May 9, 2018

Matthew Keim, Manager Engineering
BNSF Railway Company
Northtown GOB 80-44th Ave NE
Minneapolis, MN 55421

RE: Final §401 Water Quality Certification for Cocolalla Double Track Project;
NWW-2018-128

Dear Mr. Keim,

Enclosed is the final water quality certification for the above referenced project. The draft certification was advertised for public comment for 21 days from April 17 to May 8, 2018. Comments were received but no substantive changes have been made to the final certification. If you have any questions or concerns, please contact June Bergquist at 208.666.4605 or via email at june.bergquist@deq.idaho.gov.

Sincerely,

[Signature]
Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

c: Shane Slate, Corps of Engineers – Coeur d’Alene Regulatory Office
   Loren Moore, DEQ State Office
   Jacobs Engineering 101 North Fourth Ave, Suite 203 Sandpoint, ID 83864
Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon our review of the joint application for permit, received on March 9, 2018 and revised on April 10, 2018, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

**Project Description**

This proposed project will upgrade an existing mainline rail track and construct an adjacent second track to promote train movement and reduce wait times at crossings. The applicant proposes to discharge 3,360 cubic yards of rock into 0.37 acres of wetlands adjacent to Cocolalla Lake and into Westmond Creek to construct a 2.8 mile long second track adjacent to, and east of, the existing BNSF mainline track. The work includes the extension of the newly replaced concrete box culvert at Westmond Creek. It will be extended by 42 feet at each end and adjacent wetlands filled to accommodate the second track. The total length of the box culvert will be 192 feet and will have fish gravel lining the bottom of the culvert to mimic streambed conditions.
A second concrete culvert located 0.12 miles south of the intersection of Westmon Road and Highway 95 crosses an unnamed tributary to Cocolalla Lake. The culvert will be extended by 14 feet on the west side of the existing track and 19 feet on the east side to accommodate the new track. BNSF proposes to excavate a three foot radius around the culvert inlet to create a positive flow into the culvert. This design has been modified and instead of the three foot excavation, a corrugated elbow culvert and debris rack would be placed on the inlet end of the culvert extension to prevent the remaining wetlands from being drained. The other modification to this culvert installation is that there will be no digging at the outlet end of culvert extension. Water at the outlet will continue to be allowed to infiltrate and find its own path to the lake as it currently does. DEQ believes these changes will be more protective of water quality.

There are also a number of jurisdictional ditches along the east side of the existing track that are classified as wetlands that will be filled and re-established further east at the base of the slope of the new track. There are also 12 other culverts that carry stormwater under the tracks proposed to be extended, one to be abandoned, and two others that require replacing. BNSF proposes the following BMPs for this project (BMPs are not verbatim, list is not all inclusive):

1. Work is proposed to begin in May 2018 and end in December 2018. The Biological Evaluation indicates that in-water work at the 17 culverts will be done during low flow or dry conditions. If water is present in Westmond Creek (perennial stream) a temporary bypass using a flexible pipe with a fish screen will be used.

2. Construction related impacts to Cocolalla Lake have been minimized by locating the new track on the landward side of the existing railroad track.

3. Work limits will be staked or flagged to avoid environmental impacts.

4. Existing roads will be utilized for the construction and staging areas will be on upland locations.

5. Construction exits will be covered with clean shot rock to prevent off-site tracking. See Condition 21 for additional BMPs if shot rock is not adequate.

6. Sediment control measures will include silt fence, sediment filter rolls, and seeding/mulching of disturbed areas. They will be inspected daily. See Conditions 14-20 and 23 for additional details.

7. Clean structural fill from commercial quarries will be used as fill. This is modified by Condition 9. Excavated materials will be hauled to staging areas and either utilized elsewhere along the track or disposed of at an approved commercial facility.

8. Construction related activities on uplands will follow requirements of the U.S. Environmental Protection Agency’s Construction General Permit to minimize stormwater related impacts to waters of the U.S.

9. Four retaining walls will be constructed to stabilize steep slopes to minimize lake fills and prevent slides from impacting wetlands and ditches that connect to surface waters.

10. Wetland impacts are proposed to be mitigated by purchase of 5.0 functional unit wetland credits from the Valencia Wetland Mitigation Bank.
11. Spill containment materials will be on-site and within immediate access of machinery and vehicles.

12. Spill containment booms and other spill retention materials will be located near equipment working in or near open water.

13. No vehicle or machinery maintenance will be done within 50 feet of open water or wetlands.

**Antidegradation Review**

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- **Tier I Protection.** The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).

- **Tier II Protection.** The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).

- **Tier III Protection.** The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho’s antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

**Pollutants of Concern**

The primary pollutants of concern for this project are sediment and phosphorus. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment and phosphorus.

**Receiving Water Body Level of Protection**

This project is located on Westmond Creek within the Pend Oreille Lake Subbasin assessment unit (AU) ID17010214PN013_02a (Westmond Creek and Tributaries). This project is also located in unnamed tributaries to Cocolalla Lake within the Pend Oreille Lake Subbasin AU ID17010214PN013L-0L (Cocolalla Lake). These AUs have the following designated beneficial
uses: cold water aquatic life, primary contact recreation and domestic water supply. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

Westmond Creek is included in Category 3 (Unassessed Waters) of the 2014 Integrated Report. Therefore, DEQ must provide an appropriate level of protection on a case-by-case basis using information available at this time (IDAPA 58.01.02.052.05.b). Because there is no data available, DEQ will assume that this waterbody is high quality and will provide Tier II protection in addition to Tier I for this waterbody (IDAPA 58.01.02.051.02; 58.01.02.051.01). BNSF Railway Company has indicated on their application that they are willing to assume that this affected waterbody is high quality.

