STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

March 5, 2018

Jason Brinkman
Idaho Department of Transportation
P.O. Box 8028
Boise, ID 83707

Re: Reference No. NWW-2015-39-B02, ITD/SH-55 Snake River, Marsing Bridge

Dear Mr. Brinkman:

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.

This certification shall remain in effect until December 31, 2020, at which time construction must be completed.

If you have any questions or further information to present please contact Julia Achabal at (208) 373-0321, or via email at Julia.Achabal@deq.idaho.gov.

Sincerely,

Aaron Scheff
Regional Administrator
Boise Regional Office

JRA/am

ec: Greg Martinez, COE, Boise
Loren Moore, DEQ State Office
2018AKF10

Idaho Department of Environmental Quality

Final §401 Water Quality Certification

March 5, 2018

404 Permit Application Number: NWW-2015-39-B02

Applicant/Authorized Agent: Idaho Transportation Department

Project Location: Latitude 43° 32' 53.60"N, Longitude -116° 47' 59.69"W on SH-55 immediately east of Marsing, Idaho

Receiving Water Body: Snake 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, received on January 4, 2018, Biological Assessment done by Idaho Transportation Department and Biological Opinion by United States Fish and Wildlife Service, 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.

This certification shall remain in effect until December 31, 2020 at which time construction must be completed.

Project Description

This project will replace a structurally deficient bridge with a new structure at SH-55 at MP 2.65. This bridge is located immediately east of Marsing, Idaho over the Snake River. The action area for this project is defined as 200 feet upstream and 600 feet downstream. The project includes the insertion of a liner 48" culvert under a secondary access road on SH-55. A temporary boat ramp will be constructed in the city park to allow for boat access to the river during construction activities.

The project will take place in two stages. The first stage will remove the downstream half of the bridge allowing a new half section to be constructed. Once the first stage is completed, the second stage will construct the upstream portion of the bridge. Each section of bridge will be completed with the use of river barges or temporary bridges as well as using the existing structures.

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.

Receiving Water Body Level of Protection

This project takes place at the intersection of two assessment units (AU) within the Middle Snake-Succor Subbasin.

- The upstream portion of the project is located on the Snake River 17050103SW006_07b (Snake River-CJ Strike Dam to RM. 425). This AU has been designated for cold water aquatic life, primary contact and domestic water supply beneficial uses.

- The downstream portion of the project is located on the Snake River 17050103SW001_07 (Snake River – RM 425 to Idaho/Oregon Border). This AU has been designated for cold water aquatic life, primary contact recreation and domestic water supply beneficial uses.

In addition to the uses mentioned above, 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 2014 Integrated Report, these AUs are not fully supporting one or more of their assessed uses.

- For 17050103SW006_07b, the aquatic life use is not fully supported. Causes of impairment include temperature and total phosphorus. The contact recreation beneficial use is fully supported.
- For 17050103SW001_07, the aquatic life use is not fully supported. Causes of impairment include temperature, nutrient/eutrophication biological indicators and flow alterations. The contact recreation beneficial use is fully supported.

As such, DEQ will provide Tier 1 protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier II protection (IDAPA 58.01.02.051.02) in addition to Tier I for the contact recreation use (IDAPA 58.01.02.052.05.c).

