July 16, 2021

Jerry Hoagland
Owyhee County, Chairman
PO Box 128
Murphy, Idaho 83650

Re: Reference No. North Fork Boulder Creek Bridge

Dear Mr. Hoagland:

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
Regional Administrator
Boise Regional Office

KLC:tg

ec: Shane Skaar, COE, Boise
Elizabeth Spelsberg, DEQ State Office
TRIM 2021AKF63
Project Name: ITD #22594 North Boulder Creek Bridge Replacement

Permit Number (if applicable): NA

Applicant/Authorized Agent: Idaho Transportation Department (ITD)

Project Location: 42°51’4.00”N -116°43’20.30”W Owyhee County, Idaho.

Receiving Water Body: North Boulder 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 certification request, received on 6/8/2021, 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 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.

1 Project Description

The project will replace the North Fork Boulder Creek Bridge on Flint Creek Road. The replacement bridge will be a single span concrete structure approximately 59 feet long and 26 feet wide. The roadway approaches will be widened approximately 230 feet north of the bridge and approximately 200 feet south of the bridge. The bridge abutments will be set back from the existing abutments approximately 13 feet and will be out of the existing channel. Two riprap pads along the face of the abutments and at the edge of the banks near the ends of the structure and wingwalls will be installed to provide scour countermeasures.
In order to keep the roadway operational during construction, a temporary shoofly bridge will be constructed to the east of the existing bridge. The shoofly will be located approximately 75 feet upstream of the existing bridge centerline.

A total of 1307 square feet/0.03 acres of wetlands will be permanently impacted by the project. Construction will occur during the fall and winter low flow season. A Pollution Prevention Plan (PPP) will be prepared prior to construction. The PPP will document erosion and sediment pollution controls to be implemented; inspection methods and schedules; as well as maintenance plans. Ground disturbing activities will be limited to those areas deemed necessary for the construction of the project. Disturbed areas will be revegetated with a minimum of three eco-regional native plant species.

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 has 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 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 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 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 are sediment. As part of the Section 401 water quality certification, DEQ is requiring the applicant to comply with various conditions to protect
water quality and to meet Idaho WQS, including the water quality criteria applicable to this pollutant.

2.2 Receiving Water Body Level of Protection

This project is located on North Boulder Creek within the Jordan Subbasin assessment unit (AU) 170501085SW007_02 (North Boulder Creek—1st and 2nd order). 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). In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.102).

This AU is included in Category 3 (Unassessed Waters) of the (2018/2020) Integrated Report. Therefore, DEQ must provide an appropriate level of protection on a case-by-case basis using information available at this time (IDAPA 58.01.02.052.05.b).

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 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.

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, federal permit, and conditions of this certification, then it is reasonable for DEQ to conclude that 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).

2.4 High-Quality Waters (Tier II Protection)

The North Boulder Creek is considered high quality for contact recreation and aquatic life. 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 aquatic life and/or recreation uses of the North Boulder Creek (IDAPA 58.01.02.052.06). These pollutants include the following: sediment. The applicant will implement a PPP prior to construction. 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 federal permit, coupled with the conditions of this certification, ensure that degradation to the North Boulder 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).

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

The following conditions are necessary to ensure the bridge replacement on North Boulder Creek complies with Idaho water quality standards and other appropriate water quality requirements of State law applicable to North Boulder Creek.

3.1 General Conditions

This certification is based on the certification request submitted by the ITD on 6/8/2021 and is conditioned upon the requirement that any modification (e.g., change in 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.

Because DEQ is certifying only the activity described in the certification request, this condition is necessary to ensure that discharges under circumstances that differ from those described in the certification request will comply with 33 U.S.C. § 1341, 40 CFR Part 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 WQS—there is
no longer reasonable assurance of compliance with WQS 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 is necessary to ensure that discharges from activities not described in the certification request, or where there has been a change in the characteristics of or WQS applicable to the receiving water body, will comply with 33 U.S.C. § 1341, 40 CFR Part 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 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.

This condition is necessary to ensure that, in the event of an ownership change, DEQ has the minimum information to support ongoing compliance with 33 U.S.C. § 1341, 40 CFR Part 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 is necessary to ensure all responsible parties, including onsite 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 is necessary to ensure all responsible parties, including onsite 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 stormwater to waters of the state, coverage under IPDES Construction General Permit is required.
This condition is necessary to ensure that work authorized under the federal permit complies with water quality requirements prohibiting unauthorized stormwater 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 1-3 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements 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, 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 to be used 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 to predict effect on water quality during dredging. Sediment assessment and characterization done in accordance with the procedures in the Sediment Evaluation Framework for the Pacific Northwest¹ (RSET, 2018) satisfies the above requirement. A different assessment and characterization methodology may be used if the Department approves the methodology in writing.
2. All 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 1-9 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, IDAPA 58.01.02.400.

