



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, ID 83814 • 208-769-1422
www.deq.idaho.gov

Brad Little, Governor
Jess Byrne, Director

September 10, 2020

By certified mail

Damon Allen
Idaho Transportation Department District 1
600 W. Prairie Ave.
Coeur d'Alene, ID 83815

Subject: Final § 401 Water Quality Certification for the Deep Creek Bridge Replacement Project, US-95 MP 493.1; NWW-2020-00360

Dear Mr. Allen:

Enclosed is the Final § 401 Water Quality Certification for the Army Corps of Engineers permit NWW-2020-00360. No comments were received during the 21-day period that the document was available on our website for public comment. Please make sure that you and anyone performing this work read the document and are familiar with the conditions of this certification prior to beginning work. Please also notify the DEQ Coeur d'Alene Regional Office when work begins.

If you have questions or concerns, please contact Chantilly Higbee at 208-666-4605 or via email at Chantilly.Higbee@deq.idaho.gov.

Sincerely,

A handwritten signature in blue ink that reads "Dan McCracken".

Dan McCracken
Regional Administrator
Coeur d'Alene Regional Office

Enclosure (1)

c: Shane Skaar, Army Corps of Engineers
Chantilly Higbee, Idaho Department of Environmental Quality



Idaho Department of Environmental Quality Draft § 401 Water Quality Certification

September 10, 2020

§ 404 Permit Application Number: NWW-2020-00360, Deep Creek Bridge Replacement Project, US-95 MP 493.1

Nationwide Permit Number: 14, Linear Transportation Projects

Applicant/Authorized Agent: Damon Allen/Mike Hartz, Idaho Transportation Department - District 1

Project Location: Approximately 48°31'10.97" N, 116°26'32.40" W; US-95 Milepost 492.6 – 493.3; 5 miles south of Naples in Boundary County

Receiving Water Body: Deep Creek and associated wetlands

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 July 23, 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) Idaho Administrative Procedure Act (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 is intended to improve safety along US-95 between mileposts 492.6 and 493.3 near McArthur Lake. Work affecting surface water will involve the replacement of a 1930's era 16 foot wide concrete box culvert with a 300 foot long, two-span bridge. It will also involve modifications to the existing roadway vertical and horizontal curvature and widening of the shoulder width. Two culverts, 72 inch diameter by 38 linear feet, will also be temporarily installed to facilitate traffic diversion to the west side of the existing bridge during construction.

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

Surface waters in the project vicinity include McArthur Lake, Deep Creek, and associated wetlands. McArthur Lake is adjacent the highway (west side) at the project site. Deep Creek flows out of McArthur Lake through a dam, immediately west of the project site, and then flows east under US-95. Only Deep Creek and associated wetlands are expected to be impacted by this project. McArthur Lake will not be impacted.

This project intersects Deep Creek within the Lower Kootenai Subbasin assessment unit (AU) 17010104PN022_03 (Deep Creek - McArthur Lake to Trail Creek). The Deep Creek - McArthur Lake to Trail Creek AU is designated for cold water aquatic life, salmonid spawning, primary contact recreation, and domestic 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 2016 Integrated Report, this AU is not fully supporting its cold water aquatic life and salmonid spawning uses, with sediment and temperature listed as the causes of impairment. As such, DEQ will provide Tier I protection (IDAPA 58.01.02.051.01) for the aquatic life use. The contact recreation beneficial use is unassessed. DEQ must provide an appropriate level of protection for the contact recreation use using information available at this time (IDAPA 58.01.02.052.05.c).

While no data have been collected to date that could indicate the support status of the contact recreation use for this AU, the downstream AU is fully supporting its contact recreation use. Therefore, DEQ will provide Tier II protection, in addition to Tier I protection, for the contact recreation use.

The only pollutant of concern associated with this project is sediment. However, sediment is not relevant to recreational uses since aquatic life is the more sensitive use and sediment will be expected to cause impairments to aquatic life at concentrations well below what would be necessary to cause recreational use impairment; it is therefore unnecessary for DEQ to conduct a Tier II analysis.

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 must 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 must be implemented, which will minimize or prevent future sediment contributions from the project area. Work in Deep Creek and adjacent wetlands will be performed during low flow conditions between July and March.

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.

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 shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05).

With regard to the sediment impairment, this project will be consistent with the *Assessment of Water Quality in Kootenai River and Moyie River Subbasins (TMDL)*; the applicant proposes the use of BMPs to avoid sedimentation to surface water.

