



— BUREAU OF —
RECLAMATION

Finding of No Significant Impact and Decision Record

Conconully Safety of Dams Modification Project

Okanogan County, Washington

Interior Region 9 – Columbia Pacific Northwest

Tracking #: CPN-EA-2024-03-FONSI

Approved and certified by:

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This document certifies that Reclamation has considered all relevant information raised in the NEPA process and that the NEPA process has concluded. The Selected Alternative has been analyzed in an Environmental Assessment and found to have no significant impacts, thus an Environmental Impact Statement is not required.

Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Finding of No Significant Impact

Introduction

In accordance with section 102(2) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to examine the potential effects to the environment associated with Reclamation's proposal to implement corrective action to address static, seismic, and hydrologic risks at Conconully Dam on Salmon Creek in Okanogan County, Washington. This Finding of No Significant Impact (FONSI) follows implementation regulations for an EA described in 43 CFR Part 46 and the Department of the Interior Handbook of NEPA Implementation Procedures (516 DM 1). This FONSI is supported by Reclamation's Conconully Safety of Dams Modification Project EA (EA Number CPN-EA-2024-03), incorporated here by reference.

Conconully Dam and the associated Conconully Reservoir are on Salmon Creek, approximately 17 miles north of Omak, Washington. As a component of the Okanogan Project¹, Conconully Reservoir provides irrigation water to downstream irrigators, water for fish and wildlife habitat, and recreational opportunities for visitors and residents of the town of Conconully, located north of the dam.

Conconully Dam was constructed, using hydraulic fill methods between 1907 and 1910, at the confluence of the North and West Forks of Salmon Creek. The resulting puddled-core embankment² is currently known to be susceptible to liquefaction and at increased risk of failure in the event of seismic activity. Seepage and potential internal erosion issues are also present throughout the dam embankment. Evaluations of the risk of seismic failure, associated with liquefaction of the dam's embankment and foundation materials, began in the 1990s. The geotechnical and risk analyses indicated that existing risks were at an unacceptable level based on Reclamation's Public Protection Guidelines³; the analyses also justified additional work to better define or understand

¹ The Okanogan Project, authorized in 1905 by the Department of the Interior and completed in 1910, was the first irrigation project in Washington State. The project's primary goal was to provide irrigation for farmland in North Central Washington. Conconully Dam is a key component of the project's water storage and delivery system.

² A puddle-core embankment contains a central section of clay mixed with water and compacted to form an impermeable layer known as puddle clay. This method was used commonly in turn of the century dam design before the development of modern waterproofing materials.

³ Reclamation's Public Protection Guidelines can be accessed at:
<https://www.usbr.gov/damsafety/documents/ReclamationPublicProtectionGuidelines2022.pdf>.

the risks. Subsequent geotechnical evaluations, field explorations, and risk analyses demonstrated that the dam embankment requires modifications to reduce the seismic risks to the dam.

As part of its Safety of Dams (SOD) program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. These requirements result in a need for Reclamation to implement corrective action to bring static, seismic and hydrologic risks at Conconully Dam below Reclamation's Public Protection Guidelines, while minimizing impacts on the environment.

Purpose and Need

The **purpose** of the proposed project is to improve public safety by reducing the risk associated with liquefaction of embankment and foundation materials, maintain water deliveries and flows for irrigators and endangered species, and continue to provide recreational benefits and fish and wildlife habitat.

The **need** for the proposed project is to comply with Reclamation's SOD requirements and reduce static, seismic, and hydrologic risks at Conconully Dam to acceptable levels based on Reclamation's Public Protection Guidelines; improve control of water flows through the outlet works; and increase reliability and longevity of the dam and water conveyance system.

Alternatives Considered

The range of alternatives developed for analysis was based on the purpose and need for the project, and on the issues raised during internal and external scoping. The alternatives analyzed include a No Action alternative (Alternative A) and two action alternatives (Alternative B - Proposed Action and Alternative C). A summary of the Alternatives analyzed in detail and environmental effects of implementing them are included in this document. Further information is described in the Conconully Safety of Dams Modification Project EA (CPN-EA-2024-03). Alternative C was identified as the preferred alternative in the EA. The FONSI and Decision Record is prepared for a modified version of Alternative C.

Alternative A – No Action

The purpose of the No Action alternative is to allow decision-makers to compare the effects of choosing an action alternative for implementation with the effects of maintaining the current conditions. Under the No Action alternative, there would be no new surface disturbance or

structural or operational changes to Conconully Dam or the outlet works. Operations and maintenance activities would continue as currently implemented.

Under the No Action alternative, the risk of seismic failure associated with liquefaction would remain at an unacceptable level based on Reclamation's Public Protection Guidelines, operational flexibility to control water flow through the outlet works would remain limited, and the seepage and potential internal erosion issues through the dam embankment would continue.

As part of its SOD program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. These requirements result in a need for Reclamation to implement corrective action to bring static, seismic and hydrologic risks at Conconully Dam below Reclamation's Public Protection Guidelines, while minimizing impacts on the environment. Thus, this alternative would not meet the purpose of, or need for, Reclamation's action.

Alternative B - Proposed Action

Reclamation proposes to reduce the risk of dam failure in the event of seismic activity, improve control of water flows through the outlet works, and increase the reliability and longevity of the dam and water conveyance system by performing the following:

- Constructing a stability berm on the downstream face of Conconully Dam on a foundation of deep soil mixing⁴ (DSM) reinforcement columns
- Installing an internal water collection system including sand filter and gravel drainage layers, including a chimney drain, a blanket drain, and a toe drain
- Upgrading and extending the outlet works to ensure compatibility with the new stability berm
- Using the existing gates or installing a bulkhead into the existing intake structure to shut off water flow, as necessary
- Constructing a stilling basin and discharge channel for water released from the outlet works
- Constructing a valve house at the downstream end of the outlet works
- Demolishing the existing gate house and control house and constructing a new gate house on its existing foundation

⁴ Deep soil mixing is a ground improvement technique that augments the characteristics of weak soils by mechanically mixing them with a cement-based mixture to a target depth. The proposed rows of soil-cement—referred to as soilcrete—create reinforced columns that strengthen the ground and provide support for structures built on it. The DSM columns essentially act as a structural support by improving the soil's load-bearing capacity.