1. BMPs for sediment and erosion control suitable to prevent exceedances of state WQS and TMDLs shall be selected and installed before starting construction at the site. One resource that may be used in evaluating appropriate BMPs is DEQ’s Idaho Catalog of Storm Water Best Management Practices². Other resources may also be used for selecting appropriate BMPs.
2. Permanent erosion and sediment control measures will be installed in a manner that will provide long-term sediment and erosion control to 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 be replaced or augmented if they are not effective.
6. All construction debris, scraps, particles, and other associated materials will be properly captured and 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 (2020 Catalog of Storm Water BMPs 3.5.1.4).
8. Maximum fill slopes will 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.
9. Sediment from disturbed areas or sediment that is 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.

3.4 Turbidity

The following conditions 1-4 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements 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, IDAPA 58.01.02.400.

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standards as stipulated under the Idaho WQS. 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 that may be used in evaluating appropriate BMPs is DEQ's Idaho Catalog of Storm Water Best Management Practices\(^3\). 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 plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the project BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must

\(^3\) Idaho Catalog of Storm Water Best Management Practices, Prepared by the State of Idaho Department of Environmental Quality, April 2020.
modify the activity or implement additional BMPs (this may also include modifying existing BMPs).

4. If the project continues to have a visual plume after BMPs have been inspected and modified, turbidity monitoring is required.
   a. A properly and regularly calibrated turbidimeter is required for measurements analyzed in the field, but grab samples may be collected and taken to a laboratory for analysis. When monitoring is required a sample must be taken at an undisturbed area immediately up-current from in-water disturbance or discharge to establish background turbidity levels. Background turbidity, latitude/longitude, date, and time must be recorded prior to monitoring down-current. Then a sample must be collected immediately down-current from the in-water disturbance or point of discharge and within any visible sediment plume. The turbidity, latitude/longitude, date, and time must be recorded for each sample. The downstream sample must be taken immediately following the upstream sample in order to obtain meaningful and representative results.
   b. Results from the down-current sampling point must be compared to the up-current or background level to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more greater than the upstream turbidity, then the project is causing an exceedance of the WQS. Any exceedence of the turbidity standard must be reported to the appropriate DEQ regional office within 24 hours.
   c. Earth disturbing activities may continue once turbidity readings return to within 50 NTU over background instantaneously; or, if turbidity has exceeded 25 NTU over background for more than ten consecutive days, once turbidity readings have no longer exceeded 25 NTU over background for at least 24 consecutive hours.
   d. Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedences and subsequent actions taken, including the effectiveness of the action.

3.5 In-Water Work

The following conditions 1-10 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, IDAPA 58.01.02.400

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.
3. Temporary crossings must be perpendicular to channels and located in areas with the least impact. The temporary crossings must be supplemented with clean gravel or treated with other mitigation methods at least as effective in reducing impacts. Temporary crossings
must be removed as soon as possible after the project is completed or the crossing is no longer needed.
4. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
5. Activities in spawning areas must be avoided to the maximum extent practicable.
6. Work in waters of the state shall be restricted to areas specified in the application.
7. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
8. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
9. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
10. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

3.6 Vegetation Protection and Restoration

The following conditions 1-4 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, 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 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, 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.

3.7 Management of Hazardous or Deleterious Materials

The following conditions 1-7 are necessary for the protection of beneficial uses in accordance with Idaho water quality requirements 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, IDAPA 58.01.02.850.
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. 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.

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

7. 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).
   d. Contact Boise Regional Office: (208) 373-0550

8. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

3.8 Treated Wood (or Wood Preservatives?)

The following condition is necessary to meet water quality requirements including without limitation IDAPA 58.01.02.200 and IDAPA 58.01.02.210.

DEQ's *Guidance for the Use of Wood Preservatives and Preserved Wood Products in or Around Aquatic Environments* must be considered when using treated wood materials in the aquatic environment. Within this guidance document DEQ references the *Best Management Practices for the Use of Treated Wood in Aquatic and Wetland Environments*. This best management practices document provides recommended guidelines for the production and installation of treated wood products destined for use in sensitive environments. This condition is necessary to ensure that toxic chemicals are not introduced into waters of the state.

3.9 Dredge Material Management

Upland disposal of dredged material must be done in a manner that prevents the material from re-entering waters of the state.

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

3.10 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 shall be taken to avoid excess application and introduction of chemicals into waters of the state.

4 Required Notification

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

5 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 Kati Carberry, Boise Regional Office, (208) 373-0434, kati.carberry@deq.idaho.gov.

for Aaron Scheff
Regional Administrator
Boise Regional Office