



Idaho Department of Environmental Quality Draft §401 Water Quality Certification

September 22, 2016

404 Permit Application Number: NWW-2015-557-I02 / Deer Creek Road Realignment Project

Applicant/Authorized Agent: USFS (Kurt Nelson) / USFS (Erika Phillips)

Project Location: Township 02 North, Range 17 East, Section 12

Receiving Water Body: North Fork Deer Creek and Deer 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 joint application for permit, received on August 29, 2016, 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

This project involves the realigning/relocation of a section of USFS Road 70097 as part of post-fire restoration treatments in the Deer Creek drainage. It includes the realigning of 3650 feet of road, removing 0.5 mile of existing road from the riparian floodplain, eliminating 3 road crossings on Deer Creek, and installing a bottomless single radius arch culvert crossing on the new road alignment on North Fork Deer Creek with parapets and wing walls to minimize/prevent road material from entering the stream. This project is part of a larger riparian and floodplain restoration project that will facilitate the restoration of approximately ½ acre of adjacent floodplain on the North Fork Deer Creek and the road alignment will decrease the release of sediment into Deer Creek, restoring the natural channel and improving water quality and fish habitat.

The relocation of the road away from the stream channel and out of the riparian zones will improve riparian functions and reduce erosion and sedimentation impacts. The decommissioning and obliteration of old roadbeds to a more natural floodplain contour and native revegetation should decrease floodplain erosion and sedimentation. This will entail fill removal, grading, soil de-compaction and native revegetation, and will reduce sedimentation and runoff into Deer Creek and North Fork Deer Creek in the long-term. The realignment of the road up onto the hillside will also include removal of three bridges and replacement of one bridge with one bottomless culvert. This will reduce maintenance needs, including a current and anticipated future need to remove woody debris jams from the floodplain above the bridges to prevent bridge failure. By removing the bridges and road from the floodplain, the stream will be able to adjust itself to a more natural course without ongoing management.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier 1 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 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 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 3 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 1 protection for that use, unless specific circumstances warranting Tier 2 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

This project is located on Deer Creek and North Fork Deer Creek within the Big Wood River Subbasin assessment unit (AU) ID 17040219SK026_02 (includes North Fork Deer Creek – source to mouth) and ID 17040219SK026_03 (includes Deer Creek – source to mouth). Both AUs have not yet been designated in the Idaho Administrative Procedures Act (IDAPA 58.01.02.150.21); but the existing beneficial uses have been assessed to be fully supporting:

1. North Fork Deer Creek – Aquatic life, salmonid spawning and secondary contact recreation; and,
2. Deer Creek – Aquatic life, salmonid spawning and primary contact recreation.

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 58.01.02.100).

According to DEQ's 2012 Integrated Report, these receiving water body AUs are fully supporting their assessed uses (IDAPA 58.01.02.052.05.a). As such, DEQ will provide Tier 2 protection in addition to Tier 1 for this water body (IDAPA 58.01.02.051.02; 58.01.02.051.01).

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 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 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).

Although AUs ID17040219SK026_02 and _03 have been assessed as high quality waters, they were identified in the *Big Wood River TMDL, approved May 15, 2002*, as sources of excess sediment to the Big Wood River. The Big Wood River segment (i.e. segment 2 - from Trail Creek in Ketchum, Idaho to the Glendale Diversion near Bellevue, Idaho – AU ID17040219SK007_05) that receives the discharge from both AUs is listed for flow alteration, and has an informational TMDL (segment 2) for total suspended solids (TSS), substrate sediment, total phosphorus and *E.coli*. As described in the TMDL, "For tributaries and canals that discharge above the Magic Reservoir an average monthly target of < 25 mg/L TSS was selected with a daily maximum of < 40 mg/L TSS. This provides a 'no effect' on fish survival and sub-lethal effects and meets beneficial uses" (*Big Wood River TMDL, 2002*, page 54; see also Table D, page xxi). This TSS target above Magic Reservoir is set at levels that protect and maintain designated and existing 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. This project will be implemented during the fall when flows are low to reduce the potential for turbidity. Rather than create a temporary diversion channel, the new channel segment will be created and the new culvert will be installed (which will be assembled on-site before being installed to minimize streambank disturbance and reduce installation time) prior to redirecting flows out of the old channel to minimize sedimentation. 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.

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 designated and existing uses is maintained and protected in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier 2 Protection)

The North Fork Deer Creek and Deer Creek are considered high quality for aquatic life and contact recreation beneficial uses. 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 contact recreation uses of the North Fork Deer Creek and Deer Creek (IDAPA 58.01.02.052.06). The only pollutant of concern is sediment. Because sediment is not relevant to contact recreation, project activities will not result in a lowering of water quality with respect to recreational beneficial use support. Sediment is relevant to the aquatic life beneficial use and the permittee must minimize the transport of sediment through the implementation of best management practices (BMPs). BMPs that will be implemented will include the following:

1. Minimization of Stream Crossings. To prevent streambank erosion and streambed disturbance, minimize the number of stream crossings by heavy equipment and minimize ground disturbance within the RCAs.
2. Implementation of Erosion Control Materials. Where there is potential for increased streambank erosion and sediment deposition into the active stream channel, use of erosion control materials (e.g. silt fencing, straw wattles, coir logs) will be required.
3. Cofferdam Construction. Prior to culvert installation, cofferdams or other erosion structures shall be constructed to isolate work areas from flowing water on fish-bearing streams. Immediately prior to cofferdam construction and equipment entry into the stream, fish passage will be blocked with nets, then aquatic organisms in the project area will be netted and placed upstream of the work area to minimize direct injury.