The only pollutant of concern associated with this project is sediment. Sediment is not relevant to recreational uses since sediment will not degrade water quality necessary to support recreation uses. 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. 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. In addition, the project will be consistent with the *Mid Snake River/Succor Creek Subbasin Assessment and TMDL, 2003*. This project will minimize impacts by widening instead of developing a new location over the river. Piers will be kept in the current locations minimizing new areas of disturbance. River access will be from both sides of the river and riparian disturbance will be kept to a minimum. Minimal wetland disturbance does not require mitigation. Construction work will be done in coffered areas to ensure sediments are not mobilized. To provide east riverbank access, on the southern side a temporary culvert crossing will be placed across irrigation drainage. Turbidity curtains will be used to minimize and reduce impacts from sediment plumes potentially created during construction activities in the slough. A temporary boat access will be created on the west side of the river and south side of the highway in a confined area. Additionally, coffer dams and dewatering will be used on the east and west banks and in mid channel to construct the new bridge piers. Coffering will ensure work areas are isolated where work can be done in dry conditions, minimizing impacts to water quality. If dewatering is necessary, water will be settled of fine sediments before discharge to the river. Where possible water will be pumped to an upland area where sediments can be settled or filtered before water is returned to the river. Construction debris from demolition and any riprap placed in areas subject to scour will be cleaned. Once work is complete, the coffer dams will be removed and water will be released back into work areas slowly to reduce scour potential. The increased width of the bridge will provide more shade to the river and no additional thermal loading is expected as a result of this project. Riparian areas and disturbed wetlands will be replanted at the river bank with native vegetation. Additionally, the contractor will be required to prepare an erosion and sediment control plan to Idaho Transportation Department standard specifications including a Constriction Debris Control Plan, Spill Prevention Plan for review by the engineer before implementation and construction will abide by an approved Storm Water Pollution Prevention Plan.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above. The provisions in the 404 permit, coupled with the conditions of this certification and the adherence to the above mentioned plans will ensure that degradation to the Snake River will not occur. 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. 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.

Erosion and Sediment Control

14. 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.

15. 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.
16. 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.
17. 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.
18. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
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

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 regional office immediately.*
28. 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 projects BMPs. If the 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).

29. 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.
30. Turbidity monitoring must be conducted, recorded, and reported. 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.*

    Results from the compliance point sampling must be compared to the background levels sampled during each monitoring event.

    - If the downstream turbidity exceeds upstream turbidity by 50 nephelometric turbidity units (NTU) or more, the project is causing an exceedance of the WQS.

    If an exceedance occurs, the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the applicant must modify the activity (this may include modifying existing BMPs).

Turbidity Monitoring and Compliance Requirements

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

31. 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 downcurrent 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

32. 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.

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 2.c. above	
50 NTU or more above background (first occurrence)	STOP work and follow instructions in 2.c. above	
50 NTU or more above background (second occurrence)	STOP work and follow instructions in 2.c. above and notify DEQ Regional Office	

33. 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

34. 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.
35. Construction affecting the bed or banks shall take place only during periods of low flow.
36. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
    a. 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.
37. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
38. Activities in spawning areas must be avoided to the maximum extent practicable.
39. Work in waters of the state shall be restricted to areas specified in the application.
40. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.

41. Activities that include constructing and maintaining intake structures must include adequate fish screening devices to prevent fish entrainment or capture.
42. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
43. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

44. 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

45. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
46. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
47. Fencing and other barriers should be used to mark the construction areas.
48. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
49. 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

50. 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

51. 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.
52. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
53. 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.
54. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.

55. 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.
56. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
57. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
    a. Make every reasonable effort to abate and stop a continuing spill.
    b. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
    c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
        - Boise Regional Office: 208-373-0550 / 888-800-3480
    d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

Culverts

58. To prevent road surface and culvert bedding material from entering a stream, culvert crossings must include best management practices to retain road base and culvert bedding material. Examples of best management practices include, but are not limited to, parapets, wing walls, inlet and outlet rock armoring, compaction, suitable bedding material, anti-seep barriers such as bentonite clay, or other acceptable roadway retention systems.
59. The culvert shall not constrict the stream channel and shall not be angled such that the outflow is directed toward the stream bank. The culvert's flow line shall match the existing stream invert at its entrance and exit. Adequate grade control shall be installed to prevent channel down cutting or excessive deposition from occurring.
60. The culvert shall be installed such that it does not impede fish passage.
61. The culvert outflow shall be armored with riprap to provide erosion control. This riprap will be clean, angular, dense rock that is free of fines and resistant to aquatic decomposition.
62. Culverts shall be sized appropriately to maintain the natural drainage patterns.

Mixing Zones

63. If a mixing zone, or alternatively a point of compliance is desired, then the permittee must contact the appropriate DEQ regional office to obtain authorization.

Treated Wood

64. 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 document provides recommended guidelines for the production and installation of treated wood products destined for use in sensitive environments.

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 Julia Achabal, 373-0321 or julia.achabal@deq.idaho.gov.

Aaron Scheff
Regional Administrator
Boise Regional Office