



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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

July 12, 2011

Mount Rainier National Park
ATTN: Karen M. Thompson
55210 238th Avenue East
Ashford, WA 98304

RE: Water Quality Certification Order No. **8612**, Corps Reference No. **NWS-2011-119**;
for the Mount Rainier National Park Carbon River Entrance Erosion Protection
Structures; Carbon River, Pierce County, Washington

Dear Ms. Thompson:

On February 2, 2011, the Mount Rainier National Park 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 Carbon River Entrance Erosion Protection Structures Project. The purpose of the project is to provide bank stabilization to protect the Carbon River Road Entrance Station and Maintenance Yard of the Mount Rainier National Park.

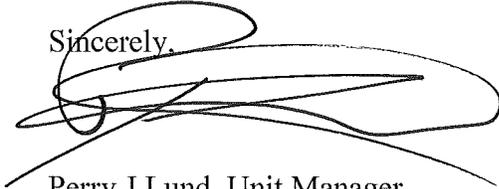
The project includes the construction of one engineered log jam (ELJ), the stabilization of two natural logjams with three "log reinforcing structures" (LRS) and the construction of one new LRS. Approximately 11, 110 cubic yards of river alluvium will be excavated and backfilled into the 4 LRS and one ELJ; approximately 1840 cubic yards of river alluvium will be displaced to create a diversion berm. Each natural logjam would be reinforced and augmented by one and two LRS. One additional LRS would be placed between the natural jams that are stabilized with LRS, utilizing adjacent large wood located on the floodplain, for a total of four LRS. The large rock used in the two previously constructed rock barbs will be recycled into the ELJ and LRS. Work also includes the construction of a temporary access ramp which will be removed and planted upon project completion. Additional plantings of black cottonwood and conifers will be installed as described in the re-vegetation plan.

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,

A handwritten signature in black ink, appearing to read "Perry J Lund", is written over the word "Sincerely,". The signature is somewhat stylized and overlaps the text.

Perry J Lund, Unit Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office

Enclosure

By Certified Mail 7009 2820 0001 7161 1135

cc: Catherine Blackwell, Corps of Engineers
Mike Jimenez, Pierce County
Gina Piazza, WDFW

e-cc: ECY RE FED PERMITS
Loree' Randall, Ecology/HQ
Alex Callender, Ecology/SWRO/SEA
Deb Cornett, Ecology/SWRO/WQ
Lori Ochoa, Ecology/SWRO/SEA

IN THE MATTER OF GRANTING A) ORDER # 8612
WATER QUALITY)
CERTIFICATION TO)
Mount Rainier National Park) Carbon River Entrance Erosion Protection
in accordance with 33 U.S.C. 1341) Structures Project, Carbon River,
(FWPCA § 401), RCW 90.48.120, RCW) Pierce County, Washington.
90.48.260 and Chapter 173-201A WAC)
))
))

TO: Mount Rainier National Park
ATTN: Karen M. Thompson
P.O. Box 2946
Portland, Oregon 97208-2946

On February 2, 2011, the Mount Rainier National Park submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification. A Joint Public Notice regarding the request was distributed by the Corps of Engineers on March 24, 2011, for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC.

The proposed project will take place along the left bank of the Carbon River, extending from the upstream end of the Carbon River National Park Service Maintenance yard, downstream to the Entrance Station of the Carbon River Road Entrance to Mount Rainier National Park, Pierce County, Washington; NW 1/4 of Section 3, Township 17 North, Range 8 East; WRIA 10, Puyallup-White Watershed.

The purpose of the project is to provide bank stabilization to protect the Carbon River Road Entrance Station and Maintenance Yard of the Mount Rainier National Park.

The project includes the construction of one engineered log jam (ELJ), the stabilization of two natural logjams with three “log reinforcing structures” (LRS) and the construction of one new LRS. The log reinforcing structures will function as a “fence” of large wood that slows flow, collects floating organic material including large wood, and provides stability to existing, natural log jams. Approximately 11,110 cubic yards of river alluvium will be excavated and backfilled into the 4 LRS and one ELJ; approximately 1840 cubic yards of river alluvium will be displaced to create a diversion berm. Each natural logjam would be reinforced and augmented by one and two LRS. One additional LRS would be placed between the natural jams that are stabilized with LRS, utilizing adjacent large wood located on the floodplain, for a total of four LRS. The large rock used in the two previously constructed rock barbs will be recycled into the ELJ and LRS. Work also includes the construction of a temporary access ramp which will be removed and planted upon project completion. Additional plantings of black cottonwood and conifers will be installed as described in the re-vegetation plan.

