



Idaho Department of Environmental Quality Final Section 401 Water Quality Certification

December 2, 2022

Project Name: NWW-2019-454-I01, Big Lost River Bank Stabilization Project

Permit Number (if applicable): NWP 13, Bank Stabilization

Applicant/Authorized Agent: VerNon Roche, 7C Ranch

Project Location: Big Lost River, approximately 17 miles northwest of Mackay, Idaho
(44.056386, -113.891245)

Receiving Water Body: Big Lost River - Burnt Creek to Thousand Springs Creek
(ID17040218SK024_05)

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 federal permits and issue water quality certification decisions.

In accordance with the Clean Water Act §§ 121.4 and 121.5, all project proponents must submit a request for a prefiling meeting at least thirty days in advance of submitting a certification request. A prefiling meeting request was received by DEQ on 8/17/2022. DEQ reviewed the prefiling meeting request and determined that necessary project information submitted with advance notice was sufficient to evaluate potential water quality impacts to act on the certification request within a reasonable period of time.

Based upon its review of the certification request in accordance with the Clean Water Act § 121.5 (b) and (c), received on 10/18/2022, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit and the conditions set forth in this water quality certification, then it is reasonable for DEQ to conclude that the activity will comply with water quality requirements, including applicable requirements of the Clean Water Act §§ 301, 302, 303, 306, and 307, Idaho's "Water Quality Standards" (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.

1 Project Description

The purpose of this project is to stabilize the banks of the Big Lost River to prevent erosion during high water events. The streambanks in the project area will be armored with approximately 1,085 linear feet of riprap (Table 1). The riprap will be placed in three discrete segments; the upstream “Zone A” will have slightly smaller diameter riprap than the downstream “Zone B” and “Zone C” segments, following the stone sizing criteria of the Natural Resource Conservation Service (NRCS) Far West States Method. Each segment of riprap will also have end protection with additional excavated material and riprap fill. Altogether, the proposed activity will require approximately 3,088 cubic yards of riprap, with a majority of this material placed below the ordinary high water mark (OHWM; Table 1).

Table 1. Estimated material quantities from proposed riprap installation (cy = cubic yards)

	Zone A		Zone B		Zone C		Totals
Material Quantities	Rock riprap segment	Rock riprap end protection	Rock riprap segment	Rock riprap end protection	Rock riprap segment	Rock riprap end protection	
Length along bank (ft)	268	12	308	12	473	12	1,085
Total volume (cy)							Total volume (cy)
excavated material filter (fill) material riprap	530	29.5	1,080	66.5	1,325	66.5	3,098
	110	-	285	-	350	-	745
	455	32	1,100	73	1,355	73	3,088
Volume below OHWM (cy)							Total volume below OHWM (cy)
excavated material filter (fill) material riprap	435	26.5	690	52	1,060	52	2,316
	86.2	-	195	-	300	-	581.2
	380	24	790	58	1,215	58	2,525

In addition, there will be five rock barbs installed in the furthest downstream reach of the project area. One rock barb is preexisting, but the in-stream portion will be modified with additional material. The barbs will require a total of approximately 426 cubic yards additional riprap and most of this material will be placed below the OHWM.

Table 2. Estimated material quantities from proposed rock barb installation (cy = cubic yards)

Material Quantities	Barb 1	Barb 2	Barb 3	Barb 4	Barb 5	Totals
Total volume (cy)						Total volume (cy)
excavated material	64	74	74	82.5	76.5	371
riprap	80.5	82	82	96	85.5	426
Volume below OHWM (cy)						Total volume below OHWM (cy)
excavated material	64	66.5	66.5	73	72.5	342.5
riprap	72.5	72	72	83	81	380.5

2 Antidegradation Review

As part of its water quality standards program, Idaho has an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051). DEQ adopted regulations to implement the antidegradation policy (IDAPA 58.01.02.052).

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 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 do not lower water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ employs 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 [DEQ Integrated Report](#) and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

2.1 Pollutants of Concern

The pollutant(s) of concern for this project is sediment. As part of the § 401 water quality certification, DEQ requires the applicant to comply with various conditions to protect water quality and meet Idaho's water quality standards, including the water quality criteria applicable to sediment.

2.2 Receiving Water Body Level of Protection

This project is located on the Big Lost River within the Big Lost subbasin assessment unit (AU) - Big Lost River - Burnt Creek to Thousand Springs Creek (ID17040218SK024_05). According to the most recent federally approved [DEQ Integrated Report](#), this AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation, and drinking water supply. 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 2022 Integrated Report, the cold water aquatic life use is not fully supporting due to flow regime modification, sedimentation/siltation, and temperature impairments. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the cold water aquatic life, salmonid spawning, and drinking water supply uses.