- Reinforcing the undermined base of the existing gate house retaining wall facing the reservoir with a 2-foot wide by 6-foot tall concrete reinforcement apron
- Modifying the slide gates and gate valves, if necessary, within the gate chamber to conform with the updated outlet works. Modifications could include abandonment, rehabilitation, replacement, or safety improvements
- Installing relief wells downstream of the stability berm and foundation
- Using temporary pumps or siphons to move water over the spillway during the non-irrigation season
- Excavating a borrow area on Reclamation lands on the east bank of Conconully Reservoir adjacent to the dam
- Contouring and sloping the excavated portion of the borrow area to a natural grade once borrow material is no longer needed
- Constructing a boat ramp to launch the barges for spillway pumping and intake bulkhead placement
- Constructing an access road to provide permanent access to dam facilities and facilitate future operations and maintenance activities
- Placing a linear barrier (for example, fencing, boulders, or other barriers) along the west side of the access road to restrict vehicle traffic to the road area and protect revegetation efforts
- Preparing up to 3.7-acres for an administrative/storage/staging area to remain after project completion
- Installing a project area entrance gate near the start of the dam access road, within 170–470 feet from Conconully Road
- Installing a permanent dam security gate
- Upgrading the existing single-phase power line to a three-phase power line and installing a new fiber optic cable line
- Completing upland revegetation to address anticipated impacts from construction activities
- Completing aquatic and wetland habitat restoration to replace, restore, and enhance protected in-stream and wetland habitats in a 9.8-acre area in the Salmon Creek floodplain directly downstream of the dam and outlet works

The total project area is approximately 120 acres. Under Alternative B, 60.4 acres would be subject to surface disturbance. Of this, 40.8 acres (68 percent of the total surface disturbance area) would experience short-term disturbance and be restored to pre-construction conditions. The remaining 19.6 acres (32 percent of the total surface disturbance area) would not be restored, representing permanent impacts such as facility footprints or wetland removal.

The proposed outlet works modification would include a 700-foot-long, 60-inch-diameter steel pipe installed within the existing outlet works tunnel and extending farther downstream through the stability berm to a valve house, where it would discharge into a stilling basin and discharge channel. The proposed outlet works extension would veer off from the existing outlet works tunnel alignment 30 feet upstream of the existing discharge point and cut into the hillside. In addition, the proposed outlet works – east alignment would include a 40-inch-diameter pipe for low flow situations (that is, low water elevations) that would have a separate discharge point into Salmon Creek upstream of the valve house outlet (for a total of two discharge points).

The existing gate house and control house would be demolished and replaced. The new gate house would be constructed on its existing foundation. Both buildings would occupy similar footprints as the original buildings. The upstream gates and/or valves would be operated either from the control house or continue to be controlled from the gate house. All jet cone and plunger valve controls, along with facility instrumentation, would be located in the control house. Modifications to the slide gates and gate valves, if necessary, would occur wholly within the gate chamber to conform with the updated outlet works. Both buildings would be built of concrete with fire-resistant roofs. The new structure would be supplied with electricity and connected to the proposed fiber optic line.

The undermined base of the existing gate house retaining wall facing the reservoir would be reinforced with a 2-foot-wide by 6-foot-tall concrete reinforcement apron. The reinforcement apron would be 2 feet below the surface and 4 feet above the surface, abutting the existing retaining wall. The reinforcement apron would be graded to match the slope of the existing ground and would be installed with a 2-foot-wide by 2-foot-deep trench. To prevent future erosion and structural damage, miscellaneous fill and riprap sourced from the borrow area would be placed in a 15-foot-wide area around the reinforcement apron.

The proposed stability berm would be constructed on a foundation of reinforced DSM columns on the downstream side of the existing dam embankment. The underground DSM columns would be installed in an overlapping pattern to form a stable foundation for the stability berm. The foundation design would resist liquefaction and minimize the risk of strength loss during seismic events. The stability berm would be constructed on the DSM column foundation with zones of sand (55,000 cubic yards) and gravel (38,000 cubic yards) to provide internal filtration, capture, and drainage of water from the dam and berm. The remainder of the stability berm would be composed of miscellaneous compacted backfill (450,000 cubic yards) obtained from the borrow area. The stability berm would be armored with gravels, cobbles, and boulders obtained from the borrow area for slope protection and erosion control. Neither dewatering nor reservoir-level restrictions would be required for DSM column installation.

Construction activities are anticipated to take place over a minimum 4-year period. **Table 1** identifies the general timing of each component. Construction equipment would likely operate continuously during regular workday hours of 7:00 a.m. to 10:00 p.m. throughout the construction period for up to 6 days per week and year-round, depending on the construction activities required (that is, those not constrained by the in-water work window). However, there could be certain circumstances where longer work periods would be necessary that would require Reclamation’s Contracting Officer’s Representative approval. In-water construction activities will adhere to the approved Washington Department of Fish and Wildlife (WDFW) in-water work window.

Table 1. General timing of component construction and use for Alternative B.

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Upgrade and expand the outlet works (including the intake bulkhead, stilling basin/discharge channel, gate chamber, and valve house)	C	C	P	P	N
Unwater in-water work area	C	C	P	P	C
Operate spillway pumps	C	C	C	C	N
Excavate the borrow area	C	C	C	C	N
Establish and occupy the administrative/storage/staging area	C	C	C	C	C
Construct the dam access road ¹	C	N	N	C	N
Install security infrastructure ²	C	N	N	C	N
Construct the boat ramp	C	P	P	N	N
Install the toe drain	C	C	P	N	N
Upgrade and install utilities	C	N	N	N	N
Install and remove the temporary cofferdam	C	C	P	P	C
Construct the relief wells	C	C	N	N	N
Construct the foundation	C	C	C	C	N
Construct the stability berm	N	N	C	C	N
Demolish and construct the gate house and control house	N	N	C	C	N
Implement the revegetation and aquatic and wetland habitat restoration projects	N	N	N	C	C

Notes:

C: General timing of construction activities

P: Timing of potential construction if additional effort is needed. Construction of the outlet works is complex and could extend the construction period up to an additional 2 years if construction conditions are not favorable.

