



Idaho Department of Environmental Quality Final Section 401 Water Quality Certification

October 16, 2024

Project Name: Sawtooth Fish Hatchery Intake Dredging

Permit Name and Number: NWW-2016-325-I01, Nationwide Permit # 3 – Maintenance

Applicant/Authorized Agent: Greg Burak, US Fish and Wildlife Service

Project Location: Approximately 8 km south of Stanley, ID on State Highway 75 along the Salmon River (44.1415°, -114.8784°).

Receiving Water Body: Salmon River (ID17060201SL068_05)

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); 40 CFR 121; 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 federal permits or licenses and issue water quality certification decisions.

In accordance with federal regulations at 40 CFR § 121.4, all project proponents must submit a request for a pre-filing meeting at least thirty days in advance of submitting a certification request. A pre-filing meeting request was received by DEQ on 8/29/2024. DEQ reviewed the pre-filing meeting request and determined that necessary project information submitted with advance notice was sufficient to evaluate potential water quality impacts to act on the certification request within a reasonable period of time.

Based upon review of the federal permit application, readily available water quality related materials, and certification request in accordance with 40 CFR §§ 121.5 (b) and (c) and 121.7 (c), received on, 9/13/2024, DEQ, certifies that if the permittee complies with the terms and conditions imposed by the federal permit and the conditions set forth in this water quality certification, then it is reasonable for DEQ to conclude that the activity will comply with water quality requirements, including applicable requirements of the Clean Water Act §§ 301, 302, 303, 306, and 307, Idaho's "Water Quality Standards" (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

Pursuant to Clean Water Act § 401 (a)(1) and 40 CFR § 121.7 (d); and IDAPA 58.01.02.052.08, DEQ issued a 21-day public notice to solicit comments on the draft certification on 9/20/2024 through 10/11/2024. Any public comments received during the 21-day comment period were considered by DEQ to inform the certification decision and conditions.

Accessibility Services: The Idaho Department of Environmental Quality will provide reasonable language access services and/or disability services for documents at no charge. To request an accommodation under Title VI of the Civil Rights Act of 1964 or Americans with Disabilities Act, contact DEQ's nondiscrimination coordinator at (208) 373-0271 or accessibility@deg.idaho.gov. Para obtener información en español, visite <https://www.deg.idaho.gov/about-us/accessibility/>.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits.

1 Project Description

The objective of the proposed project is to remove accumulated sediment from the area around the water intake structure for the Sawtooth Fish Hatchery. For proper water diversion function and winter ice management, approximately 100 - 200 cubic yards (cy) of material will be excavated from the main channel of the Salmon River and the area around the intake structure. In total, an estimated 200 linear feet of the river will be directly impacted by the sediment removal.

2 Antidegradation Review

As part of its water quality standards program, Idaho has an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051). DEQ adopted regulations to implement the antidegradation policy (IDAPA 58.01.02.052).

Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).

Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless 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 do not lower water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ employs a water-body-by-water-body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved [DEQ Integrated Report](#) and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

2.1 Pollutants of Concern

The pollutant of concern for this project is sediment. As part of the § 401 water quality certification, DEQ requires the applicant to comply with various conditions to protect water quality and meet Idaho's water quality standards, including the water quality criteria applicable to this pollutant.

2.2 Receiving Water Body Level of Protection

This project is located on Salmon River within the Upper Salmon River subbasin assessment unit (AU) Salmon River - ID17060201SL068_05. This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply (IDAPA 58.01.02.110, DEQ 2022). In addition to these uses, all waters within the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2022 *Integrated Report*, this segment of the Salmon River is not fully supporting one or more of its assessed uses. The cold water aquatic life and salmonid spawning uses are listed as not supporting, due to temperature impairment. Primary contact recreation is listed as fully supporting.

The only pollutant of concern associated with this project is sediment; however, sediment is not relevant to recreational uses because aquatic life is the more sensitive use. Sediment will be expected to cause impairments to aquatic life at concentrations well below that necessary to cause recreational use impairment, so it is unnecessary for DEQ to conduct a Tier II analysis for contact recreation use (IDAPA 58.01.02.052.08).

As stated above, DEQ employs a water-body-by-water-body approach to implementing Idaho's antidegradation policy. If a waterbody is impaired for dissolved oxygen, pH, or temperature, but *"biological or aquatic habitat parameters show a healthy, balanced biological community is present"* then *"the water body must receive Tier II protection for aquatic life uses"* (IDAPA 58.01.02.052.05.c.i.). Given that this segment of the Salmon River supports spawning of Chinook Salmon (Section 2.4) (Nau et al. 2021), DEQ will provide both Tier I and Tier II protection for the cold water aquatic life uses (IDAPA 58.01.02.051.01 and IDAPA 58.01.02.052.05.c).

