



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

May 24, 2013

404 Permit Application Number: NWW-2013-243-B03, Soda Creek Culvert Replacement/Red Horse Creek Rock Fords

Applicant/Authorized Agent: Nez Perce – Clearwater National Forest

Project Location: Soda Creek; Forest Service road 1172, mile 2.1, Section 20, Township 28 N, Range 10 E, Idaho County.

Red Horse Creek; Forest Access road 1807/1807B, Section 36, Township 29 N, Range 8 E, Idaho County.

Receiving Water Body: Soda Creek and Red Horse Creek

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 its review of the joint application for permit, received on May 6, 2013, 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

Soda Creek

This project involves the removal of an undersized culvert and installation of a 103”x71” arch culvert. Other activities will include construction of rock weirs, replacement of roadway aggregate, cofferdam installation, and seeding.

Red Horse Creek

This project involves the construction of two, 15’x25’ armored vehicular fords and involves the placement of approximately 28 cubic yards of riprap.

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

Soda Creek

This project is located on Soda Creek within the South Fork Clearwater Subbasin assessment unit (AU) ID17060305CL046_02 (Soda Creek - source to mouth). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, and secondary contact recreation. There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated.

The cold water aquatic life and salmonid spawning uses in this Soda Creek AU are not fully supported due to excess temperature (2004 South Fork Clearwater TMDL). The secondary contact recreation beneficial use has not yet been assessed, however the applicant has agreed that this water body is high quality with respect to contact (Ted Moyer, Civil Engineer, Nez Perce-Clearwater National Forest, verbal communication, 5/9/2013). As such, DEQ will provide Tier 1

protection for the aquatic life and salmonid spawning uses and Tier 2 protection, in addition to Tier 1, for the recreation beneficial use (IDAPA 58.01.02.051.02; 58.01.02.051.01).

Red Horse Creek

This project is located on Red Horse Creek within the South Fork Clearwater Subbasin assessment unit (AU) ID17060305CL051_02 (Red Horse Creek-source to mouth). This AU has not yet been designated. Because DEQ presumes most waters in the state will support cold water aquatic life and primary or secondary contact recreation beneficial uses, undesignated waters are protected for these uses (IDAPA 58.01.02.101.01.a). In addition to these uses, salmonid spawning has been identified as an existing use based on the South Fork Clearwater River Subbasin Assessment and TMDL (2004).

The cold water aquatic life and salmonid spawning uses in this Red Horse Creek AU are not fully supported due to excess temperature (2004 South Fork Clearwater TMDL). The secondary contact recreation beneficial use has not yet been assessed, however the applicant has agreed that this water body is high quality with respect to contact recreation (Ted Moyer, Civil Engineer, Nez Perce-Clearwater National Forest, verbal communication, 5/9/2013). As such, DEQ will provide Tier 1 protection for the aquatic life and salmonid spawning uses and Tier 2 protection, in addition to Tier 1, for the recreation beneficial use (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.

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. These AUs (ID17060305CL046_02 and ID17060305CL051_02) are included in the South Fork Clearwater River Subbasin Assessment and TMDL (2004).

The South Fork Clearwater River TMDL was developed to address impairments to multiple AUs within the subbasin; excess temperature was addressed for Soda Creek and Red Horse Creek. The TMDL determined that water channels that have been made wider and shallower, with less vegetative shading are being heated by solar insolation. The degree to which shade has been reduced and channels altered was assessed on a stream reach by stream reach basis. Current stream shading was assessed using aerial photograph interpretation and other analytical techniques. Potential shade in forested areas was assumed to be 90%. Targets were set to restore stream shading and stream channel morphology to conditions representing minimal human impact. In order to improve stream temperature, restored riparian communities and stream channels are needed. Therefore, it is necessary to ensure that project activities do not cause further temperature exceedances, whether directly or indirectly. Project activities at both sites are not expected to contribute sources of temperature to Soda Creek or Red Horse Creek; no trees or canopy will be removed and banks will be reseeded after construction.

The pollutant of concern for both the Soda Creek and Red Horse Creek projects is sediment. Sediment is not relevant to recreational uses, but it is relevant to aquatic life use. The Soda Creek project will replace an undersized culvert which will improve fish passage.

The Red Horse Creek project will involve the construction of two vehicle fords. Soil disturbances will be limited to the construction area; water, soil, and erosion control BMPs will be in place during construction and water will be diverted around the construction zone during construction.

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 South Fork Clearwater River Subbasin Assessment and TMDL (2004).

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above for these two AUs; 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)

Soda Creek and Red Horse Creek are considered high quality for contact recreation uses. As such, the water quality relevant to contact recreation uses of Soda Creek and Red Horse Creek 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 contact recreation uses in Soda Creek and Red Horse Creek (IDAPA 58.01.02.052.06). The pollutant of concern relevant to the contact recreation beneficial use is *Escherichia coli*. Project activities are not expected to contribute sources of *Escherichia coli* to Soda Creek or Red Horse Creek; therefore this project will not cause degradation with respect to contact recreational uses. The only pollutant of concern for these projects is sediment. Sediment is not relevant to contact recreational uses. Therefore, these projects will not result in a lowering of water quality with respect to any pollutant relevant to the Tier 2 protection for these water bodies. As such, the projects comply with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

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. 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.
6. If this project disturbs more than 1 acre and there is potential for discharge of stormwater to waters of the US, 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 suspendable fine material. The fill material to be placed shall include clean earth fill, sand, and stone only.
2. All temporary fills shall be removed in their entirety on or before construction completion.
3. 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 uncontrolled.

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 permanent and/or temporary erosion and sediment control measures around the perimeter of the project or initial work areas to protect the project water resources.
3. Structural fill or bank protection shall consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
4. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
5. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
6. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
7. Maximum fill slopes shall be such that material is structurally stable once placed and does not slough into the stream channel during construction, during periods prior to revegetation, or after vegetation is established.

Turbidity

1. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity during in-water work.
2. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity.
3. Turbidity monitoring must be conducted. A properly and regularly calibrated turbidimeter is recommended but visual inspection is acceptable. Turbidity shall not exceed background turbidity by more than fifty (50) nephelometric turbidity units (NTU) instantaneously or more than twenty-five (25) nephelometric turbidity units (NTU) for more than ten (10) consecutive days. If an exceedance occurs, the applicant must inspect the condition of the project BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity, which may include modifying existing BMPs.

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, native vegetation shall be kept to a minimum.
2. 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. 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.
3. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
4. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
5. Any spill less than 25 gallons must be cleaned up within 24 hours of the release but does not require reporting to DEQ. If the spill is less than 25 gallons and is not cleaned up within 24 hours, then it becomes a reportable quantity.
6. Any spill greater than or equal to 25 gallons must be cleaned up within 24 hours of the release and reported to DEQ by calling 1-800-632-8000 (Idaho State Communications Center). Any spill equal to or greater than 25 gallons is reportable immediately.
7. Any release that causes a sheen (of any size) in waters of the state must be reported immediately to the National Response Center at 1-800-424-8802 and the Idaho State Communication Center (1-800-632-8000).

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. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
4. 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 John Cardwell, Lewiston Regional Office at (208) 799-4370 or at John.Cardwell@deq.idaho.gov.

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Clayton Steele
Regional Administrator
Lewiston Regional Office