N: No construction activities anticipated to take place for the activity.

¹ The temporary alignment of the dam access road would be constructed at the start of the project (Year 1). The final, permanent alignment of the dam access road would be put in place once construction has been completed.

² A project area entrance gate near Conconully Road and temporary lighting would be installed within the project area at the start of the construction period. A permanent access gate near the gate house and security fencing would be installed at the end of construction. The project area entrance gate would continue to limit public vehicle access while revegetation activities are taking place and for up to 3 additional years post-construction to prevent unauthorized vehicles from entering the project area while new vegetation is established.

Construction of the outlet works within the existing tunnel and modifications in the gate chamber would start after the irrigation season ends during the fall/winter of Year 1, pause during the following spring and summer irrigation season, and resume in the fall/winter of Year 2. It is anticipated to be completed by the following spring of Year 3; however, construction of the outlet works is complex, and if work conditions are not favorable, the construction period could be extended through the fall/winter of Year 3 with completion in the spring of Year 4. Construction and completion of the outlet works and valve house may run concurrently with DSM activities for the foundation.

The construction of the stability berm is expected to take about 9–12 months, from the winter of Year 3 into the fall of Year 4. The borrow area would be in use for the full duration of the 4-year construction period. After the completion of the construction activities, aquatic and wetland habitat restoration activities, including revegetation of disturbed upland and wetland/riparian areas within the project area, would be implemented.

Details related to site preparation, construction, revegetation, and aquatic and wetland habitat restoration can be found in Chapter 2, Appendix E (*Draft Revegetation Plan*), Appendix G (*Draft Aquatic and Wetland Habitat Restoration Plan*), and Appendix J (*Design and Construction Information*) of the EA.

Alternative C - Preferred

Alternative C was identified in the EA as the preferred alternative. Reclamation would implement the same upgrades to Conconully Dam under Alternative C as described for Alternative B with the following component construction and location differences:

- The outlet works would be shifted west from the Alternative B alignment, requiring less rock excavation. The outlet works extension would be shorter under Alternative C and would discharge into Salmon Creek at one location as opposed to two locations.
- A 19-foot long by 15-foot-wide by 11-foot-high concrete impact basin structure would be constructed in lieu of an excavated plunge pool stilling basin. The location would conform with the differences for the outlet works under Alternative C.
- The valve house would be slightly larger than under Alternative B; however, the structure would be placed below ground to a depth of 27 feet. The roof would be the only part of the valve house that would be exposed at the surface.
- The stability berm in Alternative C would not be as wide as described under Alternative B and would use 50,000 fewer cubic yards of fill material.

- A boat ramp would not be constructed. Instead, any barges needed for intake bulkhead installation or the spillway pumps would be deployed by being lowered into the reservoir with a crane or launched from the existing boat ramp at Conconully State Park, if feasible.
- Other project components, such as access road and water collection system locations, would also be relocated to fit within the adjusted berm and outlet works footprint.
- General timing of component construction would follow that of Alternative B, as depicted in **Table 1**.

Mitigation, Monitoring, and Enforcement

Mitigation, monitoring, and enforcement measures have been identified in Appendix F *Best Management Practices and Conservation Measures* of the EA to address potential adverse impacts. These measures have been adopted as part of Alternatives B and C. Best Management Practices (BMPs) are drawn from construction specifications, and include measures for site layout; temporary access, staging and stockpile areas; equipment use; sediment and erosion control; dust and noise abatement; limiting ground disturbance; timing of in-water work; worksite isolation; and spill prevention and control among others. BMPs would be implemented to minimize soil exposure, control dust and air contaminants, minimize the removal of wetland vegetation, and manage spills, thereby reducing impacts on resources and their uses. See **Attachment 1** for a list of BMPs and conservation measures, specific to resources and resource uses, which will be incorporated into project implementation.

In addition to BMPs, mitigation required by regulatory agencies will be adopted and implemented as part of Reclamation's action to address permanent impacts to wetlands, cultural resources, and Endangered Species Act (ESA) species and their critical habitat. The authority to implement these mitigation measures is derived from Clean Water Act (CWA) Sections 401(a)(1) and 404 permitting requirements and National Historic Preservation Act (NHPA) Section 106 and ESA Section 7 consultations.

- **Wetlands/Waters of the US:** Disturbance to wetlands and waters of the U.S. will be offset through compensatory mitigation as required under the CWA Section 404 permit administered by the U.S. Army Corps of Engineers (USACE) and the Section 401(a)(1) water quality certification administered by the Ecology. A Wetlands and Waters Compensatory Mitigation Plan has been prepared to guide restoration and enhancement efforts for aquatic and wetland habitats. Additionally, the contractor will comply with the EPA Construction General Permit and all applicable federal, state, and local permits to ensure water quality

protection during construction activities. These measures will ensure compliance with federal and state water quality standards and reduce potential impacts on aquatic and wetland resources. If permit requirements, BMPs, or other measures contradict each other, Reclamation's contract specification will require that Reclamation's contractor abide by the most stringent requirements.

- **Cultural Resources:** To protect cultural resources, Reclamation has consulted under NHPA Section 106 and has executed a Memorandum of Agreement (MOA; R26MA13703, February 9, 2026) with the Washington State Historic Preservation Office (SHPO) and Confederated Tribes of the Colville Reservation (CTCR) Tribal Historic Preservation Office (THPO). The MOA stipulates mitigation measures, monitoring responsibilities, procedures for inadvertent discoveries, and Tribal involvement throughout the project. Execution of the MOA satisfies Section 106 requirements and resolves potential adverse effects on historic properties.
- **Federally Listed Species:** Reclamation received a biological opinion from National Marine Fisheries Service (NMFS) under ESA Section 7 consultation. The biological opinion includes specific terms and conditions designed to protect federally listed species and their habitats. Reclamation will implement these conservation measures in coordination with the NMFS.

