



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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January 29, 2018

BNSF Railway Company
ATTN: Mr. Mike Herzog
4515 Kansas Avenue
Kansas City, KS 66106

RE: Water Quality Certification Order No. **15621** for BNSF Railway Bridge 66.4 Replacement Project, Drano Lake & Columbia River, Skamania County, Washington

Dear Mr. Herzog:


BNSF Railway Company 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 Bridge 66.4 Replacement Project over Drano Lake (mouth of the Little White Salmon River) and the Columbia River in Skamania County, Washington.

The proposed project will replace an existing 411-foot long, three span bridge structure that was originally constructed in 1907. The new bridge will be approximately 28 feet longer than the existing bridge and will have a center truss span and two pre-cast concrete beam approach spans on each side. The US Coast Guard is reviewing this project for an individual Section 9 Bridge Permit.

On behalf of the state of Washington, Ecology certifies that the work described in the original 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 Kingsbury at (360) 407-6926. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Perry J Lund
Shorelands and Environmental Assistance Program
Southwest Regional Office

Enclosure

By Certified Mail 91 7199 9991 7036 9326 9173



BNSF Railway Company
Bridge 66.4 Replacement
January 29, 2018
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cc: Ron Wilcox, U.S. Army Corps of Engineers
John Greene, U.S. Coast Guard
Skip Haak, PBS Engineering & Environmental Inc.
Scott Swarts, Jacobs

e-cc: ECY RE FEDPERMITS
Loreé Randall, Ecology, HQ SEA
Lori Kingsbury, Ecology, SWRO SEA
Rebecca Rothwell, Ecology, SWRO SEA
Chris Montague-Breakwell, Ecology, SWRO WQ

IN THE MATTER OF GRANTING A)
WATER QUALITY)
CERTIFICATION TO)
BNSF Railway Company)
ATTN: Mr. Mike Herzog)
in accordance with 33 U.S.C. 1341)
(FWPCA § 401), RCW 90.48.120, RCW)
90.48.260, and Chapter 173-201A WAC)
)

ORDER No. 15621
BNSF Railway Bridge 66.4 Replacement
Project, Columbia River & Drano Lake, near
Cook, Skamania County, Washington

TO: BNSF Railway Company
ATTN: Mr. Mike Herzog
4515 Kansas Avenue
Kansas City, Kansas 66106

BNSF Railway Company submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification under the federal Clean Water Act to replace bridge 66.4 over the Columbia River and Drano Lake (mouth of Little White Salmon River.) The US Coast Guard is reviewing this project for an individual Section 9 Bridge Permit. 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 29, 2017.

The project will replace an existing 411-foot-long, three-span bridge structure that was originally constructed in 1907 and is reaching the end of its design service life. The existing bridge consists of a 152-foot-long central truss span with deck plate girder approach spans on either side. The spans are single track and have open timber decks. The bridge is supported by four masonry and concrete piers (with wing walls extending out from the two center piers) and abutments supported by rock, timber pile, and concrete pile foundations located in the water.

The replacement bridge will be approximately 28 feet longer overall, and the center truss span will be 336 feet long to span the opening to Drano Lake and will have two shore pre-cast concrete beam approach spans, one on each side of the truss span. The spans would be single track and have ballast covered decks. The new bridge will be supported by two piers founded on micro-pile foundations, and two abutments founded on steel piles. Each micro-pile foundation will consist of 27 micro-piles. The new abutments will be located above the ordinary high water mark (OHWM) and will be supported by pile foundations. New permanent piers will also be located above the OHWM except for approximately 63 square feet of pier 2 which will be located below the OHWM.

The project will require construction of the following temporary structures:

- A 350-foot-long work trestle constructed directly to the south of the existing bridge and extending across the mouth of Drano Lake to facilitate construction of the new bridge span and the removal of the existing spans;
- Two temporary rock fill areas below the OHWM to facilitate vehicle and equipment access for the bridge construction and removal;

- Two barge access trestles (approximately 20 feet long and 15 feet wide) constructed perpendicular to the rock fill areas; and,
- Installation of approximately 300 24-inch-diameter steel pipe piles.