Proposed measures include: the installation of silt fencing, silt curtains, and fiber rolls, and the stabilization of exposed soil (mulch, vegetation applications). The applicant also proposes to monitor downstream turbidity levels to confirm maintenance of water quality standards during in-stream work activities.

Regarding the temperature impairment, no permanent change to shade-providing vegetation/trees is proposed. Thus, temperature is not a pollutant of concern for this project.

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).

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

Erosion and Sediment Control

15. 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/60184297/stormwater-bmp-catalog.pdf>. Other resources may also be used for selecting appropriate BMPs.
16. 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.
17. 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.
18. 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.
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 Monitoring and Compliance Requirements

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 Coeur d'Alene regional office immediately by calling 208-666-4605 or emailing Chantilly.Higbee@deq.idaho.gov.*
28. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity.
29. Visual observation is acceptable to determine whether BMPs are functioning properly **unless a plume is observed**. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs and *initiate turbidity monitoring consistent with Table 1 with a properly and regularly calibrated turbidimeter*. Calibration logs must be maintained and available for DEQ review upon request. 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.
 - a. Turbidity Sampling Location. Choose, identify, and document the following locations for each plume observed:
 - i. Background locations
Collect background samples at relatively undisturbed locations unaffected by the construction activity, up-current from the permitted activity.
 - ii. Compliance locations
Choose a location 50 feet down-current from the permitted activity, within any visible plumes.
 - b. Turbidity measurements must be representative of stream turbidity when the activity is being conducted. *Measurements cannot be taken during a cessation of activity.*

Table 1. Turbidimeter monitoring when a plume is observed

Turbidity Amount Above Background²	Monitoring Frequency	Action Required
0 to 24 NTU	Monitor every 2 hours	None
25 to 49 NTU	Monitor every 2 hours	STOP work after 8 hours in every 24-hour period
≥50 NTU (first occurrence)	Monitor after Instructions ¹ are followed	STOP work and follow Instructions ¹
≥50 NTU (second occurrence)	Monitor after Instructions ¹ are followed	STOP work, follow Instructions ¹ and notify DEQ Regional Office at (208) 666-4605

¹ **Instructions:** If BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs) until additional monitoring indicates turbidity standards are met. Monitoring can cease when a plume is no longer observed.

² Turbidity shall be sampled three times at each location and reported. Use the maximum value of the three samples for determining compliance and following Table 1 direction.

30. **Reporting:** Beginning with observation of a plume, provide a written description of the information required in 28a and 28b. Copies of these reports must be made available to DEQ and other local, state and federal regulatory agencies upon request. The reports must include:
- Background NTUs, compliance location NTUs and their difference in NTUs, a mapped location, time, and date for each sample.
 - A narrative discussing BMPs in use when the plume was observed, all exceedances, controls applied and their effectiveness, subsequent monitoring, work stoppages, and any other actions taken.

In-water Work

- 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.
- Construction affecting the bed or banks shall take place only during periods of low flow.
- Fording of the channel should be kept at a minimum and performed only when necessary.
- Damage and sedimentation to wetlands from heavy equipment operation should be minimized to the maximum extent practicable. DEQ recommends placement of heavy equipment on protective mats or suitably designed pads to prevent damage to the wetlands.
- Activities in spawning areas must be avoided to the maximum extent practicable.
- Work in waters of the state shall be restricted to areas specified in the application.
- Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
- Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
- To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

40. 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

41. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
42. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
43. Fencing and other barriers should be used to mark the construction areas.
44. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
45. 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.

Management of Hazardous or Deleterious Materials

46. 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.
47. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
48. 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.
49. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
50. 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.
51. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
52. 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); Coeur d'Alene Regional Office: 208-769-1422 / 877-370-0017

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

Temporary Culverts

53. To prevent temporary road surface and culvert bedding material from entering the stream, culvert crossings must include appropriate best management practices to retain the temporary road base and culvert bedding material.
54. The temporary 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. The culvert outflow shall be designed and installed to control erosion.
55. The culvert shall be installed such that it does not impede fish passage.
56. Culvert removal shall be performed during low flow, and must include appropriate best management practices to prevent sedimentation to the stream (e.g., stream diversion, silt fencing/curtain).

Required Notification

The permittee must notify the Coeur d'Alene Regional Office when authorized work begins; 208-666-4605 or via email at Chantilly.Higbee@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 Chantilly Higbee, Coeur d'Alene Regional Office at 208-666-4605 or via email at Chantilly.Higbee@deq.idaho.gov.



Dan McCracken
Regional Administrator
Coeur d'Alene Regional Office