Environmental commitments represent BMPS and mitigation measures to avoid, minimize, rectify, reduce, eliminate or compensate for impacts caused by implementation of the Project. These combined measures are designed to avoid or substantially reduce the potential for significant effects on aquatic habitats, wetlands, water quality, cultural resources, and ESA-listed species.

Reclamation is the lead Federal agency with primary responsibility for complying with the NEPA on the Project, and Reclamation's Pacific Northwest Construction Engineering Group would ensure the contractor implements the environmental commitments contained within the specification and permit requirements. Monitoring and enforcement will occur through permit conditions and agreements, including the EPA Construction General Permit, CWA permit and water quality certification, WDFW Hydraulic Project Approval (HPA) permit, the MOA under NHPA Section 106, and the biological opinion under ESA Section 7. Monitoring will include cultural resource oversight, verification of aquatic, upland, and wetland habitat revegetation, and ensuring water quality standards are met.

In addition, the following plans will be prepared prior to and followed during project construction, and will include but are not limited to:

- Work Area Isolation Plan
- Temporary Erosion and Sediment Control Plan
- Spill Prevention, Control and Countermeasure Plan
- Aquatic and Wetland Habitat Restoration Plan
- Fish Relocation and Salvage Plan
- Stormwater Pollution Prevention Plan
- Water Quality Monitoring Plan
- Revegetation Plan
- Plan for the Inadvertent Discovery of Cultural Resources
- Native American Graves Protection and Repatriation Act Plan of Action
- Noise Monitoring and Abatement Plan
- Fire Protection and Prevention Plan
- Emergency Evacuation Plan

Summary of Environmental Effects

Degree of Effects

The EA evaluated the reasonably foreseeable effects of implementing the No Action and Alternatives B and C. In determining the degree of significance, the following were considered:

1. Short- and long-term effects⁵: Potential short- and long-term effects of the Proposed Action were analyzed in Section 3.0 *Affected Environment and Environmental Consequences* of the EA. As a result of the implementation of either action alternative, there would be minor short-term adverse effects and major long-term beneficial effects to the affected environment. Adverse effects would be further minimized with implementation of environmental commitments (**Attachment 1**; also see EA Section 2.2.2 B.12 *Upland Revegetation and Aquatic and Wetland Habitat Restoration*; Appendix E. *Draft Revegetation Plan*; Appendix F. *Best Management Practices and Conservation Measures*; Appendix G. *Draft Aquatic and Wetland Habitat Restoration Plan*; Appendix K. *Unwatering and Fish*

⁵ Effect durations in the EA were defined as follows: Temporary effects are those that would only occur during the duration of the construction period; Short-term effects are those expected to occur for up to 10 years following construction; and Long-term or permanent effects are those expected to occur for 10 years or more (EA Appendix C. C.1 *Impact Analysis Methodology*).

Salvage Plan; Memorandum of Agreement R26MA13703; NMFS Biological Opinion WCRO-2025-02522; CWA Section 404 Conceptual Mitigation Plan) and any additional terms and conditions and/or stipulations resulting from the CWA Sections 404 and 401 and HPA permitting processes. There would be no adverse long-term effects to resources analyzed under either action alternative. Long-term beneficial effects are described below.

2. Beneficial and adverse effects: Potential adverse effects would be minimized as described above under short- and long-term effects. Implementation of either action alternative would result in long-term beneficial effects to public safety, water resources, recreation, ESA-listed steelhead and their critical habitat, and upland, aquatic, and wetland habitats and associated fish and wildlife species (EA Section 3.0).
3. Effects on public health and safety: Implementation of either action alternative would benefit the public, irrigators, recreationalists, and workers operating and maintaining the facilities (EA Section 3.0 and *Appendix C Impact Analysis Methods and Summary*). While construction could pose temporary⁵ safety risks for work crews and the public, implementation of BMPs would reduce these risks to negligible or minor levels (**Attachment 1**).
4. Economic effects: Overall, the economic effects of the action alternatives would be similar, each providing beneficial impacts by reducing the risk of seismic failure and supporting the continued economic contributions of irrigation and recreation. In contrast, the No Action alternative would result in greater, and adverse, economic effects, as the ongoing risk of seismic failure would continue to threaten irrigation delivery, recreational opportunities, and the broader local economy. Consequently, while the action alternatives offer modest economic benefits, the No Action alternative would pose higher economic risks to the affected resources (EA Section 3.0 and *Appendix C Impact Analysis Methods and Summary*).
5. Effects on the quality of life of the American people: Implementation of the action alternatives would result in minor short-term adverse effects but would provide long-term benefits to the quality of life of the American people. These benefits include improved public health and safety through reduced dam-failure risk; enhanced recreation access and visitor experience; and continued support for public services through reliable irrigation and reservoir operations. The action alternatives would also protect passive ecosystem values by improving wetland function and habitat conditions and by supporting conservation of special-status species, including ESA-listed steelhead. In addition, development of an interpretive display to illustrate the history of Conconully Dam and preservation of historic components for public display would further support

education and knowledge by enhancing opportunities for learning about the area's cultural resources (EA Section 3.0).

Effects by Resource

Reclamation's resource specialists analyzed and reviewed 15 resources. The following eight resources were eliminated from full consideration in the EA:

- air quality and climate
- geology and soils
- vibration
- transportation and traffic
- land use
- public health and safety
- utilities and service systems
- socioeconomics

The rationale for their exclusion can be found in Appendix C, Section C.2 *Resource Topics Analyzed* of the EA. Chapter 3 of the EA provides a full analysis and explanation of how each resource was evaluated.

Based on the analysis presented in the EA, none of the impacts on any resource were determined to be potentially significant, as the implementation of BMPs, along with required terms and conditions and stipulations from ESA and NHPA consultations and CWA permitting, would ensure that all effects remain below the threshold of significance. **Table 2** summarizes the effects that the action alternatives would have on each resource category analyzed in detail in the EA.

Table 2. Summary comparison of resource impacts for resources analyzed in detail.

