



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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www.deq.idaho.gov

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

April 23, 2018

Curtis Arnzen  
Idaho Transportation Department  
P.O. Box 837  
Lewiston, Idaho 83501

Subject: FINAL 401 Water Quality Certification for NWW-2017-733-B03 Forest Service Road  
No. 5669 culvert replacement

Dear Mr. Arnzen:

Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, the DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressively, or by taking no action.

This letter is to inform you that DEQ has evaluated the information submitted to us by the U.S. Army Corps of Engineers and is issuing the attached 401 certification, subject to the terms and conditions contained therein. This certification shall remain in effect until 2 years from issuance, at which time construction must be completed.

Please contact me at 208-799-4370 if you have any questions or further information to submit to DEQ.

Sincerely,

A handwritten signature in blue ink that reads "John Cardwell".

John Cardwell  
Regional Administrator  
Lewiston Regional Office

c: William Schrader, ACOE Project Manager  
Loren Moore, DEQ State Office  
Sujata Connell, DEQ LRO  
Chris Wolffong, USDA



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## Idaho Department of Environmental Quality Final §401 Water Quality Certification

April 23, 2018

**404 Permit Application Number:** NWW-2018-00089, Moose Creek Culvert Replacement

**Applicant/Authorized Agent:** Idaho Transportation Department

**Project Location:** Latitude: N 45.829365 Longitude: W -115.580000

**Receiving Water Body:** Moose Creek

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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 March 22, 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

The purpose of this project is to improve flow characteristics and aquatic organism passage in Moose Creek, as well as roadway improvements. This project consists of the removal of an existing corrugated culvert and replacing it with a new, 102' long, 14' wide x 4' 8" tall bottomless corrugated plate arch culvert, set on precast concrete footings. Discharge of materials below the ordinary high water mark of Moose Creek includes 96 cubic yards of gravel, rock and stone for grade control structures and rock weirs, 49 cubic yards of concrete footings, 20 cubic yards of structural backfill and bedding and 13 cubic yards of temporary straw bales/wattles and diversion pipe. A temporary diversion structure and other erosion control measures including straw wattles, bales, and a silt fence will be used to reduce sedimentation during construction.

## 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 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 Moose Creek within the South Fork Clearwater River Subbasin assessment unit (AU) ID17060305CL030\_02 (South Fork Clearwater River - Crooked River to Tenmile Creek). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning 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).

According to DEQ's 2014 Integrated Report, this Moose Creek AU is not fully supporting its aquatic life and salmonid spawning beneficial uses. Causes of impairment include excess temperature and sediment and physical substrate habitat alterations. DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the Moose Creek aquatic life beneficial use.

The pollutants of concern associated with this project are sediment and temperature. However, sediment and temperature are not relevant to recreational uses and will not degrade water quality necessary to support recreation uses. Additionally, project activities are not expected to alter the temperature regime of Moose Creek as any riparian vegetation removed will be replanted. This AU is fully supporting its primary contact recreation beneficial use; therefore, DEQ will provide Tier II protection in addition to Tier I protection for primary contact recreation (IDAPA 58.01.02.051.01 and 58.01.02.051.02).

### ***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 *South Fork Clearwater River Subbasin Assessment and TMDLs* (July 2004).

The South Fork Clearwater River Subbasin Assessment and TMDL determined that the South Fork Clearwater River and its tributaries (Moose Creek) are being heated by solar insolation due to alterations to the stream flow regime, channel substrate and reduced riparian shading. Aquatic species of concern identified in the TMDL include sculpin, mountain whitefish, bridgelip suckers and pacific lamprey. Salmonid resources include bull trout, spring chinook, steelhead/rainbow trout, westslope cutthroat trout, and brook trout. Pollutant load reduction targets were set to restore stream shading and stream channel morphology. 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 in Moose Creek. Based on project designs and proposed activities, construction activities are not expected to contribute sources of temperature to Moose Creek; no trees or canopy will be removed and stream banks will be reseeded after construction.

The project will replace one undersized culvert with a new corrugated plate arch culvert on a precast footing on Moose 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. Erosion control measures include, but are not limited to the installation of sediment traps and the use of straw bales and wattles which will minimize or prevent future sediment contributions from the project area.

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)***

The Moose Creek is considered high quality for primary contact recreation. 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 primary contact recreation uses of Moose Creek (IDAPA 58.01.02.052.06). The pollutant relevant to the primary contact recreation beneficial use is *Escherichia coli*. Project activities are not expected to contribute sources of *Escherichia coli* to Moose Creek. The only pollutants of concern for this project are sediment and temperature. Sediment and temperature are not relevant to recreational uses. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

The provisions in the 404 permit, coupled with the conditions of this certification, ensure that long-term impacts or degradation to primary contact recreation in Moose Creek (AU ID17060305CL030\_02) 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. 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. 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.
4. 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.
5. 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**

1. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material 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. 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. Permanent 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. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
8. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
9. 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.
10. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.

### ***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).
2. 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).
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. Monitoring must occur each day during project implementation when project activities may result in turbidity increases above background levels.
5. A sample must be taken at a relatively undisturbed area approximately up-current from in-water disturbance or discharge to establish background turbidity levels for each monitoring event. Background turbidity, location, date, and time must be recorded prior to monitoring down-current.

Monitoring must occur down-current from the in-water disturbance or point of discharge and within any visible plume. The turbidity, location, date, and time must be recorded for each sample or observation.

Results from the compliance point sampling must be compared to the background levels sampled during each monitoring event. If the downstream turbidity exceeds upstream turbidity by 50 nephelometric turbidity units (NTU) or more, the project is causing an exceedance of the WQS. If an exceedance occurs, the permittee must inspect the

condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity (this may include modifying existing BMPs).

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The log must include background measurements (in NTUs) or observations; compliance point measurements or observations; comparison of background and compliance point monitoring as a numeric value (in NTUs) or in narrative form; and location, time, and date for each sampling event. The report must describe all exceedances and subsequent actions taken and the effectiveness of the action including subsequent monitoring.

### ***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 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.
  - a. Temporary crossings must be removed as soon as possible after the project is completed or the crossing is no longer needed.
3. Activities in spawning areas must be avoided to the maximum extent practicable.
4. Work in waters of the state shall be restricted to areas specified in the application.
5. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
6. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
7. 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. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. 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. Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

### ***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. 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.
5. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
6. 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).
    - Lewiston Regional Office: 208-799-4370 / 877-541-3304
  - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

### ***Culverts***

1. 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.
2. 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.
3. The culvert shall be installed such that it does not impede fish passage.
  4. 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.
  5. 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](mailto:mark.sellet@deq.idaho.gov).



John Cardwell  
Regional Administrator  
Lewiston Regional Office