The replacement bridge will be constructed adjacent to the existing bridge and then moved into place via slide rails connected to the temporary work structure. Once the new bridge structure is in place, the existing bridge will be deconstructed, with existing piers and wing walls removed to two feet below the mudline. All temporary structures will be removed and the ground surface restored to pre-existing grades. Disturbed areas will be restored and replanted with native plants and shrubs.

The project is located immediately south of SR 14 (Lewis and Clark Highway) crossing over the Columbia River and Drano Lake (mouth of the Little White Salmon River) between the towns of Cook and Underwood in Skamania County, Washington; Section 35, Township 3 North, Range 9 East, WRIA 29, Wind-White Salmon Watershed.

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.

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:

1. For purposes of this Order, the term "Applicant" shall mean Burlington Northern Santa Fe (BNSF) Railway Company and its agents, assignees, and contractors.
2. For the purposes of this Order, all submittals required by its conditions shall be sent to Ecology's Southwest Regional Office, Attn: Federal Permit Manager, SEA Program, P.O. Box 47775, Olympia, WA 98504-7775 or by e-mail (preferred) to fednotification@ecy.wa.gov with a copy to lori.kingsbury@ecy.wa.gov. All submittals shall reference Order No. **15621**.
3. Work authorized by this Order is limited to the work described in the JARPA package received by Ecology on October 21, 2016, and as amended in the revised submittal received by Ecology on October 9, 2017. 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 whether the revised project requires a new water quality certification and public notice or whether a modification to this Order is required.
5. This Order does not exempt, and is provisional upon, compliance with other statutes and codes administered by federal, state, and local agencies.
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 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.
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 permits, 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 persons 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. 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) and WAC 173-201A-200(1)(g).
2. The Applicant shall conduct water quality monitoring as described in the approved *Water Quality Monitoring and Protection Plan (WQMPP)*, *Bridge 66.4 Replacement Project, Skamania County, Washington* prepared by Skip Haak, PBS Engineering and Environmental, Inc., dated October 3, 2017.
3. Ecology must approve, in writing, any changes or additions to the WQMPP prior to implementation of the changes or additions.
4. Results of the water quality monitoring shall be documented in a report and submitted to Ecology's Federal Permit Manager weekly during the identified in-water work activities, per Condition A.2.
5. If water quality exceedances are observed outside 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, and correct the problem and prevent further water quality turbidity exceedances.
6. Notification of exceedances shall be made to Ecology **within 24 hours of occurrence**. Notification shall be made with reference to Order No. 15621, Attn: Federal Permit Manager, by telephone at (360) 407-6926 or by e-mail at lori.kingsbury@ecy.wa.gov. The Applicant shall, at a minimum, provide Ecology with the following information:
 - a. A description of the nature, extent, and cause of the exceedance.
 - b. The period of non-compliance, including exact dates, duration, and times and/or the anticipated time when the project will return to compliance.
 - c. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.
 - d. 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, water quality monitoring results and location, photographs, and any other pertinent information.
7. Mitigation and/or additional monitoring may be required if the monitoring results indicate that the water quality standards have not been met.

C. Timing Requirements:

1. This Order will expire five (5) years from the date of issuance. Continuing this Order beyond the five-year term will require the Applicant to apply for an extension prior to the expiration of this Order.
2. The following in-water work windows shall apply to this project:
 - November 1 through February 28

D. Notification Requirements:

1. Written notification (fax, e-mail, or mail) shall be made to Ecology's Federal Permit Manager in accordance with condition A.2 above for the following activities:
 - a. Immediately following a violation of the state water quality standards or any condition of this Order.
 - b. At least ten (10) days prior to the onset of in-water work in each construction season.
 - c. Within ten (10) days after the completion of construction for each construction season.
2. If project construction is not completed within thirteen (13) months of issuance of this Order, the Applicant shall submit a written construction status report. Status reports shall be submitted every twelve (12) months thereafter until project construction is complete.