2.3 Protection and Maintenance of Existing Uses (Tier I Protection)

A Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the water quality standards are set at levels that ensure protection of existing and designated beneficial uses.

Throughout the life of the project, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) to reduce erosion and minimize

turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented that will minimize or prevent future sediment contributions from the project area.

If the project is conducted according to the provisions of the project plans, federal permit and conditions of this certification, then it is reasonable for DEQ to conclude that the project will comply with the state's numeric and narrative water quality criteria. These criteria are set at levels that protect and maintain existing and designated beneficial uses.

There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated and discussed above. The conditions in this certification ensure 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 IDAPA 58.01.02.051.01 and 58.01.02.052.07.

2.4 High-Quality Waters (Tier II Protection)

The Salmon River is considered high quality for cold water aquatic life and salmonid spawning. Although there is an existing temperature impairment, this section of the Salmon River represents an important area for Spring-summer Chinook Salmon redd habitat (Nau et al. 2021). The water quality relevant to cold water aquatic life and salmonid spawning must be maintained and protected, unless lowering water quality is necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the activities subject to the federal permit issuance will affect water quality for each pollutant that is relevant to aquatic life uses of the Salmon River (IDAPA 58.01.02.052.06). As previously noted, sediment is the pollutant of concern. The applicant proposes to employ site-specific BMPs to prevent degradation. Excavated sediment will be transported and placed around the Sawtooth Fish Hatchery grounds above the ordinary high water mark and outside of wetland areas. Deflection barriers will be placed in the river to deflect flows around the excavation areas to further reduce the potential for sediment transport downstream. Maintenance activities will be performed during the in-stream work window (July 15-August 15).

To maintain the ambient water quality conditions, permanent erosion and sediment controls must be implemented to minimize or prevent future sediment contributions from the project area. The provisions in the federal permit and the conditions of this certification ensure that degradation to the Salmon River will not occur.

DEQ concludes that this project complies with the Tier II provisions of IDAPA 58.01.02.051.02, 58.01.02.052.06, and 58.01.02.052.08.

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

The following conditions ensure the Sawtooth Fish Hatchery Intake Dredging project complies with Idaho's water quality standards and other appropriate water quality requirements of state law applicable to Salmon River.

3.1 General Conditions

This certification is based on review of the federal permit application, readily available water quality related materials, and certification request submitted by the US Fish and Wildlife Service on 9/13/2024 and is conditioned upon the requirement that any modification (e.g., change in work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho's water quality standards.

Because DEQ is certifying only the activity described in the certification request, this condition ensures that discharges under circumstances that differ from those described in the certification request will comply with 33 U.S.C. § 1341, 40 CFR 121, and other applicable water quality requirements, including without limitation 33 U.S.C. § 1311(a), Idaho Code § 39-108, IDAPA 58.01.02.051, IDAPA 58.01.02.052, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. DEQ reserves the right to modify this certification in accordance with 40 CFR § 121.10 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 water quality standards—there is no longer reasonable assurance of compliance with the water quality standards or other appropriate requirements of state law.

Because DEQ is certifying only the activity described in the certification request based on information available at the time of certification, this condition ensures that discharges from activities not described in the certification request, or where there has been a change in the characteristics of or water quality standards applicable to the receiving water body, will comply with 33 U.S.C. § 1341, 40 CFR 121, and other applicable water quality requirements, including without limitation 33 U.S.C. § 1311(a), Idaho Code § 39-108, IDAPA 58.01.02.051, IDAPA 58.01.02.052, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

2. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to the new name. This condition ensures that, if ownership changes, DEQ has the minimum information to support ongoing compliance with 33 U.S.C. § 1341, 40 CFR 121, this water quality certification, and other

applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

3. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.

This condition ensures all responsible parties, including on-site contractors, are aware of and comply with this water quality certification and other applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

4. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the federal permit.

This condition ensures all responsible parties, including on-site contractors, comply with this water quality certification and applicable water quality requirements, including without limitation Idaho Code § 39-108, IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

5. If this project disturbs more than 1-acre and there is potential for discharge of storm water to waters of the United States, then coverage under the [IPDES Construction General Permit Program](#) may be required.

This condition ensures that work authorized under the federal permit complies with water quality requirements prohibiting unauthorized storm water discharges, including without limitation 33 U.S.C. § 1311(a), 33 U.S.C. § 1342(p), IDAPA 58.01.02.080, and IDAPA 58.01.02.400.

