



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

July 22, 2013

404 Permit Application Number: NWW-2013-293-B02

Applicant/Authorized Agent: Idaho Transportation Department, District 4

Project Location: State Highway (SH) 75, Mile Post 131.6, near Lake Creek; within Section 36, Township 05 North, Range 17 East; at 43° 43' 31.40" North, 114° 22' 49.40" West; in Blaine County, near Ketchum, Idaho.

Receiving Water Body: Big Wood 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 its review of the joint application for permit, received on June 26, 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

Project activities include the discharge of 135 cubic yards of rock riprap and cobble below the ordinary high water mark of the Big Wood River over a linear distance of 75 feet, for a highway shoulder/bank stabilization project on SH-75 at milepost 131.6.

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 the Big Wood River within the Big Wood River assessment unit (AU) ID17040219SK007_04 (North Fork Big Wood River to Seamans Creek). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. 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 use in this Big Wood River AU is fully supported (2010 Integrated Report). As such, DEQ will provide Tier 2 protection, in addition to Tier 1, for the cold water aquatic life beneficial use (IDAPA 58.01.02.051.02; 58.01.02.051.01). The primary contact recreation, salmonid spawning and domestic water supply beneficial uses have not yet been assessed (2010 Integrated Report). DEQ discussed with ITD the lack of water quality monitoring data on this Big Wood River AU and concurred that Tier 2 protection was acceptable to them. As such, DEQ will provide Tier 2 protection for these uses (IDAPA 58.01.02.052.01).

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. This Big Wood River AU is listed in the approved *Big Wood River TMDL* (2002); but does not have load allocations or wasteload allocations defined for this segment because water quality impairment was not determined to exist.

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 *Big Wood River TMDL* (2002) per the following provisions:

1. Existing wetlands and streams will not exceed 0.1 acres as described in the USACE permit. Other wetlands and associated streams will be avoided in order to reduce erosional sediments from entering the receiving waterbody.
2. Any work in waterways will be done during the low flow periods. This is done to reduce erosional sediments from being transported downstream from the project site and from entering the receiving waterbody.
3. Vegetation removal along the streambank will be minimized as practicable; and will be removed and revegetated according to the approved plans and specifications by the USACE. This is done to reduce erosional sediments from being filtered and entering the receiving waterbody. As such, existing vegetation will be cut back in order to access and place toe protection along the undercut bank.
4. ITD will construct a riverbank toe along 75-feet of the previously repaired reach using large-diameter (4-5 feet) angular rock placed in the approximate original bank toe footprint (located approximately 8 feet from the existing bank toe). Then, for the proposed highway shoulder restoration, 3-6 inch diameter cobble will be used to fill gaps in the medium angular rock along the highway shoulder to provide a foundation for highway maintenance.

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)

The Big Wood River is considered high quality for the cold water aquatic life use. As such, the water quality relevant to this use 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 aquatic life use uses of the Big Wood River (IDAPA 58.01.02.052.06). As previously noted, the only pollutant of concern for this project is sediment; sediment is relevant to the aquatic life and salmonid spawning uses designated for this AU. Therefore, there must be no lowering of water quality as a result of the discharge of sediment. The permittee must minimize sediment transport through implementation of BMPs. Permanent erosion and sediment controls must also be implemented, which will minimize or prevent future sediment contributions from the project area. Additionally, the applicant is required to adhere to the conditions of this certification as outlined below. Although this project may result in minimal short-term sediment impacts to the water body, DEQ does not expect long-term impacts or degradation to this Big Wood River AU or the Big Wood River. Therefore, DEQ concludes that this project complies with the Tier 2 provisions of Idaho's WQS (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. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the US 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 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. 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 uncontrolled.

Erosion and Sediment Control

1. The contractor and ITD determined from previous work done in 2010 that sediment control devices were not necessary as most of the work was done from the streambank and the turbidity plumes created were diminished within 500 feet. (See Turbidity section for additional information on turbidity monitoring.) The proposed work is similar, but with larger rock. However, DEQ understands that the water quality of the Big Wood River in this AU is high quality and is a sensitive area for certain fishery species. However, DEQ encourages ITD and its contractor to implement a minimal level of best management practices that provide sufficient protection to the receiving waterbody and its natural resources.
2. 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.
3. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
4. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion, according to the USACE approved plans and specifications.

5. 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.
6. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
7. 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

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). Any violation of this standard must be reported to the DEQ regional office immediately.
2. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity during in-water work.
3. 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.
4. Because of the size of this project, no turbidity monitoring is required. However, ITD and/or its contractor must ensure that the project activity will be conducted in a manner that will not violate water quality standards for the Big Wood River. Additionally, the contractor and ITD have determined that turbidity plumes created during the 2010 work in the Big Wood River in live water without sediment controls or instream diversions/barriers were visually observed to have dissipated in less than 500 feet (measurement was not required) and in less than 15 minutes.

In-water Work

1. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the US. If this is not practicable, appropriate measures must be taken to ensure disturbance to the waters of the US is minimized.
2. Construction affecting the bed or banks shall take place only during periods of low flow.
3. Forging of the channel is not permitted.
4. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
5. Activities in spawning areas must be avoided to the maximum extent practicable.
6. Work in waters of the state shall be restricted to areas specified in the application.
7. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.

8. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
9. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
10. 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, and as described in the USACE approved plans and specifications.
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. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
5. 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.

Dredge Material Management

1. The proposed project activity will not dredge or excavate the channel of the Big Wood River. Therefore, no dredge material management is necessary.

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. Any wastewater or wash water must not be allowed to enter a water of the state.
6. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
7. 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.
8. 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.
9. Any release that causes 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.

Required Notification

The permittee must notify the appropriate DEQ Regional Office when authorized work begins. Please contact Dr. Balthasar Buhidar at (208) 736-2190 or at balthasar.buhidar@deq.idaho.gov.

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 Dr. Balthasar Buhidar, Twin Falls Regional Office, (208) 736-2190 or balthasar.buhidar@deq.idaho.gov.

“DRAFT”

Bill Allred

Regional Administrator
Twin Falls Regional Office