NOTE: These notifications shall include the Applicant's name, project name, Order No. 15621, project location, contact name, and contact's phone number.

E. General Construction Conditions:

1. All work in and near waters of the state shall be conducted so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment, and erosion-control Best Management Practices (BMPs) suitable to prevent exceedances of state water quality standards shall be in place before starting clearing, filling, and grading work and shall be maintained throughout construction.
2. The project shall be clearly marked/staked prior to construction. All clearing limits, travel corridors, stockpile locations, and staging areas shall be clearly marked. Sensitive areas and their 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.
3. Accumulation of soils or debris shall be removed from the drive mechanisms and the undercarriage of equipment prior to use. Appropriate BMPs shall be implemented to minimize track-out during construction.
4. All equipment operating within or directly over waters of the state shall be free of external petroleum-based products. Equipment shall be inspected daily for leaks,

accumulation of grease, etc. Any identified problems shall be fixed before operating over or within waters of the state.

5. The Applicant shall establish a separate, contained area for washing down vehicles and equipment that does not have any possibility of draining to surface waters and/or wetlands. Wash water containing concrete, grout, oils, grease, or other hazardous materials resulting from wash down of equipment or working area shall be contained for proper disposal, and shall not be discharged into waters of the state.
6. No construction or waste material shall be stored or stockpiled on a temporary or permanent basis at or below the OHWM. 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.
7. Stockpile areas consisting of erodible materials shall be located a minimum of 50 feet from waters of the state, including wetlands. Stockpile areas shall be stabilized with suitable BMPs to prevent erosion and sediment transport to surface waters.
8. Machinery and equipment used during construction shall be serviced, fueled, and maintained on uplands a minimum of 100 feet from waters of the state in order to prevent contamination of surface waters. Additional spill containment shall be provided for fueling and storing stationary equipment located within the 100 foot set back area.
9. The Applicant shall ensure that all fill material placed for the proposed project does not contain toxic materials in toxic amounts.
10. Turbid de-watering water shall not be discharged directly to waters of the state, including wetlands. Turbid de-watering water shall be routed to an upland area for settling.
11. Clean de-watering water that has been tested and confirmed to meet water quality standards may be discharged directly to waters of the state, including wetlands. The discharge outfall method shall be designed and operated so as not to cause erosion or scour in the stream channel, along the banks, or within the vegetation.
12. Waste water and sediment removed from the drilled shaft casings shall be either pumped into a storage tank for containment or otherwise contained and hauled to an appropriate upland disposal area where this is no possible entry into waters of the state.

In-and Over-Water Activities

13. The Applicant shall have a boat available on site during in- and over-water construction activities to immediately retrieve any debris entering the water.
14. A floating silt curtain with a containment boom shall be placed around the perimeter of the work area to contain turbidity and debris from construction activities. Debris from within the boom shall be removed by the end of each work day.
15. No petroleum products, fresh concrete, lime, concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.

16. All equipment operating within and over state waters shall utilize only vegetable-based biodegradable hydraulic fluid.
17. Barges used during project construction shall not be allowed to ground out or rest on the substrate or be anchored over vegetated shallows.
18. The work surface of the barge decks shall include a basin suitable to contain construction materials and debris so there is no possible entry to waters of the state.
19. Any water and/or sediment within the containment basin of the barge shall not be discharged to waters of the state.

Temporary Rock Fill Areas

20. Perimeter containment shall be installed for rock placement areas located within the OHWM to isolate the area from surface waters.
21. A separation barrier shall be placed over the native substrate prior to the placement of rock in the temporary fill areas located within the OHWM.

