



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

Brad Little, Governor
John H. Tippetts, Director

July 30, 2020

Mike Carroll, Forest Engineer
Salmon-Challis National Forest
1206 S. Challis St
Salmon, Idaho 83467

RE: Reference No. NWW-2019-00600 – Boundary Creek Road-Dagger Creek Bridge Installation

Dear Mr. Carroll:

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.

If you have any questions or further information to present please contact Kati Carberry at (208)373-0434, or via e-mail at Kati.Carberry@deq.idaho.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron Scheff".

For Aaron Scheff

Aaron Scheff
Regional Administrator
Boise Regional Office

KLC/am

ec: William Schrader, COE-Boise
Jason Pappani, DEQ-State Office
Lori Flook, DEQ-State Office
CM#: 2020AKF68



Idaho Department of Environmental Quality Final §401 Water Quality Certification

July 30, 2020

404 Permit Application Number: NWW-2019-00600, Boundary Creek Road-Dagger Creek Bridge Installation

Applicant/Authorized Agent: Mike Carroll, Salmon-Challis National Forest

Project Location: Latitude 44.475624° N, Longitude -115.323991° W; approximately 35 miles east from Cascade, Valley County, Idaho

Receiving Water Body: Dagger 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 June 19, 2020, 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 remove an existing culvert at the Boundary Creek Road crossing over Dagger Creek where beaver activity has plugged the flow blocking passage and causing washout of the road surface. The project includes removal of an existing 5 foot diameter, 40 foot long CMP culvert and replacing it with a new bridge. Project activities will result in an estimated 47 cubic yards of fill material into 0.01 acres along 40 linear feet within Dagger 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 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 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 Dagger Creek within the Upper Middle Fork Salmon Subbasin assessment unit (AU) 17060205SL011_02 (Dagger Creek-entire drainage). 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). DEQ BURP monitoring data from 1997, 2007, and 2015 indicated that cold water aquatic life and salmonid spawning were an existing use therefore DEQ is required to also protect for salmonid spawning. 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 (2016) Integrated Report, this receiving water body AU is fully supporting its assessed uses of cold water aquatic life, salmonid spawning, and primary contact recreation (IDAPA 58.01.02.052.05.a). As such, DEQ will provide Tier II protection in addition to Tier I for this water body (IDAPA 58.01.02.051.02; 58.01.02.051.01).

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.

The purpose of this project is to restore fish passage and improve the conditions at the site of the existing degraded culvert. This project is expected to have beneficial effects for aquatic life in Dagger Creek including improved fish passage and connectivity between habitats upstream and downstream of the existing culvert. All work will be done in low flow conditions and the work area shall be dewatered prior to construction activities. Once work is completed the work area will be slowly re-watered. 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.

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 Dagger Creek is considered high quality for salmonid spawning, cold water aquatic life, and primary contact recreation. As such, the water quality relevant to these uses 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 salmonid spawning, cold water aquatic life, and primary contact recreation uses of the Dagger Creek (IDAPA 58.01.02.052.06). The only pollutant of concern associated with this project is sediment. However, sediment is not relevant to recreational uses since sediment will not degrade water quality necessary to support recreation uses, and it is therefore unnecessary for DEQ to conduct a Tier II analysis for the contact recreation beneficial use of this waterbody. This project is short term in nature and is expected to enhance water quality once the culvert has been removed and replaced with the bridge. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

To ensure that this project will protect for aquatic life uses the permittee must implement all BMPs, Reasonable and Prudent Measures, associated Terms and Conditions, and Reporting and

Monitoring Requirements described in the Stream Crossing Programmatic Biological Opinion issued by the U.S. Fish and Wildlife Service on June 15, 2012 (2012-F-0015), which was completed to protect bull trout and other cold water aquatic life.

In order to maintain the ambient water quality conditions, permanent erosion and sediment controls must be implemented, which will minimize or prevent future sediment contributions from the project area. The Stream Crossing Programmatic Biological Opinion includes BMPs that are required in order to control and capture sediment within the channel during construction. All rewatering will be done slowly to minimize large pulses of sediment and to prevent stream channel erosion.

The provisions in the 404 permit, coupled with the conditions of this certification, ensure that degradation to the Dagger Creek Drainage AU or Dagger Creek 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. 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 state 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 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

9. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.
10. 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.
11. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
12. All temporary fills shall be removed in their entirety on or before construction completion.
13. 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

14. 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.
15. 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.
16. 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.
17. 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.
18. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protection from erosion at 100-year design flood elevation.
19. 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.
20. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.

21. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
22. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
23. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
24. 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.
25. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
26. 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

27. 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.*
28. 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.

Turbidity monitoring must be conducted, recorded, and reported as described below.

Monitoring must occur each day during project implementation when project activities may result in turbidity increases above background levels. *A properly and regularly calibrated turbidimeter is required.*

A sample must be taken at a relatively undisturbed area 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 down current sampling must be compared to the background (up current) 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 stop all work and 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

29. 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.
30. Construction affecting the bed or banks shall take place only during periods of low flow.
31. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
32. Activities in spawning areas must be avoided to the maximum extent practicable.
33. Work in waters of the state shall be restricted to areas specified in the application.
34. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
35. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
36. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

37. 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

38. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
39. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
40. 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

41. 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

42. 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.
43. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
44. 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.
45. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
46. 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.
47. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
48. 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).
 - Boise Regional Office: 208-373-0550 / 888-800-3480
 - d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

Required Notification

The permittee must notify the Boise Regional Office when authorized work begins and when authorized work ends. Please contact Kati Carberry at (208) 373-0434 or by e-mail at Kati.Carberry@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 DEQ Boise Regional Office, Kati Carberry at (208) 373-0434 or by e-mail at Kati.Carberry@deq.idaho.gov.



For Aaron Scheff

Aaron Scheff
Regional Administrator
Boise Regional Office