The only pollutant of concern associated with this project is sediment; however, sediment is not relevant to recreational uses because aquatic life is the more sensitive use. Sediment will be expected to cause impairments to aquatic life at concentrations well below that necessary to cause recreational use impairment, so it is unnecessary for DEQ to conduct a Tier II analysis for the recreational use (IDAPA 58.01.02.052.08).

2.3 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 will be maintained and protected. The numeric and narrative criteria in the water quality standards 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 will be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Before developing the TMDL, the water quality standards require applying the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

An EPA-approved TMDL has been developed for this AU. The TMDL addresses concerns that were identified in the Big Lost River Subbasin Total Maximum Daily Load Addendum and Five Year Review (DEQ 2011). The TMDL outlines a goal of reducing sediment loads by 5 tons per year. If the project is conducted according to the provisions of the project plans, federal permit, and conditions of this certification, then it is reasonable for DEQ to conclude that the project will comply with the TMDL as well as the state's numeric and narrative criteria.

The proposed construction activities will be conducted when this segment of the Big Lost River is dry, to minimize sedimentation impacts. Throughout the life of the project, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) to reduce erosion and minimize turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented that 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. 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 IDAPA 58.01.02.051.01 and 58.01.02.052.07.

3 Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

3.1 General Conditions

This certification is based on the certification request submitted by Vernon Roche on October 18, 2022, and is conditioned upon the requirement that any modification (e.g., change in work windows, etc.) of the permitted activity will first be provided to DEQ for review to determine compliance with Idaho's water quality standards.

Because DEQ is certifying only the activity described in the certification request, this condition ensures that discharges under circumstances that differ from those described in the certification request will comply with 33 U.S.C. § 1341, 40 CFR 121, and other applicable water quality requirements, including without limitation 33 U.S.C. § 1311(a), Idaho Code § 39-108, IDAPA 58.01.02.051, IDAPA 58.01.02.052, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. 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 water quality standards—there is no longer reasonable assurance of compliance with the water quality standards or other appropriate requirements of state law.

Because DEQ is certifying only the activity described in the certification request based on information available at the time of certification, this condition ensures that discharges from activities not described in the certification request, or where there has been a change in the characteristics of or water quality standards applicable to the receiving water body, will comply with 33 U.S.C. § 1341, 40 CFR 121, and other applicable water quality requirements, including without limitation 33 U.S.C. § 1311(a), Idaho Code § 39-108, IDAPA 58.01.02.051, IDAPA 58.01.02.052, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

2. If ownership of the project changes, the certification holder will notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator will request, in writing, the transfer of this water quality certification to the new name. This condition ensures that, if ownership changes, DEQ has the minimum information to support ongoing compliance with 33 U.S.C. § 1341, 40 CFR 121, this water quality certification, and other applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.
3. 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.

This condition ensures all responsible parties, including on-site contractors, are aware of and comply with this water quality certification and other applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

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 federal permit.

This condition ensures all responsible parties, including on-site contractors, comply with this water quality certification and applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

5. If this project disturbs more than 1-acre and there is potential for discharge of storm water to waters of the state, then coverage under the [DEQ Construction General Permit Program](#) may be required.

This condition ensures that work authorized under the federal permit complies with water quality requirements prohibiting unauthorized storm water discharges, including without limitation 33 U.S.C. § 1311(a), 33 U.S.C. § 1342(p), IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

3.2 Fill Material

The following conditions are necessary to protect beneficial uses in accordance with Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Fill material subject to suspension will be free of easily suspended fine material. Only clean material may be placed as fill. If dredged material is proposed for use as fill material and there is a possibility the material may be contaminated, then the permittee must assess and characterize sediment to determine the suitability of dredge material for unconfined-aquatic placement; determine the suitability of post-dredge surfaces; and predict the effect on water quality during dredging. Sediment assessment and characterization following the procedures in the *Sediment Evaluation Framework for the Pacific Northwest* (RSET 2018) satisfies this requirement. A different assessment and characterization methodology may be used if the DEQ approves the methodology in writing.
2. Temporary fills will 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.

3.3 Erosion and Sediment Control

The following conditions protect beneficial uses in accordance with Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. BMPs for sediment and erosion control suitable to prevent exceedances of Idaho's water quality standards and TMDLs will be selected and installed before starting construction at the site. One resource to evaluate appropriate BMPs is the *Idaho Catalog of Storm Water Best Management Practices* (DEQ 2020). Other resources may also be used for selecting appropriate BMPs.
2. Permanent erosion and sediment control measures will be installed to provide long-term sediment and erosion control and prevent excess sediment from entering waters of the state.
3. Permanent erosion and sediment control measures will be installed at the earliest practicable time consistent with good construction practices and will be maintained as necessary throughout project operation.
4. Structural fill or bank protection will consist of materials that are placed and maintained to withstand predictable high flows in the waters of the state.
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 and replaced or augmented if they are not effective.
6. All construction debris, scraps, particles, and other associated materials will be captured and properly disposed of so they cannot enter waters of the state or cause water quality degradation.