3.2 Fill Material

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.210, IDAPA 58.01.02.250, IDAPA 58.01.02.251, IDAPA 58.01.02.252, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. 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 United States.

3.3 Erosion and Sediment Control

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. BMPs for sediment and erosion control suitable to prevent exceedances of Idaho's water quality standards and consistency with TMDLs shall be selected and installed

before starting construction at the site. One resource to evaluate appropriate BMPs is the *Idaho Catalog of Storm Water Best Management Practices* (DEQ 2020). Other resources may also be used for selecting appropriate BMPs.

2. Permanent erosion and sediment control measures will be installed to provide long-term sediment and erosion control and prevent excess sediment from entering waters of the United States.
3. Permanent erosion and sediment control measures will be installed at the earliest practicable time consistent with good construction practices and will be maintained as necessary throughout the project.
4. Structural fill or bank protection will consist of materials that are placed and maintained to withstand predictable high flows in the waters of the United States.
5. A BMP inspection and maintenance plan must be developed and implemented. At a minimum, BMPs must be inspected and maintained daily during project implementation and replaced or augmented if they are not effective.
6. All construction debris, scraps, particles, and other associated materials will be captured and properly disposed of so they cannot enter waters of the United States or cause water quality degradation.
7. Disturbed areas suitable for vegetation will be seeded or revegetated to prevent subsequent soil erosion (EPA 2000).
8. Sediment from disturbed areas or sediment that can be tracked by vehicles onto pavement must not leave the site in amounts reasonably expected to enter waters of the United States. 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 to prevent track-out.

3.4 Turbidity

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200.08, IDAPA 58.01.02.250.02.e, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standards stipulated in Idaho's water quality standards. Any violation of this standard must be reported to the DEQ regional office immediately.
2. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize instream sediment suspension and resulting turbidity. One resource to evaluate appropriate BMPs is the *Idaho Catalog of Storm Water Best Management Practices* (DEQ 2020). Other resources may also be used for selecting appropriate BMPs.
3. All practical BMPs on disturbed banks and within the waters of the United States must be implemented to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a sediment plume is observed, the project may be causing an exceedance of water quality standards, and the permittee must inspect the condition of the project BMPs. If the BMPs appear to be functioning

- improperly, then corrective action must be taken, and the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).
4. If the project continues to have a visual sediment plume after BMPs have been inspected and modified, turbidity monitoring consistent with Table 1, is required.
 - a. A properly and regularly calibrated turbidimeter is required for sample collection measurements to be analyzed in the field. The turbidimeter should be calibrated before each use or according to the manufacturer's recommendations. The calibration log should be maintained and made available to DEQ upon request. Instantaneous grab samples may be collected for field analysis and taken to a laboratory for analysis as needed. When turbidity monitoring is required, a grab sample must be collected at an undisturbed area immediately upstream from the in-water disturbance or discharge to establish background turbidity levels. Background turbidity, latitude/longitude, date, and time must be recorded before monitoring downstream. A sample must be collected immediately downstream from the in-water disturbance or point of discharge and within the visible sediment plume. The turbidity, latitude/longitude, date, and time must be recorded for each sample. The downstream sample must be taken immediately following the upstream sample to obtain meaningful and representative results.
 - b. Results from the downstream sampling location must be compared to the upstream sample location or background turbidity to determine whether project activities are causing an exceedance of Idaho's water quality standards. If the downstream turbidity is 50 nephelometric turbidity units (NTUs) or greater than the upstream turbidity, then the project is causing an exceedance of the water quality standards. Any exceedance of the turbidity standard must be reported to the appropriate DEQ regional office within 24-hours of the sample event.
 - c. Earth-disturbing activities may continue once turbidity readings return to within 50 NTU over background instantaneously, or if turbidity has exceeded 25 NTU over background for more than 10 consecutive days, once turbidity readings have no longer exceeded 25 NTU over background for at least 24 consecutive hours.
 - d. Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent corrective actions taken, including the effectiveness of the action.

Table 1. Turbidimeter monitoring and sampling when a plume is observed.

| Turbidity Above Background ^a | Monitoring/Sampling Frequency ^a | Additional Actions Required |
|---|---|---|
| 0 to 24 NTU | Visual monitoring every 2 hours | None |
| 25 to 49 NTU | Sample every 2 hours | STOP work after 8 hours in every 24-hour period |
| 25 NTU for 10 or more consecutive days | Sample before and after following instructions ^b | STOP work and follow instructions ^b ; notify DEQ regional office |
| 50 NTU or more | Sample before and after following instructions ^c | STOP work and follow instructions ^c ; notify DEQ regional office |

- a. Sample and report turbidity three times at each location. Use the maximum value of three samples to determine compliance following Table 1 directions.