Resource Topic	Analysis Indicator/s	Alternative B – Proposed Action	Alternative C – Preferred
Water Resources	<ul style="list-style-type: none"> • Reduction in flows below that authorized for irrigation deliveries • Reduction in flows below current fish flow agreements • Increase or decrease to select water quality criteria 	<p>Because dam operations during project construction would not reduce flows below levels required for irrigation deliveries or fish-flow agreements, no significant impacts on irrigation demands or minimum instream flow requirements would occur. Surface disturbance and heavy equipment use could introduce contaminants such as soil, lubricants, or fuel into Salmon Creek, causing short-term water-quality impacts; however, Reclamation’s contractor would prepare and implement required plans (EA Appendix F. Section F.1 <i>Contractor Plan Submittals</i>), including a stormwater pollution prevention plan, to avoid and minimize these effects. Associated conservation measures and BMPs would control erosion and sedimentation, preventing pollutants from entering the outlet channel and Salmon Creek and ensuring that water-quality indicators, such as turbidity, remain below significant levels. Artesian flows from the relief wells would not adversely affect water temperature or water quality in Salmon Creek, and the discharge of colder water would provide a beneficial thermal effect for summer steelhead and spring Chinook salmon.</p>	<p>Impacts on water deliveries and in-stream flow requirements for fish would be the same as those described under Alternative B. With the reduction in rock excavation and the shortening of the outlet works under Alternative C, short-term impacts on water quality in Salmon Creek would be slightly less than those described under Alternative B.</p>
Biological Resources: Fisheries and Other Aquatic Species	<ul style="list-style-type: none"> • Take of federally listed fish or adverse modification of critical habitat • Injury, mortality, or displacement of common or special-status fish with population-level effects • Permanent loss or degradation of aquatic habitat or EFH 	<p>Temporary unwatering would result in a short-term loss of 243 linear feet of Salmon Creek habitat, and construction of the stability berm and outlet works extension would cause a permanent loss of 642 linear feet; however, restoration of aquatic habitat in the Salmon Creek floodplain would fully offset these losses, and base flows for fish would be maintained throughout construction, keeping effects below the level of significance.</p> <p>Effects from pump platforms, the boat ramp, sound and vibration, access roads, invasive species, and settling ponds would be negligible, and the permanent loss of 0.3 acres of reservoir habitat from the boat ramp would have only a minor effect on fisheries given the reservoir’s size and the limited value of the affected habitat.</p> <p>Through ESA Section 7 consultation, the NMFS biological opinion provided terms, conditions, and conservation recommendations that minimize injury, mortality, and displacement of fish and offset adverse effects on ESA-listed steelhead and bull trout, as well as Chinook salmon EFH. Implementation of these requirements, along with BMPs and habitat restoration, ensures that adverse modifications to critical habitat or permanent degradation of aquatic habitat remain below significant levels. Therefore, no significant impacts to fisheries or aquatic resources would occur.</p>	<p>Impacts on Salmon Creek stream habitat would be the same as described under Alternative B. Alternative C would not result in permanent aquatic reservoir habitat impacts (0.3 acres less than Alternative B) because the boat ramp would not be constructed.</p>

Resource Topic	Analysis Indicator/s	Alternative B – Proposed Action	Alternative C – Preferred
Biological Resources: Wetlands	<ul style="list-style-type: none"> Loss of wetlands and other waters of the U.S. 	<p>The temporary cofferdam would disturb 0.01 acres of wetlands, and permanent project features would affect 0.53 acres of wetlands; however, these impacts on wetlands and other waters of the U.S. would be offset through proposed aquatic and wetland habitat restoration, which would reduce the net permanent loss. Anticipated CWA 404 permit terms and conditions, combined with BMPs such as erosion control and revegetation, would minimize short-term disturbance and prevent long-term degradation of wetland function. Because wetland losses are small in scale, fully mitigated, and accompanied by measures that maintain overall ecological function, the effects on wetlands and other waters of the U.S. would remain below the threshold of significance.</p>	<p>Impacts would be the same as described under Alternative B.</p>
Biological Resources: Terrestrial Wildlife	<ul style="list-style-type: none"> Permanent loss or degradation of habitat for migratory birds or special-status wildlife Injury or mortality of migratory birds or special-status wildlife with population-level effects Disturbance-related take of bald or golden eagles 	<p>Construction would cause temporary disturbance to migratory birds and special-status wildlife and minor short-term impacts on their habitat; however, these effects would not be significant because BMPs and seasonal restrictions would minimize disturbance during sensitive periods.</p> <p>Permanent habitat loss from dam modifications would be small in scale and further reduced through implementation of the Revegetation Plan and the Aquatic and Wetland Habitat Restoration Plan (EA Appendices E and G, respectively), which would offset long-term effects on feeding and cover habitat.</p> <p>Through ESA Section 7 consultation, Reclamation provided FWS conservation recommendations to minimize and offset impacts on ESA-listed gray wolf, ensuring that injury or mortality resulting in population-level effects would not occur. Reclamation received a letter of concurrence from FWS on November 24, 2025.</p> <p>Adherence to federal wildlife protection requirements and avoidance measures would also prevent disturbance-related take of bald or golden eagles. As a result, impacts related to permanent habitat loss, potential injury or mortality, and eagle-protections remain below the threshold of significance.</p>	<p>Impacts would be similar to those under Alternative B; however, there would be a slight increase in short-term disturbance to wildlife habitats, and less permanent disturbances. Therefore, the potential for wildlife to avoid the area would be slightly less than under Alternative B.</p>