Cocolalla Lake, according to DEQ’s 2014 Integrated Report, is not fully supporting its aquatic life use. Causes of impairment include phosphorus and dissolved oxygen. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use. The contact recreation beneficial use is unassessed. DEQ must provide an appropriate level of protection for the contact recreation use using information available at this time (IDAPA 58.01.02.052.05.b).

**Protection and Maintenance of Existing Uses (Tier I Protection)**

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state’s numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses. In addition, the project will be consistent with the *Clark Fork/Pend Oreille Sub-Basin Assessment and Total Maximum Daily Loads*. Soils typically contain some amount of phosphorus so by minimizing or preventing soil from moving into wetlands and tributaries of the lake it will minimize or prevent phosphorus from entering Cocolalla Lake. BMPs will be used and maintained to prevent soil movement into waters of the U.S. (even when dry). The project will comply with the Construction General Permit which requires the development of a Storm Water Pollution Prevention Plan to ensure that adequate and functional
BMPs are placed on uplands to prevent water pollution. Disturbed areas will be seeded and mulched so long term soil stabilization can be achieved. Construction boundaries will be marked to protect existing vegetation. Fills will be placed on the landward side of the existing tracks so it doesn’t have to be placed in the lake. Additional BMPs are listed in the Description section of this certification.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both existing and designated uses is maintained and protected in compliance with the Tier I provisions of Idaho’s WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

**High-Quality Waters (Tier II Protection)**

Westmond Creek is considered high quality for cold water aquatic life and primary contact recreation. As such, the water quality relevant to these uses must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to cold water aquatic life and primary contact recreation uses of the Westmond Creek (IDAPA 58.01.02.052.06). The pollutants of concern for this project are sediment and phosphorus. Adherence to the project plans, Construction General Permit, Section 404 permit, and conditions of this certification provides reasonable assurance that no significant degradation to the creek will occur. Work will be conducted during low flow conditions, water will be diverted around the construction activity, clean fill will be used, disturbed areas will be stabilized with vegetation, fish gravels will be placed in the bottom of the box culvert for fish passage, digging in wetlands will be minimized, and wetlands will not be dewatered. Other BMPs are listed in the Description section of this certification. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

In order to maintain the ambient water quality conditions, permanent erosion and sediment controls must be implemented which will minimize or prevent future sediment contributions from the project area. The provisions in the 404 permit, coupled with the conditions of this certification, ensure that significant degradation to Westmond Creek will not occur. Therefore, DEQ concludes that this project complies with the Tier II provisions of Idaho’s WQS (IDAPA 58.01.02.051.02; 58.01.02.052.06 and 58.01.02.052.08).

**Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law**

**General Conditions**

1. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is
no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.

2. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.

3. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.

4. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.

5. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.

6. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.

7. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the state, coverage under the EPA Stormwater Construction General Permit must be obtained. More information can be found at https://www.epa.gov/npdes-permits/stormwater-discharges-construction-activities-region-10.

**Fill Material**

8. Fill activities affecting stream channels and wetlands shall take place only during periods of low flow.

9. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only and if from Idaho, from an Idaho Department of Lands permitted source.

10. Fill material shall not be placed in a location or in a manner that impairs surface or subsurface water flow into or out of any wetland area.

11. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.

12. All temporary fills shall be removed in their entirety on or before construction completion.

13. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could erode or slump into waters of the state.

**Erosion and Sediment Control**

14. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ’s *Catalog of Stormwater Best*
Management Practices for Idaho Cities and Counties, available online at http://www.deq.idaho.gov/media/494058-entire.pdf. Other resources may also be used for selecting appropriate BMPs.

15. One of the first construction activities shall be placing erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.

16. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.

17. Erosion and sediment control measures shall be installed at the earliest practicable time consistent with good construction practices and shall be maintained as necessary throughout project operation.

18. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.

19. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.

20. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.

21. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. Placement of clean aggregate at all construction entrances or exits and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces.

Turbidity

22. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standards under the Idaho WQS (IDAPA 58.01.02). Any violation of this standard must be reported to the DEQ regional office immediately.

23. BMPs must be implemented on disturbed banks and within the waters of the state to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs) to eliminate the plume.

24. Turbidity monitoring for this certification does not alter any monitoring requirements for the Construction General Permit.

In-water Work

25. Work in open water is to be kept at a minimum and conducted only when necessary.

26. Construction affecting the bed or banks shall take place only during periods of low flow.
27. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
28. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
29. Work in waters of the state shall be restricted to areas specified in the application.
30. Practices must prevent wet concrete from entering into waters of the state.
31. Stranded fish found in dewatered segments should be safely moved to a location (preferably downstream) with water.
32. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

33. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Management of Hazardous or Deleterious Materials

34. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
35. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
36. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use. A log book of these inspections shall be kept on site and provided to DEQ upon request.
37. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
38. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state. Cleaning shall be adequate enough to remove all life stages of aquatic invasive species.
39. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
40. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
   a. Make every reasonable effort to abate and stop a continuing spill.
b. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.

c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
   • Coeur d’Alene Regional Office: 208-769-1422 / 877-370-0017

d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

**Culverts**

41. To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. Examples of best management practices include, but are not limited to, parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, anti-seep barriers such as bentonite clay, or other acceptable roadway retention systems.

42. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert’s flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or excessive deposition from occurring.

43. The culvert shall be installed such that it does not impede fish passage.

44. Culverts shall be sized appropriately to maintain the natural drainage patterns.

**Right to Appeal Final Certification**

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to June Bergquist, Coeur d’Alene Regional Office at 208-666-4605 or via email at june.bergquist@deq.idaho.gov.

[Signature]
Daniel Redline
Regional Administrator
Coeur d’Alene Regional Office