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 Mount Rainier National Park, 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 or by e-mail to loch461@ecy.wa.gov. Any submittals shall reference Order No.8612 and Corps No. **NWS- 2011-119**.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on March 29, 2010. 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. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue a Section 404 permit.
6. 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.
7. The Applicant shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
8. 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.
9. 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 permit, plans, documents, and approvals. These statements shall be provided to Ecology before construction begins at the project site.
10. 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.
11. Failure of any person to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

B. Water Quality Conditions:

1. The Carbon River is classified as "Char Spawning and Rearing" and the criteria of that class apply except as specifically modified by this Order.
2. Water Quality standards for turbidity in Char Spawning and Rearing waters are as follows: turbidity shall not exceed 5NTU over background conditions when the background is 50 NTU or less; or a 10 percent increase in turbidity when the background is more than 50 NTU.

3. The point of compliance for this project is as specified in WAC 173-201A-200(1)(e)(i) which allows up to a 300-foot temporary mixing zone from the point of in-water activities, except as specifically identified below:
4. A 450 foot mixing zone for turbidity shall apply as follows:

Waterbody	Activity	Maximum Duration
Carbon River	Introduction of the river into the new channel	4 days

5. The BMP's and procedures to be used to protect water quality during all in-water work activities shall occur as identified in the following documents:
 - a. *“Mount Rainier National Park Carbon River Access Management Plan, Erosion Protection Structures - Water Quality Management Plan – June 2011”*
 - b. *“Mount Rainier National Park – Carbon River Entrance Erosion Protection Structures Contract BMP's”*
6. Ecology must approve, in writing, any changes or additions to the listed BMPs.
7. Water quality shall be sampled according to the protocols outlined in the *“Carbon River Road-Turbidity Monitoring and Reporting Requirements”* prepared by the Mount Rainier National Park Service dated May 2011 or as modified by this Order or revised and approved by Ecology.
 - a. Parameter to be sampled: Turbidity shall be sampled for this project.
 - b. Equipment: Sampling for turbidity is to be accomplished using a turbidimeter that is properly calibrated according to the operator's manual.
 - c. Location of samples: At a minimum the sampling shall take place 300-feet and 450 feet downstream from the in-water activity. Background samples shall be collected outside of the area of influence of the in-water work. Background samples shall be collected at the same frequency as the point of compliance samples.
 - d. Number of samples to be collected: Samples shall be collected at a minimum of every four (4) hours during daylight hours when in-water activities are being conducted.
 - e. Reporting: Monitoring results shall be submitted weekly during the periods of in-water work to Ecology's Southwest Regional Office Federal Permit Coordinator, per Condition A.2 above. Monitoring reports shall include:
 - i. The name(s) and phone number(s) of the person responsible for on-site monitoring and reporting.
 - ii. A map of the project site with the monitoring location identified.
 - iii. The date and time for each sample collected.
 - iv. Weather conditions at the time of the activity
 - v. The results of the turbidity sampling, including the background samples taken.
8. If water quality exceedances are detected 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. 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.

9. 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 exceedance;
 - ii. The period of the exceedance, 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 exceedance.
 - 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(s), corrective action taken and/or planned, steps to be taken to prevent a recurrence, photographs, and any other pertinent information.
 - b. Mitigation and/or additional monitoring may be required as a result of the exceedance(s).

C. Timing Requirements:

1. This Order expires five (5) years from the date of issuance of the Corps permit.

D. Notification Requirements:

1. The Applicant shall provide a copy of the final Corps Permit to Ecology's Southwest Regional Office Federal Permit Manager, in accordance with condition A.2 above, within two (2) weeks of receipt of the permit.
2. Written notification (FAX, e-mail, or mail) shall be made to Ecology's Southwest Regional Office Federal Permit Manager in accordance with condition A.2 above for the following activities:
 - a. At least ten (10) days prior to the onset of in-water work in each construction season.
 - b. Within ten (10) days after completion of construction for each project season.
 - c. Immediately following a violation of the state water quality standards or any condition of this Order.

3. If project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit a written construction status report. Status reports shall be submitted every 12 months thereafter until project construction is complete.