Resource Topic	Analysis Indicator/s	Alternative B – Proposed Action	Alternative C – Preferred
Cultural Resources	<ul style="list-style-type: none"> • Adverse effects on NRHP-eligible historic properties • Impacts on cultural resources that may qualify as Traditional Cultural Properties or are not yet documented or evaluated 	<p>Conconully Dam, an NRHP-eligible historic property, would experience adverse effects from the project; however, the Washington SHPO and the THPO for the CTCR have concurred on these findings, and the effects would be fully resolved through stipulations outlined in a Memorandum of Agreement. These stipulations ensure that adverse effects to the dam’s historic integrity are mitigated to a level below significance.</p> <p>All lands within the area of potential effect were surveyed, and no Traditional Cultural Properties or Sacred Sites were identified in consultation with CTCR. All but one documented cultural resource were determined not eligible for the NRHP, and any newly identified resources during construction would be addressed under an inadvertent discovery plan.</p> <p>Because adverse effects on the NRHP-eligible dam are mitigated through the MOA, and no impacts on unevaluated cultural resources or potential TCPs were identified, effects on cultural resources would remain below the threshold of significance.</p>	Impacts would be the same as those described under Alternative B.
Tribal Interests	<ul style="list-style-type: none"> • Degree of impact identified by Tribes during consultation 	<p>There are no Indian trust assets within the area of potential effects, and none are expected to be affected by the project. No locations of Tribal importance have been identified within the project area to date, although consultation with the CTCR is ongoing and may identify areas of interest. Potential impacts, such as temporary surface disturbance, changes to visual or auditory conditions, or effects on resources used by the Tribes, would be minimized through project design and BMPs. To date, the Tribes have not identified impacts they consider significant, and continued consultation and the inadvertent discovery plan ensure that any newly identified Tribal concerns or resources would be appropriately addressed. As a result, impacts related to the degree of impact identified by Tribes during consultation would remain below the threshold of significance.</p>	Impacts would be the same as described under Alternative B.

Resource Topic	Analysis Indicator/s	Alternative B – Proposed Action	Alternative C – Preferred
Noise	<ul style="list-style-type: none"> • Sensitive receptors within 0.5 miles of construction areas • Noise levels evaluated in dBA against applicable state/local ordinances, FTA criteria, and existing conditions 	<p>Construction equipment and vehicle use would temporarily increase ambient noise for sensitive receptors within 0.5 miles of the work areas, with the potential for moderate to major short-term impacts if nighttime work were required. However, all noise increases would be temporary and would return to existing conditions once construction is complete.</p> <p>Noise levels, evaluated in dBA against state and local ordinances, FTA criteria, and current ambient conditions, would remain below significance thresholds with implementation of the contractor prepared Noise Monitoring and Abatement Plan and noise-reduction BMPs included in EA Appendix F. As a result, impacts on noise-sensitive receptors would not be significant.</p>	<p>Impacts would be similar to those described under Alternative B. The reduced excavation needed for the outlet works could result in a slight decrease in noise from rock excavation.</p>
Visual Resources	<ul style="list-style-type: none"> • Conformance with VRM Class III objective from the KOPs 	<p>Construction activities would cause temporary visual disturbances, and modifications to the dam would create some permanent visual contrast within the surrounding natural landscape. These impacts would be minimized through implementation of visual-reduction BMPs (EA Appendix F), along with post-construction restoration and revegetation to blend project features with existing conditions.</p> <p>From key observation points, Alternative B conforms to VRM Class III objectives, which allow for moderate visual change that does not dominate the landscape. Because visual contrast would be temporary or minimized through BMPs and restoration, and long-term changes remain compatible with VRM Class III standards, impacts on visual resources would not be significant.</p>	<p>Impacts would be similar to those described under Alternative B. However, under Alternative C, the boat ramp would not be constructed, which would avoid a permanent impact on visual resources and result in slightly less visual contrast than under Alternative B. Alternative C would conform with visual resource management Class III objectives from the key observation points.</p>

Resource Topic	Analysis Indicator/s	Alternative B – Proposed Action	Alternative C – Preferred
Recreation	<ul style="list-style-type: none"> • Changes to recreational opportunities • Changes in access to recreational sites • Changes to the recreational experience 	<p>Construction would temporarily close the project area to vehicle and pedestrian access, resulting in minor short-term reductions in recreational opportunities and a temporary decline in the recreational experience due to construction fencing, lighting, and visible construction activities. These effects would end once construction is complete.</p> <p>Long-term, the project would potentially improve recreational opportunities and access through the addition of a new boat ramp and the creation of a new parking area. Because temporary restrictions would be short-lived and offset by long-term enhancements, and because overall recreational experience would remain consistent with visitor expectations, impacts related to changes in access, opportunities, and recreational quality would not be significant.</p>	<p>Impacts would be similar to those described under Alternative B; however, no boat ramp would be constructed, which could result in fewer future recreational opportunities compared with Alternative B.</p>

Finding

This finding is based on a modified version of Alternative C, which incorporates all components of Alternative C (EA Section 2.2.3), with two changes described in Alternative B:

- replacing the impact basin (EA Section 2.2.3 C.1) with the plunge pool stilling basin (EA Section 2.2.2 B.1) and
- adding the boat ramp (EA Section 2.2.2 B.7).

Based on the analysis presented in the EA and summarized in Table 2 of this document, Reclamation has determined that implementation of the modified version of Alternative C, with adopted BMPs and mitigation measures as described above and in **Attachment 1**, will not result in significant impacts to the natural or human environment. This determination is made in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. § 4321 et seq.). Rationale for this finding is detailed in the summary of environmental effects above.

Reclamation has considered the potential for impacts to water resources, biological resources, cultural resources, tribal interests, noise, visual resources, recreation, and other environmental factors. With the implementation of required and adopted environmental commitments and mitigation measures identified in the EA and subsequent permits, consultations, and agreements, no significant adverse effects are anticipated. Therefore, Reclamation finds that preparation of an environmental impact statement is not required, and a FONSI is appropriate for the modified Alternative C.

Decision Record

Selected Alternative

Modified Alternative C

Based on the analysis of all alternatives in the Conconully Safety of Dams Modification Project EA (CPN-EA-2024-03), Reclamation has decided to select a modified version of Alternative C (Modified Alternative C) for implementation. The Modified Alternative C alternative incorporates all components of Alternative C (EA Section 2.2.3), with two changes described in Alternative B: replacing the impact basin (EA Section 2.2.3 C.1) with the plunge pool stilling basin (EA Section 2.2.2 B.1) and adding the boat ramp (EA Section 2.2.2 B.7). By implementing this alternative, the decision meets SOD program requirements to develop and implement corrective actions when risks to the public, property, or the environment are determined to be unreasonable.