- b. Instructions: If BMPs appear to be functioning properly, then the permittee must modify the activity or implement corrective action such as installing additional BMPs (this may include modifying existing BMPs) until additional sampling indicates turbidity standards are met. Sampling can cease when a sediment plume is no longer observed. Work can commence when a sediment plume is no longer observed, and measurements are consecutively below 25 NTU.
- c. Instructions: If BMPs appear to be functioning properly, then the permittee must modify the activity or implement corrective action such as installing additional BMPs (this may include modifying existing BMPs) until additional sampling indicates turbidity standards are met. Sampling can cease when a sediment plume is no longer observed. Work can commence when a sediment plume is no longer observed, and measurements are below 50 NTU.

3.5 In-Water Work

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.200, IDAPA 58.01.02.250, IDAPA 58.01.02.253, and IDAPA 58.01.02.400.

1. Work in open water must be kept to a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the United States. If this is not practicable, take appropriate measures to ensure disturbance to the waters of the United States is minimized.
2. Construction affecting the bed or banks shall occur only during periods of low flow and/or corresponding with appropriate in-water work periods for aquatic life.
3. Fording the channel is not permitted. Build temporary bridges or other structures if crossings are necessary.
4. Temporary crossings shall 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.
5. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
6. In-water activities in spawning areas shall be avoided to the maximum extent practicable during spawning and incubation periods.
7. Work in waters of the United States shall be restricted to areas specified in the application.
8. Activities that construct and maintain intake structures must include adequate fish exclusion 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 streambank stabilization must be completed before returning water to a dewatered segment.

3.6 Management of Hazardous or Deleterious Materials

The following conditions are necessary for the protection of beneficial uses according to Idaho's water quality standards, including without limitation IDAPA 58.01.02.051, IDAPA 58.01.02.080, IDAPA 58.01.02.200, IDAPA 58.01.02.400, IDAPA 58.01.02.800, and IDAPA 58.01.02.850.

1. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the United States. Adequate measures and controls must ensure that those materials will not enter waters of the United States because of high water, precipitation runoff, wind, storage facility failure, accidents, or unauthorized third-party activities.
2. Secondary containment is required for chemical materials.
3. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
4. Daily inspections of all fluid systems on equipment to be used in or near waters of the United States shall ensure no leaks or potential leaks exist before equipment use. A logbook of daily equipment inspections shall be kept on site and provided to DEQ upon request.
5. Equipment and machinery shall be removed from the vicinity of the waters of the United States before refueling, repair, and/or maintenance.
6. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment capability before entering waters of the United States. Any wastewater or wash water must not enter waters of the United States.
7. Emergency spill response procedures shall be in place and include a spill response kit (e.g., oil absorbent booms or other equipment).
8. If an unauthorized release of hazardous material to waters of the United States or to land occurs and there is a likelihood it will enter waters of the United States, 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 so it will not reach surface or ground waters of the United States.
 - c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the appropriate DEQ regional office during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
 - d. Contact Idaho Falls Regional Office: (208) 528-2650.
9. Collect, remove, and properly dispose of spill and cleanup materials in a manner approved by DEQ.

3.7 Dredge Material Management

Upland disposal of dredged material must prevent the material from reentering waters of the United States.

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

4 Required Notification

The permittee must notify the Idaho Falls Regional Office when authorized work begins and if the applicant or organization is transferred or changes.

5 Right to Appeal Final Certification

The final § 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 Alex Bell (office phone number: 208-528-2679, email address: alex.bell@deq.idaho.gov).



Alex Bell

Regional Water Quality Manager
Idaho Falls Regional Office

References

- Nau, C. I., E. A. Felts, B. Barnett, M. Davison, C. McClure, J. R. Poole, R. Hand, and E. Brown. 2021. *Idaho Adult Chinook Salmon Monitoring*. Annual Report 2020. Idaho Department of Fish and Game Report 21-08.
- DEQ (Idaho Department of Environmental Quality). 2020. *Idaho Catalog of Storm Water Best Management Practices*. Boise, ID: DEQ. <https://www.deq.idaho.gov/water-quality/wastewater/storm-water/>
- DEQ (Idaho Department of Environmental Quality). 2022. *Idaho Department of Environmental Quality 2022 Integrated Report*. Boise, ID: DEQ. <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/16619>
- EPA (US Environmental Protection Agency). 2000. *National Menu of Best Management Practices (BMPs) for Stormwater*. <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater>
- RSET (Northwest Regional Sediment Evaluation Team). 2018. *Sediment Evaluation Framework for the Pacific Northwest*. Prepared by the RSET Agencies.