



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
John H. Tippetts, Director

December 27, 2017

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

RE: Final §401 Water Quality Certification for Highway 3 St. Joe River Bridge
Project; St. Joe River; NWW-2016-152-B02

Dear Mr. Allen,

Enclosed is the final water quality certification for the above referenced project. The draft certification was advertised for public comment for 21 days from November 30 to December 21, 2017. One comment was received, it was from your office and as a result a minor change was made to the final certification to improve the project description. If you have any questions or concerns, please contact June Bergquist at 208.666.4605 or via email at june.bergquist@deq.idaho.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel Redline".

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

c: Nicholle Braspennickx , Corps of Engineers – Boise Regulatory Office
Loren Moore, DEQ State Office



Idaho Department of Environmental Quality Final §401 Water Quality Certification

December 27, 2017

404 Permit Application Number: NWW-2016-152-B02; St. Joe River Bridge

Applicant/Authorized Agent: Idaho Transportation Department District 1

Project Location: Latitude 47° 19' 02.03"N; Longitude -116° 33' 41.61"W

Receiving Water Body: St. Joe River

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 and supplemental information, received on November 1 and November 16, 2017, 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 Idaho Transportation Department proposes to replace the Highway 3 bridge crossing over the St. Joe River. The current structure was built in 1953 and requires replacement due to structural concerns and design needs. The new bridge will be 15 feet wider, will have one less pier in the water and includes two 12 foot travel lanes, wider approaches, 6' 6" shoulders, and sidewalks on both sides of the bridge. The new bridge will be located in the current bridge footprint. Demolition will be done on half the structure while maintaining traffic on the other half. Equipment will work from four temporary work platforms constructed of pilings, girders and decking.

Vibratory and hammer pile driving was initially proposed in the application; however the contractor has decided to use a "drilled shaft" method for construction of the bridge foundation.

This method does not require the use of cofferdams; it doesn't require the excavation of riverbed sediments, or backfilling with rock riprap for scour protection of the piers. Drilling also will not have the adverse hydro-acoustic effect on fish that hammer pile driving causes. The temporary work bridges will be installed using the vibratory and impact driving methods so the pilings can be removed after the bridge is constructed. Percussion reduction devices will be used when impact driving is used (a few strikes are needed for the final setting of each temporary piling) to minimize harm to fish.

After foundation construction, bridge superstructure, deck, and railings will be added. Finally the bridge approaches will be constructed and that will complete the first half of bridge construction. At this point the contractor has the option to begin demolition of the three existing bridge piers. The existing piers will be removed down to the riverbed and all debris removed from the channel. These areas will be either surrounded by steel sheet pile cofferdams or silt curtains. Phase 2 of the bridge project will be to repeat demolition and construction tasks on the other side of the bridge to complete the project.

The new bridge will maintain the current vertical clearance for water navigation. Little riparian vegetation exists adjacent to the existing bridge that is sufficient in height to influence temperature. The wider width of the bridge will also provide additional shade to the river.

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 pollutants of concern for this project are sediment and temperature. 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 and temperature.

Receiving Water Body Level of Protection

This project is located on St. Joe River within the St. Joe Subbasin assessment unit (AU) ID17010304PN005_06 (St. Joe River – St. Maries River to mouth). This AU has the following designated beneficial uses: 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).

This AU is included in Category 3 (Unassessed Waters) of the 2014 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). This short unassessed segment of the St. Joe River is bounded downstream by the Coeur d'Alene Reservation boundary and upstream by the confluence with the St. Maries River. Its length is approximately 0.75 mile. The St. Joe River upstream of this unassessed segment has an EPA approved temperature TMDL. Below the unassessed segment is the jurisdiction of the Coeur d'Alene Tribe. The St. Maries River enters the St. Joe River at the upstream boundary of this unassessed segment. The St. Maries River has EPA approved TMDLs for sediment and temperature, therefore this tributary does not improve water quality of the St. Joe River. Additionally, the *St. Joe River Subbasin Temperature Total Maximum Daily Loads*, September 2011 states, "The St. Joe River below St. Joe City, Idaho, to the confluence with the St. Maries River is included as part of the AU (ID17010304PN027_05) that is identified as exceeding water quality criteria. This portion of the river is impacted by the hydroelectric dam operated in Post Falls, Idaho, along the Spokane River by Avista Utilities. The St. Joe River is elevated 8 feet above its normal (pre-dam construction) summer elevation. The artificial elevation of water has caused the river to become wider than natural and lose near-stream vegetation due to river bank erosion. These modifications have caused an increase in river surface area, allowing for more solar loading." These modifications of the river continue to its confluence with Coeur d'Alene Lake.

In conclusion, there is no reason to believe that this unassessed segment is fully supporting aquatic life beneficial uses. DEQ will provide Tier I protection only for aquatic life uses.

The pollutants of concern associated with this project are sediment and temperature. However, an increase to water temperature as a result of this project is not a concern because there is little riparian vegetation that currently exists at the bridge location and the new wider bridge will provide more shade than the current bridge. Sediment and excess temperature are not relevant to recreational uses since they will not degrade water quality necessary to support recreation uses, and 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.

