



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

June, 26 2012

Stephaney M. Church  
Boise National Forest  
2180 American Legion Blvd.  
Mountain Home, ID 83647

Re: Reference No. NWW-2012-280-B01, Cottonwood Creek Culvert Replacement

Dear Ms. Church,

The Department of Environmental Quality (DEQ) has considered water quality certification for construction related to the referenced project. DEQ is issuing the attached 401 Water Quality Certification subject to the terms and conditions contained therein.

This certification shall remain in effect until December 31, 2013, at which time construction must be completed.

Please contact me at (208) 373-0550 if you have any questions or further information to present.

Sincerely,

A handwritten signature in blue ink that reads "Michael McLinchy for".

Pete Wagner  
Regional Administrator  
Boise Regional Office

JRA: dr

cc: Gregory J. Martinez, COE, Boise  
Miranda Adams, DEQ State Office  
TRIM 2012AKF123



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

June 26, 2012

**404 Permit Application Number:** NWW-2012-280-B01

**Applicant/Authorized Agent:** Boise National Forest

**Project Location:** T3N, R5E, Section 2 in Boise County, Idaho. Head East on I-84. Exit 57. Turn left on Gowen Road and drive north approximately 12.7 miles. Turn right on Forest Road 268 for 15.6 miles.

**Receiving Water Body:** Cottonwood 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.

DEQ has reviewed the facts and the figures presented in the public notice and joint application for permit for the above-referenced activity. DEQ has also reviewed and considered other material and information related to the proposed activity, including the concurrence letter from U.S. Fish and Wildlife Service, April 13, 2012.

Based upon its review and consideration of the information listed above, DEQ certifies that if the permittee(s) comply with the terms and conditions imposed by the above-referenced 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.

This certification shall remain in effect until December 31, 2013 at which time construction must be completed.

### Project Description

This project will replace three existing culverts with a single multi-plate bottomless pipe arch culvert measuring 25' W x 10'10"H x 82'L. The work will improve flow and restore the stream bed to a more natural profile that will resemble the historic channel and reestablish aquatic organism passage.

## Antidegradation Review

Idaho's Water Quality Standards contain an antidegradation policy which includes a provision for restoration projects. Pursuant to IDAPA 58.01.02.052.02, if an activity qualifies as a restoration project, changes in water quality may be allowed without an antidegradation review. Water quality restoration projects are those projects that will secure long-term water quality improvement by returning a water body to something closer to its natural characteristics and uses where those characteristics and uses have been lost or diminished.

The Mountain Home Ranger District, Boise National Forest project to replace three existing culverts with an open bottom arch pipe culvert will restore Cottonwood Creek to a more natural condition. A bypass pipe will be installed and stream flow will be diverted to the west of the existing culverts. Where the road prism previously existed, appropriately sized stream simulation materials will be placed to mimic a natural condition. The bottomless pipe arch will be installed over the stream simulation. Flow will be reintroduced incrementally, in a manner that limits sedimentation downstream, until channel and flow are restored. The project will restore hydrologic function, repair aquatic organism passage and possibly reestablish bull trout populations that were once thought to exist in Cottonwood Creek. The project will also secure long-term water quality improvements to existing Bull Trout habitat in Arrow Rock Reservoir by eliminating scour and turbidity associated with the long drop between the existing culvert outlets and channel bottom. Therefore DEQ concludes that the project is a restoration project as described the Water Quality Standards.

DEQ recognizes this project may result in short-term impacts to water quality. The project, however, will include the use of best management practices to minimize impacts. Because the project constitutes a restoration project, any short-term changes in water quality may be allowed without an antidegradation review.

## 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. 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. 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. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. 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.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. 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.
12. 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 58.01.02.250.02.e). 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 in-stream sediment suspension and resulting turbidity.

### ***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. Activities in spawning areas must be avoided to the maximum extent practicable.
5. Work in waters of the state shall be restricted to areas specified in the application.
6. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
7. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.

8. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

### ***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.

### ***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. 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. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).

### ***Culverts***

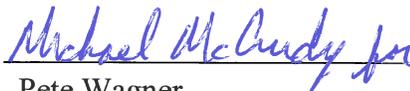
1. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert's flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or 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 Julia Achabal, DEQ Boise Regional Office, 208.373.0550, [julia.achabal@deq.idaho.gov](mailto:julia.achabal@deq.idaho.gov).



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Pete Wagner

Regional Administrator

Boise Regional Office