STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
John H. Tippets, Director

January 4, 2016

Doral Hoff
Idaho Transportation Department
PO Box 837
Lewiston, ID 83501

Subject: Water Quality Certification for NWW-2015-506-B02

Dear Mr. Hoff,

Attached are the final §401 water quality certifications for the above referenced projects. The §401 process requires a public notice, and the comment period closed on December 31, 2015. No public comments regarding the §401 water quality certification were received by the Idaho Department of Environmental Quality (DEQ). Therefore, DEQ is issuing the final certification.

If you have any questions or concerns, please do not hesitate to contact me at (208) 799-4370 or Cynthia.Barrett@deq.idaho.gov .

Sincerely,

Cynthia Barrett
Water Quality Program Manager
Lewiston Regional Office

cc: Nicholle Braspennickx, ACOE, Boise
John Cardwell, DEQ, LRO
Nicole Deinarowicz, DEQ, SO
TRIM 2015AKF85

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Idaho Department of Environmental Quality

Final §401 Water Quality Certification

January 4, 2016

404 Permit Application Number: NWW-2015-506-B02

Applicant/Authorized Agent: Idaho Transportation Department

Project Location: T41N R1E S18 SW SW SH-3 MP40

Receiving Water Body: Purdue 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 November 30, 2015, 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 project will replace the existing 13'-5"x 8'5"x 68' corrugated pipe arch culvert with a 16'-6' span x 84' length embedded arch pipe. The pipe will be embedded 3.5' to promote fish passage in Purdue Creek.

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 pollutants of concern for this project are sediment and temperature. 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 temperature.

Receiving Water Body Level of Protection

This project is located on Purdue Creek within the Potlatch River Subbasin assessment unit (AU) ID17060306CL049_02 (Potlatch River - headwaters). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, domestic water supply and primary contact recreation. 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).

The cold water aquatic life and salmonid spawning beneficial uses in Purdue Creek are not fully supported due to excess temperature and the contact recreation beneficial use is not fully supported due to *Escherichia coli* bacteria (*Potlatch River TMDL, 2009*).

The pollutants of concern associated with the construction of this project are sediment and temperature, therefore DEQ will provide Tier 1 protection for cold water aquatic life and salmonid spawning beneficial uses (IDAPA 58.01.02.051.01; 58.01.02.051.02). DEQ will not provide a Tier 1 review for contact recreation as the project will not be adding bacteria pollutants to this AU.

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. This AU ID17060306CL049_02 is included in the Potlatch River Subbasin Assessment and TMDL, approved by EPA (2009).

The Potlatch River Subbasin Assessment and TMDL determined that the Potlatch River and its tributaries (Purdue Creek) are being heated by solar insolation due to alterations to the stream flow regime, channel substrate and habitat alterations including reduced riparian vegetative shading. Pollutant load reduction targets were set to restore stream shading and stream channel morphology and in order to improve stream temperature, restored riparian communities and stream channels are needed. Because these water quality impacts have been documented, it is necessary to ensure that project activities do not directly or indirectly cause further temperature exceedances. Based on project designs and proposed activities, construction activities are not expected to contribute sources of temperature to Purdue Creek; no trees or canopy will be removed and stream banks will be reseeded after construction.

The project will replace a deteriorating undersized culvert on Purdue Creek. Soil disturbances will be limited to the construction area; water, soil, and erosion control best management practices (BMPs) will be in place during construction and water will be diverted around the construction zone. During the construction phase the applicant will implement, install, maintain, monitor, and adaptively manage BMPs directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment control measures 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 water quality 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 Potlatch River Subbasin Assessment and TMDL (2009).

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).

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 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 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.

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

Turbidity

1. Turbidity monitoring must be conducted each day during project implementation when project activities may result in turbidity increases above background levels. If the downstream turbidity exceeds upstream turbidity by fifty (50) nephelometric turbidity units (NTU) or more, or more than twenty-five (25) NTU for more than ten (10) consecutive days, the project is causing an exceedance of the WQS. If an exceedance occurs, the permittee 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 existing BMPs and or modify BMPs.
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.

In-water Work

1. Equipment shall work from an upland site to minimize disturbance of waters of the state. If this is not practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.
2. Construction affecting the bed or banks shall take place only during periods of low flow.
3. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
4. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
5. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

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. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully re-established 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. 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. Immediately notify DEQ of the spill by calling the Idaho State Communications Center at 1-800-632-8000.
   d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.
6. In accordance with IDAPA 58.01.02.851.04, any aboveground spill or overfill of petroleum that results in a release *that causes a sheen on a nearby surface water* shall be reported to DEQ within 24 hours and corrective action in accordance with IDAPA 58.01.02.852 shall be taken.
7. In accordance with IDAPA 58.01.02.851.04, any aboveground spill or overfill of petroleum that results in a release less than 25 gallons *and does not cause a sheen on nearby surface water* shall be reported to DEQ by calling the Idaho State Communications Center at 1-800-632-8000 if cleanup cannot be accomplished within 24 hours.

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 Mark Sellet at (208) 799-4370 or email at mark.sellet@deq.idaho.gov.

John Cardwell
Regional Administrator
Lewiston Regional Office