4. Fish Passage Protection. Fish passage shall be provided at all proposed and reconstructed stream crossings of existing and potential fish-bearing streams unless protection of pure-strain native fish enclaves from competition, genetic contamination, or predation by exotic fishes is determined to be an overriding management concern.
5. Culvert Design to Accommodate 100 Year Flood Recurrence Interval. To accommodate floods, including associated bedload and debris, new culverts, replacement culverts, and other stream crossings shall be designed to accommodate a 100-year flood recurrence interval unless site-specific analysis using calculated risks tools or another method, determines a more appropriate recurrence interval.
6. Inspection of Mechanical Equipment. Mechanical equipment should be inspected to ensure that it is free of leaks and clean of contaminants such as cleaning agents, motor oil and hydraulic fluids to prevent soil or water contamination.
7. Refueling Areas & Spill Containment. Equipment refueling will occur outside of the riparian zone in an upland location. Refueling within the RCA will be allowed only in pullouts on the opposite side of the road away from the stream and away from the flowing water. Spill containment kits with absorbent pads will be kept on hand in case a spill occurs.
8. Equipment Staging & Parking Areas. Equipment staging and parking areas should be located outside the riparian zone in weed-free sites, unless no other alternative exists.
9. Implementation of Sediment Filtering Devices. In excavation areas adjacent to flowing or standing water (including streams, wetlands or side channels), sediment filtering devices (i.e. silt filter fence, wattles, weed free straw bales, etc.) shall be used to limit delivery of disturbed soils and fill material into the creeks. These should be placed between the work area and flowing water to intercept sediments that might be flushed/spread from the work site.
10. Re-establishment of Riparian Vegetation and Bank Stabilization. Following disturbance of any riparian or streambank vegetation, native plantings and/or seeding will be used to re-establish riparian vegetation and provide long-term bank stabilization.
11. Fish Passage Protection. Fish passage shall be provided at all proposed and reconstructed stream crossings of existing and potential fish-bearing streams unless protection of pure-strain native fish enclaves from competition, genetic contamination, or predation by exotic fishes is determined to be an overriding management concern.
12. Excavation Outside of Permitted Proposed Actions. Excavation and other equipment used in the proposed action will not ford or travel in any wetted stream channel except as necessary to complete the proposed actions.
13. Riparian Conservation Areas/Buffers. Riparian Conservation Areas (RCA) are delineated at 150 foot slope distance for forested perennial streams; 75 foot slope distance for forested intermittent streams; and a buffer that is the extent of the flood prone width or riparian vegetation (whichever is greatest) for non-forested streams.
14. Aquatic Management Zone/Buffer. Provide for an Aquatic Management Zone (AMZ) buffer between the road's edge and the stream channel to ensure no sediment is mobilized from the roadway into the stream channel during storm events.
15. Road Surface Drainage System. Design the road surface drainage system to intercept, collect, and remove water from the road surface and surrounding slopes in a manner that minimizes concentrated flows in ditches, culverts and over fill slopes and road surfaces.

16. Drainage Culvert Placement and Buffer Distance. Where drainage culverts are needed, ensure that the concentrated flows will not cause hillslope erosion or gullies downslope towards the floodplain and stream channel. And provide a sufficient buffer distance at the outfall of road drainage structures for water to infiltrate before it is able to reach the waterbody.
17. Retaining Rooted Trees and Shrubs. Leave the existing rooted trees or shrubs at the toe of the road's fillslope or benchcut to help stabilize the road edge.
18. Excess and Unsuitable Materials. If there are any excess and unsuitable materials removed from the hillslope and roadcut, those materials will be deposited and stabilized only in pre-designated wasterock sites.
19. Location of Stream Crossings. Locate stream crossings where the channel is narrow, straight and uniform, and has relatively flat terrain, to the extent practicable. Where lateral channel instability exists, design the road crossing large enough to account for natural channel adjustments and possible channel shifts over the design life of the structure.
20. Design and Maintenance of Stream Crossings. Design and install crossings to sustain bankfull dimensions of width, depth, and slope and maintain streambank resiliency and continuity through the structure.
Align culverts with the natural stream channel and orient the crossing perpendicular to the channel, to the extent practicable. Design stream crossing structures to have sufficient capacity to convey peak annual flows and flood flows without appreciably altering streamflow and channel characteristics.
21. Fuel and Chemical Storage Staging Area. Fuel and chemical storage will be located outside of the RCA.
22. Retaining Felled Trees or Snags. Trees or snags that are felled within RCAs would be left unless determined to not be necessary for achieving soil, water, riparian, and aquatic desired conditions.
23. Stream Crossing Access & Heavy Equipment Usage. Heavy equipment used to excavate fill and remove culverts from effected creeks and floodplains within the project area would not be operated in the wetted creek (with the exception of the bucket). The machinery may have to cross the creek channel one or more times in order to access the far side of the stream crossing site.
24. Timing of Project Implementation. The project would be performed in late summer or fall to minimize the amount of water flowing in the creek through the site.