7. Disturbed areas suitable for vegetation will be seeded or revegetated to prevent subsequent soil erosion (EPA 2000).
8. Maximum fill slopes will be material that is structurally stable once placed and does not slough into the stream channel during construction, during periods before revegetation, or after vegetation is established.
9. Sediment from disturbed areas or sediment that can be tracked by vehicles onto pavement must not leave the site in amounts reasonably 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 to prevent track-out.

3.4 Turbidity

The proposed construction activities will take place when the streambed is dry. If in-water work occurs, refer to the following conditions that protect beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200.08, IDAPA 58.01.02.250.02.e, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standards stipulated in Idaho's water quality standards. Any violation of this standard must be reported to the DEQ regional office immediately.
2. 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. One resource to evaluate appropriate BMPs is the *Idaho Catalog of Storm Water Best Management Practices* (DEQ 2020). Other resources may also be used for selecting appropriate BMPs.
3. 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 sediment plume is observed, the project may be causing an exceedance of water quality standards, and the permittee must inspect the condition of the project BMPs. If the BMPs appear to be functioning improperly, then corrective action must be taken, and the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).
4. If the project continues to have a visual sediment plume after BMPs have been inspected and modified, please call the Idaho Falls regional DEQ office.

3.5 In-Water Work

The proposed construction activities will take place when the streambed is dry. If in-water work occurs, then please refer to the applicable water quality standards: IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

3.6 Vegetation Protection and Restoration

The following conditions protect beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
2. Fencing and other protective barriers should be used to mark the construction areas.
3. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
4. If authorized work results in unavoidable vegetative disturbance, native riparian and wetland vegetation must be successfully reestablished to benefit water quality at pre-project levels or improved at the completion of authorized work.

3.7 Management of Hazardous or Deleterious Materials

The following conditions protect beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.400, IDAPA 58.01.02.800, and IDAPA 58.01.02.850.

1. Petroleum products and hazardous, toxic, and/or deleterious materials must not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must ensure that those materials will not enter waters of the state because of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.
2. Secondary containment is required for chemical materials.
3. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
4. Equipment and machinery must be removed from the vicinity of the waters of the state before refueling, repair, and/or maintenance. Equipment and machinery must be cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment capability before entering waters of the state. Any wastewater or wash water must not enter waters of the state.
5. Emergency spill response procedures must be in place and include a spill response kit (e.g., oil absorbent booms or other equipment).
6. If an unauthorized release of hazardous material to state waters or to land occurs and there is a likelihood 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 so 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).

- d. Contact Idaho Falls Regional Office: (208) 528-2650
7. Collect, remove, and properly dispose of spill and cleanup materials in a manner approved by DEQ.

3.8 Dredge Material Management

Upland disposal of dredged material must include prevention of the material from reentering waters of the state.

This condition ensures that there is no unauthorized discharge from upland disposal sites according to 33 U.S.C. § 1311(a) and Idaho's water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400

3.9 Pollutants/Toxins

In conformance with IDAPA 58.01.02.200, 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 must be taken to avoid excess application and introduction of chemicals into waters of the state.

4 Required Notification

The permittee must notify the Idaho Falls Regional Office when authorized work begins.

5 Right to Appeal Final Certification

The final § 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 Alex Bell, alex.bell@deq.idaho.gov, 208-528-2679.



Troy Saffle
Regional Administrator

Idaho Falls Regional Office

References

- DEQ (Idaho Department of Environmental Quality). 2011. *Big Lost River Subbasin Total Maximum Daily Load Addendum and Five Year Review*. Boise, ID: DEQ. <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/11680>
- DEQ (Idaho Department of Environmental Quality). 2020. *Idaho Catalog of Storm Water Best Management Practices*. Boise, ID: DEQ. <https://www.deq.idaho.gov/water-quality/wastewater/storm-water/>
- DEQ (Idaho Department of Environmental Quality). 2022. *Idaho Department of Environmental Quality 2022 Integrated Report*. Boise, ID: DEQ. <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/16619>
- EPA (US Environmental Protection Agency). 2000. *National Menu of Best Management Practices (BMPs) for Stormwater*. <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater>
- RSET (Northwest Regional Sediment Evaluation Team). 2018. *Sediment Evaluation Framework for the Pacific Northwest*. Prepared by the RSET Agencies.