Under Modified Alternative C, Reclamation will construct a stability berm on the downstream face of Conconully Dam on a foundation of DSM reinforcement columns to improve the strength and resilience of the dam's foundation materials and reduce the static, seismic, and hydrologic risks to acceptable levels based on Reclamation's Public Protection Guidelines. This action directly addresses the project's purpose and need by improving public safety through the reduction of dam failure risk associated with liquefaction of embankment and foundation materials, and by ensuring compliance with Reclamation's SOD requirements.

In addition, Reclamation will upgrade and extend the outlet works to ensure compatibility with the proposed stability berm and install new water flow control systems and facilities to enhance operational functionality. These improvements meet the need to improve control of water flows through the outlet works and increase the reliability and longevity of the dam and associated water conveyance infrastructure. Implementation of Modified Alternative C will also support continued water deliveries for irrigators and endangered species, while preserving recreational opportunities and fish and wildlife habitat, further fulfilling the broader purpose of maintaining the dam's long-term functionality and public benefits.

The Modified Alternative C is being selected due to the economic and technical benefits associated with the engineering design and construction of the boat ramp compared with the individual alternatives. Under this alternative, the engineering design described under Alternative C will be incorporated to reduce the length of the outlet works

extension, reduce the amount of rock excavation required during construction of the outlet works, and reduce the amount of materials needed to construct the stability berm. Additionally, the construction of the boat ramp as described under Alternative B will facilitate easier and faster construction, support future operations and maintenance activities, and potentially provide future recreation access.

Modified Alternative C is within the range of alternatives analyzed in the EA, and all components were fully analyzed. The FONSI concluded that no significant impacts were identified for either of the action alternatives (Alternatives B and C), therefore an EIS is not required.

Other Alternatives Considered

No Action

Because dam modification would not occur under the No Action alternative, there would be no potential impacts associated with construction; however, the risk of seismic failure associated with liquefaction would remain at an unacceptable level based on Reclamation's Public Protection Guidelines, operational flexibility to control water flow through the outlet works would remain limited, and the seepage and potential internal erosion issues through the dam embankment would continue. Therefore, this alternative would not meet the project's purpose and need and was not selected.

Alternative B

Although Alternative B would include the construction of the boat ramp, offering construction efficiencies and future recreational benefits, its engineering design would require more materials to build the stability berm, and would require a longer outlet works, and increased rock excavation compared to Alternative C. Due to these greater construction impacts, Alternative B was not selected.

Alternative C

Although the engineering design of Alternative C would reduce the amount of required materials, the width of the stability berm, the length of the outlet works, and the extent of rock excavation, it does not include construction of the boat ramp. As a result, the original Alternative C analyzed in the EA would not provide the associated construction efficiency and would exclude the opportunity to provide additional recreational benefits in the future. Therefore, Alternative C was not selected.

Compliance and Conformance

Reclamation coordinated with appropriate federal, state, and local entities through permitting and consultation procedures. Reclamation reviewed the Modified Alternative C for conformance with land use plans, and compliance with laws pertinent to the decision. The following are relevant findings of Modified Alternative C, with respect to the plans and laws associated with the affected environment.

- Clean Water Act
 - As described in Section 3.2 *Water Resources* of the EA, Reclamation will obtain authorizations from the USACE, the Washington State Department of Ecology (Ecology), and the U.S. Environmental Protection Agency (EPA) under the CWA prior to initiating construction⁶. All permit requirements will be adopted and followed throughout the implementation of Modified Alternative C.
- Endangered Species Act
 - As described in Section 3.3 *Biological Resources* of the EA, Reclamation through analysis, determined that informal consultation with the U.S. Fish and Wildlife Service (USFWS) and formal consultation with NMFS was required as the Proposed Action (Alternative B) activities would likely affect listed species and critical habitat under their jurisdictions.
 - Reclamation, in consultation with USFWS, determined that the Proposed Action is not likely to adversely affect gray wolf (*Canis lupus*) and bull trout (*Salvelinus confluentus*). On November 24, 2025, USFWS issued a letter concurring with Reclamation that the Proposed Action is not likely to adversely affect the subject listed species.
 - Reclamation, in consultation with NMFS, determined that the Proposed Action is likely to adversely affect Upper Columbia River Steelhead (*Oncorhynchus mykiss*) and their designated critical habitat. On February 10, 2026, NMFS issued a biological opinion to Reclamation that concluded that the Proposed Action is not likely to jeopardize the continued existence of the Upper Columbia River Steelhead and determined that the action would not destroy or adversely modify designated critical habitat for steelhead. NMFS provided an incidental take statement that describes reasonable and prudent measures to minimize the impacts and sets forth terms and conditions that Reclamation must comply with

⁶ Completion of the NEPA process is required before issuance of Clean Water Act Section 404, Section 402, and Section 401 permits; accordingly, those permitting processes remain in progress.

to be exempt from ESA take prohibition (**Attachment 1**; NMFS Biological Opinion WCRO-2025-02522).

- Magnuson-Stevens Fishery Conservation and Management Act
 - As described in Section 3.3 *Biological Resources* of the EA, Reclamation, through ESA Section 7 consultation with NMFS, considered potential impacts from the Proposed Action to Essential Fish Habitat (EFH). Minimization and avoidance measures included in the project's Proposed Action will minimize impacts to EFH (**Attachment 1**; NMFS Biological Opinion WCRO-2025-02522). EFH consultation was completed on February 10, 2026.
- National Historic Preservation Act
 - As described in Section 3.4 *Cultural Resources* of the EA, Reclamation, through consultation, determined that the components of the Proposed Action would have adverse effect on properties eligible for listing on the National Register of Historic Places. To protect cultural resources, Reclamation has consulted under NHPA Section 106 and has executed an MOA with Washington SHPO and CTCR THPO on February 9, 2026. The MOA stipulates mitigation measures, monitoring responsibilities, procedures for inadvertent discoveries, and Tribal involvement throughout the project. Execution of the MOA satisfies Section 106 requirements and resolves potential adverse effects on historic properties (**Attachment 1**; MOA R26MA13703).
- Washington State Hydraulic Code (RCW Chapter 77.55, WAC Chapter 220-660)
 - As described in Section 2.2.2 *Alternative B – Proposed Action* of the EA, Reclamation will obtain authorization from the WDFW under the Washington State Hydraulic Code prior to initiating construction⁷. All permit requirements will be followed throughout the implementation of Modified Alternative C.

