STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

Brad Little, Governor
John H. Tippets, Director

June 18, 2020

Brant Petersen
USDA, Boise National Forest, Idaho City District
PO Box 129
Idaho City, ID 83631

RE: Reference No. NWW-2020-00222-B03 – National Forest Service Road No. 384, Culvert Replacement on Lower Edna Creek

Dear Mr. Petersen:

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 email at Kati.Carberry@deq.idaho.gov.

Sincerely,

Aaron Scheff

Aaron Scheff
Regional Administrator
Boise Regional Office

KLC/am

ec: Eric Gerke, ACOE, Boise
Jason Pappani, DEQ State Office
CM#: 2020AKF41

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

June 18, 2020

404 Permit Application Number: NWW-2020-00222-B03, National Forest Service Road No. 384, Mile 0.01, AOP Culvert Replacement on Lower Edna Creek

Nationwide Permit Number: 14, Linear Transportation Projects

Applicant/Authorized Agent: Boise National Forest, Idaho City District

Project Location: Latitude 43.961417º N, Longitude -115.619472º W

Receiving Water Body: Lower Edna 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 May 11, 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

The project will remove and replace an undersized 7-foot diameter by 64-foot long multi-plate culvert and install a 12-foot span by 6-foot, 3-inch rise by 60-foot long pipe arch culvert. An estimated 109 cubic yards of fill material will be discharged below the ordinary high water mark of Lower Edna 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 Lower Edna Creek within the North and Middle Fork Boise River Subbasin assessment unit (AU) 17050111SW014_02 (Crooked River, Pikes Fork, and Beaver Creek 1st and 2nd Order). This AU has the following designated beneficial uses: salmonid spawning, cold water aquatic life, 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 (2016) Integrated Report, this receiving water body AU is fully supporting its assessed uses (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.

All work will be done in low flows and the work area shall be dewatered prior to construction activities. Once the 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 existing and designated 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 Lower Edna 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 Lower Edna 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 replaced. As such, the project complies with IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06.

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 provisions in the 404 permit, coupled with the conditions of this certification, ensure that degradation to the Crooked River, Pikes Fork and Beaver Creek 1st and 2nd order AU or the Lower Edna 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. 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

12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
18. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
19. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
20. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
21. 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.
22. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.

Turbidity

23. 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 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

24. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
25. Activities in spawning areas must be avoided to the maximum extent practicable.
26. Work in waters of the state shall be restricted to areas specified in the application.
27. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
28. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
29. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

30. 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

31. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
32. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
33. Fencing and other barriers should be used to mark the construction areas.
34. Where possible, alternative equipment should be used (e.g., spider hoe or crane).

35. 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

36. 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

37. 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.
38. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
39. 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.
40. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
41. 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.
42. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
43. 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.

Culverts

44. 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.
45. 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.
46. The culvert shall be installed such that it does not impede fish passage.
47. 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.
48. Culverts shall be sized appropriately to maintain the natural drainage patterns.

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 email 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, (208) 373-0434 or Kati.Carberry@deq.idaho.gov.



Aaron Scheff
Regional Administrator
Boise Regional Office