-water work that has been tested and confirmed to meet water quality standards may be discharged directly to waters of the

¹ Project limits include mitigation sites, staging areas, borrow sources, and other sites developed or used to support project construction.

state including wetlands. The discharge outfall method shall be designed and operated so as not to cause erosion or scour in the stream channel, banks, or vegetation.

8. All equipment being used below the ordinary high water mark shall utilize bio-degradable hydraulic fluid.

Equipment & Maintenance

9. Staging areas will be located a minimum of 50 feet and, where practical, 200 feet, from waters of the state including wetlands. If a staging area must be located within 50 feet of waters of the state, then the Applicant shall provide a written explanation and obtain approval from Ecology's Federal Permit Coordinator before placing the staging area in the setback area.
10. Equipment used for this project shall be free of external petroleum-based products while used around the waters of the state, including wetlands. Accumulation of soils or debris shall be removed from the drive mechanisms (wheels, tires, tracks, etc.) and the undercarriage of equipment prior to its use around waters of the state, including wetlands.
11. No equipment shall enter, operate, be stored or parked within any sensitive area except as specifically provided for in this Order or allowed in the HPA.
12. Machinery and equipment used during construction, except for cranes used for construction of engineered log structures requiring permanent stationing within the isolated work area, shall be serviced, fueled, and maintained on uplands in order to prevent contamination to surface waters.
13. During fueling and servicing of cranes, BMPS shall be in place to contain any spillage of petroleum products.
14. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall not be discharged into state waters. The Applicant shall set up a designated area for washing down equipment.
15. 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.

Bank Stabilization & Bulk Bag Dam Installation & Removal

16. Material used to construct the access road shall be clean and free of excess sediment.
17. Material used to fill the bulk bags shall be clean and free of excess sediment.
18. Removal of riprap in the river and leveling the river bed shall be done in a manner that minimizes disturbance of the river bed and sediment.

19. Upon completion of the in-water work, all materials used in the bulk bag dam shall be removed from the site except for the clean gravel used to fill the bags. The applicant is authorized to place the clean gravel from the bulk bags in the river in a manner that minimizes turbidity or to utilize the gravel as backfill material in the engineered log structures. All other material that was part of the bulk bag dam system, removed from the river, shall be placed in approved upland site.
20. Logs or LWD used in the construction of engineered log jams shall be free of dirt, sand and other fine material to the extent practicable.
21. Re-introduction of water into the isolated work area shall be done gradually, and at a rate not higher than the normal river flow, in order to minimize the mobilization of sediments and fines into downstream waters.

F. Wetlands

1. The Applicant shall mitigate wetland impacts as described in the *US 101 Hoh River Erosion Site #2 Advance Mitigation Site Use Plan* (hereafter called the "Mitigation Plan") prepared by Paul Dreisbach, and dated January 2014, or as modified by this Order or revised and approved by Ecology.
2. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology (see A.2) for review and approval.
3. Until the Applicant has received written notice from Ecology that the Mitigation Plan has been fully implemented, the Applicant's obligation under Condition F.1 to mitigate for wetland impacts is not met.

G. Emergency/Contingency Measures

1. The Applicant shall develop and implement a spill prevention and containment plan for this project and shall have spill cleanup material available on site at all times during construction.
2. Work that is out of compliance with the provisions of this Order, conditions causing distressed or dying fish, discharges of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters, is prohibited. If such work, conditions, or discharges occur, the Applicant shall comply with WSDOT's most current Environmental Compliance Assurance Procedure for Construction Project and Activities, notify the Ecology Project Coordinator per condition B.1.a. and immediately take the following actions:

- a. Cease operations at the location of the non-compliance.
 - 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 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.
 - d. Immediately notify Ecology's Regional Spill Response Office at 360-407-6300 and the Washington State Department of Fish & Wildlife with the nature and details of the problem, any actions taken to correct the problem, and any proposed changes in operation to prevent further problems.
 - e. Immediately notify the National Response Center at 1-800-424-8802, for actual spills to water only.
3. Notify Ecology's Regional Spill Response Office immediately at 360-407-6300 if chemical containers (e.g. drums) are discovered on-site or any conditions present indicating disposal or burial of chemicals on-site that may impact surface water or ground water.

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

CONTACT INFORMATION

Please direct all questions about this Order to:

Penny Kelley
Department of Ecology
P.O. Box 47600
Olympia, WA 98503-7600
360-407-7298
pkel461@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board Website**
www.eho.wa.gov/Boards_PCHB.aspx
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>
- **Chapter 371-08 WAC – Practice And Procedure**
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>
- **Chapter 34.05 RCW – Administrative Procedure Act**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05>

- **Chapter 90.48 RCW – Water Pollution Control**
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>
- **Chapter 173.204 Washington Administrative Code (WAC) Sediment Management Standards**
<http://www.ecy.wa.gov/biblio/wac173204.html>
- **Chapter 173-200 WAC Water Quality Standards for Ground Waters of the State of Washington**
<http://www.ecy.wa.gov/biblio/wac173200.html>
- **Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington**
<http://www.ecy.wa.gov/biblio/wac173201A.html>

SIGNATURE

Dated this 4th day of March 2014 at the Department of Ecology, Lacey Washington



Brenden McFarland, Section Manager
Environmental Review and Transportation
Shorelands and Environmental Assistance Program
Headquarters

Water Quality Certification Order #10570
Statement of Understanding
US 101 Hoh River Erosion Site #2 – Bank Stabilization

I, _____, state that, I will be involved as a WSDOT employee or an agent or contractor for Washington State Department of Transportation in the US 101 Hoh River Erosion Site #2 – Bank Stabilization in Jefferson County, WA. I further state that I have read and understand the relevant conditions of Washington Department of Ecology **Water Quality Certification Order # 10570** and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

Signature

Date

Company

Phone number

Address

City, State, and Zip Code