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). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

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. Bull trout work windows will be observed per U.S. Fish and Wildlife Service's direction. Disturbed riverbanks will be stabilized and revegetated. Due to the new method of bridge construction proposed by the contractor, many impacts such as dredging, dewatering, and driving steel sheet pile have been minimized or eliminated. In water demolition work will be done within the confines of either a cofferdam or silt curtain. An onsite spill kit is required by this certification. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain designated and existing beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above; therefore, the permit ensures that the level of water quality necessary to protect both existing and designated uses is maintained and protected in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

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. 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.
4. 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.
5. 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.
6. 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.
7. 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 <http://yosemite.epa.gov/R10/WATER.NSF/NPDES+Permits/Region+10+CGP+resources>.

Fill Material

8. Fill material subject to suspension shall be free of easily suspended fine material.
9. All temporary fills shall be removed in their entirety on or before construction completion.
10. 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.

Erosion and Sediment Control

11. 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.
12. 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.
13. 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.

- 14. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
- 15. **All construction debris freed by the day’s demolition activities shall be removed from the water by the end of each work day.** Debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
- 16. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
- 17. 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

- 18. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). *Any violation of this standard must be reported to the DEQ regional office immediately.*
- 19. 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.
- 20. 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.*

Turbidity Monitoring and Compliance Requirements

To ensure compliance with Idaho’s WQS, required monitoring steps shall include the following:

- 21. Choose and identify the following locations for each crossing:
 - a. Background location: A relatively undisturbed location unaffected by the construction activity, up-current from the permitted activity; and,
 - b. Compliance location: A location down-current from the permitted activity, within any visible plume, at the distance that corresponds to the size of the waterbody where work is taking place as listed on the table below:

Wetted Stream Width	Compliance Distance
Up to 30 feet	50 feet
>30 feet to 100 feet	100 feet
>100 feet to 200 feet	200 feet
>200 feet	300 feet

- 22. Conduct Compliance Monitoring with a Turbidimeter

- a. Measure turbidity at both background and compliance locations at the frequency directed in the tables below and record the date, time, location, and turbidity measurements in the daily log. The permittee must also record all controls and practices implemented at the start of the work.
- b. Turbidity measurements must be representative of stream turbidity when the activity is being conducted. *Measurements cannot be taken during a cessation of activity.*
- c. If the project causes turbidity levels to increase above 50 NTU over background, the permittee must implement additional controls and practices, resume work, and monitor both points again. A description of the additional controls and the date, time, and location where they are implemented must be recorded in the daily log. Keep in mind that stopping and starting an activity to reduce turbidity is not a BMP.

Compliance Monitoring With a Turbidimeter

Allowable Exceedance in Turbidity	Action Required at 1st Monitoring Interval	Action Required at 2nd Monitoring Interval
0 to 24 NTU above background	Continue to monitor every 2 hours	Continue to monitor every 2 hours
25 to 49 NTU above background	Continue to monitor every 2 hours	STOP work after 8 hours/24-hour period
25 NTU above background for 10 or more consecutive days	STOP work and follow instructions in 22.c. above	
50 NTU or more above background (first occurrence)	STOP work and follow instructions in 22.c. above	
50 NTU or more above background (second occurrence)	STOP work and follow instructions in 22.c. above and notify DEQ Regional Office	

23. Reporting - Copies of daily logs for turbidity monitoring must be made available to DEQ and other local, state and federal regulatory agencies upon request. The log must include:
 - a. Background NTUs, compliance point NTUs, comparison of the points in NTUs, and location, time, and date for each reading
 - b. A narrative discussing all exceedances, controls applied and their effectiveness, subsequent monitoring, work stoppages, and any other actions taken

In-water Work

24. Equipment shall work from an upland site or work bridges to minimize disturbance of waters of the state.
25. Construction affecting the river banks shall take place only during periods of low flow.
26. Work in waters of the state shall be restricted to areas specified in the application and within the confines of either a cofferdam or silt curtain or similar BMP.
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 cofferdams should be collected and released into the river.
29. Drilling slurry, drill cuttings, and water that has come in contact with drilling fluids shall not be discharged into a water of the state.

30. **If dewatering is necessary, a dewatering plan shall be provided to DEQ for review and approval. DEQ approval shall be obtained prior to discharging.** Please submit the plan to this email address: june.bergquist@deq.idaho.gov.

Pollutants/Toxics

31. 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

32. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
33. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
34. Fencing and other barriers should be used to mark the construction areas.
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. **Cleaning shall be sufficient to remove all life stages of invasive aquatic species.**

42. Emergency spill procedures shall be in place and shall include a spill response kit (e.g., oil absorbent booms or other equipment) to be on site.
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).
 - 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.

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 June Bergquist, Coeur d'Alene Regional Office at 208-666-4605 or via email at june.bergquist@deq.idaho.gov.



Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office