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. 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, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.
4. All construction debris, excess sediment, 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. 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.
7. Under no circumstances shall a blockage to stream flow or fish passage be created.
8. 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.
9. Logs or large woody debris used in the construction of the log complexes shall be free of dirt, sand, and other fine material to the extent practicable.

Equipment, Staging and Maintenance Areas:

10. Staging areas will be located a minimum of 50 feet, and where practical, 150 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 Manager before placing the staging area within the setback area.

11. Machinery and equipment used for this project shall be free of external petroleum-based products while used around waters of the state including wetlands and during the installation and removal of the river diversion system. Accumulation of soils or debris shall be removed from the drive mechanism (wheels, tires, tracks, etc.) and the undercarriage of equipment prior to its use around waters of the state, including wetlands and during the installation and removal of the river diversion system.
12. All machinery and equipment used for project construction shall be serviced, fueled, and maintained in a confined area in order to prevent contamination to waters of the state. Fueling areas shall be located a minimum of 50 feet from waters of the state, including wetlands and shall be provided with adequate spill containment.
13. All equipment used below the ordinary high water line shall utilize bio-degradable hydraulic fluid and shall be checked daily for drips or leaks.
14. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment shall be contained for proper disposal, and shall not be discharged into waters of the state. 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.
15. All staging areas and access roads created within the bed of the river shall be restored to its natural condition upon completion of construction.

Temporary Diversion and Channel Construction:

16. All new channel construction shall be conducted in the dry or in isolation from stream flow. A temporary bypass to divert flow around the work area shall be in place prior to initiation of other work in the wetted perimeter.
17. The temporary diversion shall be of sufficient size to either pass all flows and debris or maintain work area isolation for the duration of the project.
18. 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.
19. The temporary diversion shall be constructed of non-erosive materials and installed to divert the entire flow through the bypass or around the isolated work area.
20. As needed, a temporary diversion constructed of non-erosive material shall be installed at the downstream end of the bypass to prevent backwater from entering the work area.
21. Turbid dewatering water, associated with in-water work, shall not be discharged directly into waters of the state, including wetlands. Turbid de-watering water shall be routed to an upland area for on-site or off-site settling.
22. 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 water of the state including wetlands. The discharge outfall method shall be designed and operated so as not to cause erosion or scour of the river channel, banks, or vegetation.

23. Any pump used for diverting water shall be screened with a 1/8 –inch mesh to prevent fish from entering the system. The screen shall remain in place whenever water is withdrawn through the pump intake.
24. Prior to returning river flow to the work area, all bank protection measures shall be in place.
25. Re-introduction of water into the isolated work areas 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.
26. Upon completion of the project, all material used in the temporary diversion shall be removed from the site.

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 at the location of 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** within 24 hours of spills or other events to Ecology's Federal Project Manger at 360-407-6926. Describe the nature of the problem, any actions taken to correct the problem, and any proposed changes in operations to prevent further problems.
 - f. Contact Ecology's Southwest Regional Office Cleanup Program and Regional Spill Office at 360-407-6300 if chemical containers (e.g. drums) are discovered on-site or there are any conditions present indicating disposal or burial of chemical on-site that may impact surface or ground water.

- Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc. shall be checked daily for drips or leaks, and shall be maintained and stored properly to prevent spills into waters of the state. All vehicles and equipment shall be inspected daily for fluid leaks before leaving the staging area.

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 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:

Lori Ochoa
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775
loch461@ecy.wa.gov

MORE INFORMATION

Pollution Control Hearings Board Website

www.eho.wa.gov/Boards_PCHB.aspx

Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board

<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>

Chapter 90.48 RCW – Water Pollution Control

<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>

Chapter 173.204 WAC – Sediment Management Standards

www.ecy.wa.gov/biblio/wac173204.html

Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington

www.ecy.wa.gov/biblio/wac173200.html

Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington

www.ecy.wa.gov/biblio/wac173201A.html

SIGNATURE



Perry J Lund, Unit Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office
Department of Ecology

7/12/2011
Date

Attachment # A

Mount Rainier National Park
Carbon River Entrance Erosion Protection Structures
Order # **8612**

Statement of Understanding
Water Quality Certification Conditions

I, _____, state that, I will be involved as an agent or contractor for the Mount Rainier National Park in the construction and placement of the erosion protection structures within the Carbon River at the Carbon River Entrance of Mount Rainier National Park, Pierce County, Washington. I further state that I have read and understand the relevant conditions of the Washington Department of Ecology Water Quality Certification Order #**8612** and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

Signature

Date

Title

Phone

Company