Pile Installation and Removal

22. A vibratory driver will be used to install in-water piles to the point of refusal. An impact hammer will be used for pile proofing.
23. Pile driving activities will include both impact and vibratory pile driving. A bubble curtain, or similar noise-attenuation device shall be placed around the pile during impact pile driving. When a bubble curtain is used, it must be placed to surround the perimeter of the pile at full depth of the water column.
24. Micro-piles will be installed by drilling a 16-inch-diameter boring and advancing a steel casing. Wastewater and sediment removed from within the casing shall be contained and hauled to an appropriate upland disposal area where there is no possible entry to waters of the state.
25. Removal of temporary piles dislodged with a vibratory extractor. Piles shall be dislodged and slowly removed through the water column.
26. All piles removed from the substrate shall be removed immediately and directly from the water. The pile shall not be shaken, hosed off, or left hanging to drip or any other action intended to clean or remove adhering material from the pile.
27. Piles that break during extraction shall be cut off two feet below the mudline.
28. Extracted piles, excess sediment, all construction debris and other solid waste material shall be properly managed and disposed of in an approved upland disposal site.

Concrete and Grout Work

29. Spill protection measures shall be in place prior to any concrete and/or grout delivery over water.
30. If cast in place, wet concrete/grout shall be prevented from entering waters of the state. All forms for any concrete/grout structure shall be completely sealed off to prevent the

possibility of fresh concrete entering waters of the state. Impervious materials shall be placed over any exposed concrete/grout to prevent any entry into waters of the state.

31. All concrete shall be completely cured prior to coming into contact with waters of the state.
32. Concrete/grout delivery systems that are situated over water shall be inspected daily to prevent any discharges of concrete and/or slurry water into waters of the state.
33. Concrete/grout process water shall not enter waters of the state. Any concrete/grout process contact water discharged from a confined area with curing concrete shall be routed to upland areas to be treated and disposed of properly with no possible entry to waters of the state.

Demolition Activities

34. The Applicant shall use tarps or other containment method when cutting or drilling over water to prevent debris, sawdust, and other materials from entering surface waters.
35. A floating silt curtain with an absorbent boom or similar BMP shall be used to contain any debris from cutting in-water piers and wing walls.
36. Deconstruction of the bridge superstructure will be conducted in an upland area. Containment shall be provided if the area is within 50 feet of surface waters.
37. Temporary rock fill below the OHWM will be removed by an excavator and the material hauled off site via barge or dump trucks. Once the rock is removed, the barrier material shall be completely removed.
38. The flexible intermediate bulk containers along the perimeter of the temporary rock fill areas shall be completely removed from the project site. Any damaged containers may be cut prior to removal.
39. Incidental debris from bridge demolition activities shall be immediately removed from waters of the state.

E. Emergency/Contingency Measures:

1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project and 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.
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 any of 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 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events to Ecology's Federal Permit Manager at (360) 407-6926 or (360) 407-6300.
 - f. Submit a detailed written report to Ecology's Federal Permit Manager 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.
3. 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.
 4. If at any time during work the Applicant finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the Applicant shall immediately notify Ecology using the above phone numbers.

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, Suite 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 Kingsbury
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775
lori.kingsbury@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 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>

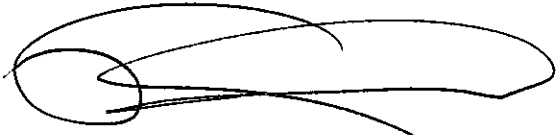
Chapter 90.48 RCW – Water Pollution Control
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>

Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173200.html

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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, Section Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office
Department of Ecology

Date

1/29/18

Attachment A

BNSF Railway
Bridge 66.4 (Drano Lake) Replacement Project
Order No. 15621
Statement of Understanding
Water Quality Certification Conditions

I, _____, state that I will be involved as an agent or contractor for BNSF Railway in the site preparation and/or construction of the Bridge 66.4 (Drano Lake) Replacement Project located between the towns of Cook and Underwood in Skamania County, Washington. I further state that I have read and understand the relevant conditions of the Washington Department of Ecology Water Quality Certification Order No. 15621 and the applicable permits and approvals referenced therein that pertain to the project-related work for which I am responsible.

Signature

Date

Title

Phone

Company