The construction activities will occur during low flow and flow will be diverted around the site during construction, therefore, no work will be performed in running water. Upon completion of the project native plantings and/or seeding will be used, which will improve riparian shade and assist in stabilizing the eroding banks.

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 404 permit, coupled with the conditions of this certification, ensure that degradation to the North Fork Deer Creek and Deer Creek AUs will not occur. Therefore, DEQ concludes that this project complies with the Tier 2 provisions of Idaho's WQS (IDAPA 58.01.02.051.02; 58.01.02.052.06 and 58.01.02.052.08).

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

Fill Material

1. Fill material shall be free of organic and easily suspended fine material. The fill material to be placed shall include clean earth fill, sand, and stone only.
2. 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.
3. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.

4. All temporary fills shall be removed in their entirety on or before construction completion.
5. 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

1. 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.
2. 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.
3. 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.
4. 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.
5. Top elevations of bank stabilization shall be such that adequate freeboard is provided to protect from erosion at 100-year design flood elevation.
6. 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.
7. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation.
8. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
9. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
10. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
11. 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.
12. To the extent reasonable and cost-effective, the activity submitted for certification shall be designed to minimize subsequent maintenance.
13. 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

1. 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.*
2. 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).
3. 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.
4. 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.*

A sample must be taken every 2 hours at a relatively undisturbed area approximately 30 feet up-current from in-water disturbance or discharge to establish background turbidity levels for each monitoring event. Background turbidity, location, date, and time must be recorded prior to monitoring down-current.

Monitoring must occur every 2 hours approximately 30 feet down-current from the in-water disturbance or point of discharge and within any visible plume. The turbidity, location, date, and time must be recorded for each sample or observation.

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).

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The log must include background measurements (in NTUs) or observations; compliance point measurements or observations; comparison of background and compliance point monitoring as a numeric value (in NTUs) or in narrative form; and location, time, and date for each sampling event. The report must describe all exceedances and subsequent actions taken and the effectiveness of the action including subsequent monitoring.

Turbidity Monitoring and Compliance Requirements

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

1. 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

2. 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	

3. 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

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. Forging 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.
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.

Pollutants/Toxics

1. 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

1. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
2. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
3. Fencing and other barriers should be used to mark the construction areas.
4. Where possible, alternative equipment should be used (e.g., spider hoe or crane).
5. 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

1. 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

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 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
 - b. Make every reasonable effort to abate and stop a continuing spill.
 - c. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
 - d. Immediately notify DEQ of the spill by calling the Idaho State Communications Center at 1-800-632-8000.
 - e. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.
8. In accordance with IDAPA 58.01.02.851.04, any aboveground spill or overflow of petroleum that results in a release that exceeds 25 gallons *or that causes a sheen on a nearby surface water* shall be reported to DEQ within 24 hours and corrective action in accordance with IDAPA 58.01.02.852 shall be taken.
9. In accordance with IDAPA 58.01.02.851.04, any aboveground spill or overflow of petroleum that results in a release less than 25 gallons *and does not cause a sheen on nearby surface water* shall be reported to DEQ by calling the Idaho State Communications Center at 1-800-632-8000 if cleanup cannot be accomplished within 24 hours.
10. Any release that causes a sheen (of any size) in waters of the state must be reported *immediately* to the National Response Center at 1-800-424-8802 and DEQ by calling the Idaho State Communications Center at 1-800-632-8000.

Culverts

1. 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.
2. The culvert shall be installed such that it does not impede fish passage.
3. 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.
4. Culverts shall be sized appropriately to maintain the natural drainage patterns.

Treated Wood

1. Any use of treated wood materials in the aquatic environment must be conducted in accordance with DEQ's "Guidance for the Use of Wood Preservatives and Preserved Wood Products In or Around Aquatic Environments." This guidance is available online at http://www.deq.idaho.gov/media/488795-wood_products_guidance_final.pdf.

Required Notification

The permittee must notify the Twin Falls Regional Office when authorized work begins. Please contact Dr. Buhidar at (208) 736-2190 or by email at Balthasar.buhidar@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 Dr Balthasar Buhidar, Twin Falls Regional Office, (208) 736-2190 or at Balthasar.buhidar@deq.idaho.gov.

"DRAFT"

David Anderson
Regional Administrator
Twin Falls Regional Office