



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

April 29, 2016

404 Permit Application Number: NWW-2015-077 Union Pacific Railroad, Meadow Creek Siding

Applicant/Authorized Agent: Cooper Minto, Union Pacific Railroad(UPRR)/Brian Antonioli, CDM Smith Inc.

Project Location: T64N R2E Section 26

Receiving Water Body: Snyder Creek tributary to the Moyie River

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 a review of the revised joint application for permit, received on November 19, 2015, subsequent correspondence from CDM Smith dated January 28, 2016, and information provided by UPRR design engineers during the April 26, 2016 site visit, 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

Overview

The Moyie River valley runs north-south from the Kootenai River to the Canadian border. It is bounded on the east with a ridge of high mountains with tributaries that flow westward from the mountains into the Moyie River. Union Pacific Railroad (UPRR) tracks parallel the Moyie River as it follows the valley north. UPRR is proposing to construct a 2.3 mile long railroad siding track (siding) parallel their existing tracks. The project is needed due to increased rail traffic and the need for trains to pass safely. The siding is also where crews will change since overnight accommodations used by the railroad are nearby. Directly paralleling this siding and extending for approximately 1.5 miles is a subdivision consisting of riverfront homes along the Moyie

River which are located approximately 250 to 300 feet from the proposed siding and existing railroad tracks. Many of these developed lots have shallow wells from 40 to 60 feet deep. Many areas downgradient of the railroad have groundwater just below the soil surface in the spring.

This siding is proposed for a location approximately 10 miles north of the City of Moyie Springs. The Moyie River Road roughly parallels the existing tracks. The arrangement of these north-south features, which vary depending on location, are from west to east: the Moyie River; the river front homes; Moyie River Road; in some areas a ditch with wetlands exists that will become the location of the new siding; the existing railroad; in some areas there are more wetlands; in areas without wetlands there will be one new access road that will replace two driveway crossings; private land with areas of wetlands including Snyder Creek; and finally the mountains that are part of the Panhandle and Kootenai National Forests.

Subject Area

On the southern portion of the proposed siding project, there is a ditch line (center ditch) located between the Moyie River Road and the existing railroad tracks that contains wetlands. This water flows south to Snyder Creek. The center ditch will be filled to create the extra track needed for the proposed siding. New ditch lines will be established on both sides of the double track feature and along both sides of the new driveway access road. In some areas there are also wetlands on the east side of the existing track and they will remain undisturbed. Snyder Creek and associated wetlands bisect the project near its southern end. Snyder Creek enters the Moyie River 450 feet from the railroad crossing.

Proposed Project

Union Pacific Railroad proposes to place 3,700 cubic yards of soil and rock into 0.43 acre of wetlands adjacent to Snyder Creek to create a new 2.3 mile long siding track. In addition, there will be 0.11 acres of wetland temporarily impacted due to dewatering of the wetland to perform the work. Wetland mitigation credits will be purchased from a wetland bank. There will be one relief culvert added to improve capacity at the Snyder Creek railroad crossing. The existing culvert that currently carries Snyder Creek under the tracks will be extended by 20 feet. Both these culverts will terminate in the ditch next to the new siding. Flow from these two culverts will first fill the existing culvert that carries Snyder Creek under the Moyie River Road and any extra water will back up the ditch along the new siding to an existing relief culvert north of the Snyder Creek crossing. All ditches along the entire length of the project will be graded to facilitate a north to south flow of water along both sides of the tracks. This ditch line will have temporary and permanent best management practices installed to prevent erosion of the ditch and subsequent turbidity and sedimentation of Snyder Creek.

Fill for the project will be imported clean fill from an Idaho Department of Lands permitted source and suitable soils from the site. UPRR has examined chemical constituents of on-site soils and determined that no contamination exists.

Antidegradation Review

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

- Tier 1 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 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 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 3 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 1 protection for that use, unless specific circumstances warranting Tier 2 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 pollutant of concern for this project is sediment. 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.

Receiving Water Body Level of Protection

This project is located on Snyder Creek within the Moyie Subbasin assessment unit (AU) 17010105PN005_02 (Moyie River – Round Prairie Creek to Meadow Creek). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, 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).

According to DEQ's 2012 Integrated Report, this receiving water body AU is fully supporting its assessed uses (IDAPA 58.01.02.052.05.a). As such, DEQ will provide Tier 2 protection in addition to Tier 1 for this water body (IDAPA 58.01.02.051.02; 58.01.02.051.01).

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 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 designated beneficial uses.

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 designated and existing uses is maintained and protected in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier 2 Protection)

Snyder Creek is considered high quality for all designated beneficial uses. 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 all designated beneficial uses of the Snyder Creek (IDAPA 58.01.02.052.06). The pollutant of concern is sediment. This project is located on Snyder Creek, a small tributary to the Moyie River. The in-water work will be conducted during the lowest flow period of this tributary to prevent discharge of sediment and turbidity into Snyder Creek, adjacent wetlands and the Moyie River. Best management practices such as erosion control mat, fiber rolls, filter sock and construction exit track-out control will be utilized. Final stabilization will be achieved by hydroseeding disturbed ground. A bypass will be constructed to carry Snyder Creek around the work site and water pumped from the wetlands (necessary for construction) will be filtered and discharged into Snyder Creek or vegetated uplands.

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 degradation to the Moyie River – Round Prairie Creek to Meadow Creek AU or Snyder Creek will not occur. Therefore, DEQ concludes that this project complies with the Tier 2 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. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. 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.

3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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 <http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources>.

Fill Material

1. Fill material shall be free of organic and easily suspended fine material. The fill material to be placed shall include clean earth fill, sand, and stone only.
2. 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.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
4. All temporary fills shall be removed in their entirety on or before construction completion.
5. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state.

Erosion and Sediment Control

1. 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.

2. 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.
3. 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.
4. 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.
5. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
6. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
7. Disturbed areas suitable for vegetation shall be seeded or re-vegetated to prevent subsequent soil erosion.

Turbidity

1. All practical BMPs on disturbed banks and within the waters of the state must be implemented 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).
2. Decant water from the wetland dewatering shall be discharged to a vegetated location for infiltration and/or filtering prior to its entering waters of the state. If discharged directly into waters of the state it must not exceed the WQS for turbidity (no visible plume if a turbidimeter is not used).
3. **UPRR shall discharge the decant water from wetland dewatering at a location which doesn't create conditions that could flood drainfields for residential septic systems or create other adverse water quality consequences.**

In-water Work

1. Construction affecting the Snyder Creek bed, banks or wetlands shall take place during low flow conditions.
2. Work in waters of the state shall be restricted to areas specified in the application.

Pollutants/Toxics

1. 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.

Vegetation Protection and Restoration

1. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Management of Hazardous or Deleterious Materials

1. 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.
2. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
3. 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.
4. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
5. 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. Cleaning must be sufficient enough to prevent the introduction of invasive species including larval stages, seeds and plant and animal parts. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place on-site and shall include a spill response kit (e.g., oil absorbent booms or other equipment).
7. Any release that causes a sheen (of any size) in waters of the state or spill of hazardous material that cannot be immediately controlled or contained must be reported by calling 911 and the local DEQ office.

Culverts

1. 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.
2. The culvert shall be installed such that it does not impede fish passage.
3. 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 at (208) 666-4605 or via email at june.bergquist@deq.idaho.gov.

DRAFT

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office