Mitigation, Monitoring, and Enforcement

As described in the FONSI and **Attachment 1** (also see EA Section 2.2.2 B.12 *Upland Revegetation and Aquatic and Wetland Habitat Restoration*; Appendix E. *Draft Revegetation Plan*; Appendix F. *Best Management Practices and Conservation Measures*; Appendix G. *Draft Aquatic and Wetland Habitat Restoration Plan*; Appendix K. *Unwatering and Fish Salvage Plan*; Memorandum of Agreement R26MA13703; NMFS

⁷ Completion of the NEPA process is required before a Washington State Environmental Policy Act (SEPA) determination can be made and a WDFW Hydraulic Project Approval permit can be issued; accordingly, this permitting process remain in progress.

Biological Opinion WCRO-2025-02522; and CWA Section 404 Conceptual Mitigation Plan) mitigation, monitoring, and enforcement measures are adopted as part of this decision and will be implemented, with any additional terms and conditions and/or stipulations resulting from the CWA Sections 404 and 401 and HPA permitting processes, under Modified Alternative C. The construction contractor will be responsible for securing a Clean Water Act Section 402 Construction General Permit prior to construction.

Tribal Engagement

Outreach and coordination with the CTCR has occurred throughout the EA development process. At the outset of the EA process, Reclamation asked the CTCR if they would like to be a part of the NEPA process as a cooperating agency or engage in government-to-government consultation. CTCR declined to be a cooperating agency and has not requested formal government-to-government consultation but has been engaged with the project's planning and development as a participating agency. The intent of a participating agency's role is to enhance interagency coordination and ensure that issues of concern are identified early and addressed in the NEPA document. Reclamation held meetings with the CTCR throughout the NEPA, permitting, and consultation processes, and will continue throughout the construction process. The purpose of these outreach efforts was to inform and receive input from the CTCR respective to their jurisdiction, special expertise, or interests.

Additionally, Reclamation initiated NHPA Section 106 consultation with the CTCR THPO on November 14, 2023. Reclamation has addressed Tribal feedback and concerns through execution of an MOA on February 9, 2026. The MOA stipulates monitoring responsibilities, procedures for inadvertent discoveries, and Tribal involvement throughout the project. Stipulations included in the MOA will be implemented during construction, as applicable.

Public Involvement

On August 9, 2024, Reclamation announced the start of a 30-day public scoping period to solicit public comments and to identify issues or alternatives to be considered. Reclamation solicited comments from agencies, the CTCR, and the public through various scoping meetings, including a virtual public meeting room website that was available 24 hours a day during the public scoping period. The public scoping period ended on September 8, 2024. The description and outcomes of the scoping process are

summarized in the Scoping Report posted October 21, 2024, on Reclamation’s project website⁸.

Reclamation held two in-person public scoping meetings to solicit oral and written comments from the public, and one scoping meeting attended by permitting and consulting agencies and the CTCR. Results of public scoping and agency and Tribal input were used by Reclamation to develop a reasonable range of alternatives to analyze in the EA.

The draft EA was made available for public review with its publication to the Reclamation project website and virtual public meeting room on June 10, 2025. Reclamation notified the public that the EA was available for public comment via the public notice of the availability of the EA, a news release to local media, and mailings to interested parties. The release of the EA initiated a 30-day public comment period.

During the public comment period for the draft EA, Reclamation held two in-person public meetings on June 25, 2025, in Conconully, Washington and Okanogan, Washington. Reclamation received six comment submissions during the public comment period. These submissions were received through virtual public meeting website comment forms, verbal comments provided during the public meetings, and written submissions received via comment cards at the public meetings. All public comment submissions received were considered in the development of the EA. Reclamation added an appendix with a public comment matrix, which contains Reclamation’s responses to comments, and clarifications on topics such as ESA consultation, revegetation, BMPs, DSM, and permitting requirements.

⁸ https://www.usbr.gov/pn/programs/sod/conconully/ConSOD_ScopingReport_FINAL_20241021_508.pdf

Attachment 1: Best Management Practices and Conservation Measures

Introduction

To minimize impacts on resources from implementing the selected alternative – Modified Alternative C – Reclamation will implement the best management practices (BMPs) and conservation measures described in Table 1-1.

- BMPs are drawn from construction specifications, including measures for site layout, temporary access, staging and stockpile areas, equipment use, sediment and erosion control, dust and noise abatement, limiting ground disturbance, timing of in-water work, worksite isolation, and spill prevention and control among others.
- Conservation measures include agreement stipulations, conservation recommendations, and/or reasonable and prudent measures and terms and conditions resulting from consultation with regulatory agencies.

With issuance of this FONSI and Decision Record, the BMPs and conservation measures listed in Table 1-1 are hereby adopted as environmental commitments and will be fully implemented as part of the project.

Reclamation will obtain required regulatory permits and implement terms and conditions contained therein. If permit requirements, conservation measures, or BMPs contradict each other, Reclamation's contract specification requires that Reclamation's contractor abide by the most stringent requirements.

BMPs and conservation measures sources include Appendix E. *Draft Revegetation Plan*, Appendix F. *Best Management Practices and Conservation Measures*, Appendix G *Draft Aquatic and Wetland Habitat Restoration Plan*, and Appendix K. *Unwatering and Fish Salvage Plan* of the EA (CPN-EA-2024-03; Reclamation 2026); Memorandum of Agreement R26MA13703 (Reclamation et al. 2026); NMFS Biological Opinion WCRO-2025-02522 (NMFS 2026); and any additional terms and conditions and/or stipulations resulting from the CWA Sections 404 and 401 and HPA permitting processes.

Table 1-1. Best management practices and conservation measures

Resource Topic	Best Management Practices and Conservation Measures	Source
General Construction	<ul style="list-style-type: none"> • Limit heavy equipment use to options with the least adverse environmental effects (for example, minimally sized equipment). • Conduct operations to prevent unnecessary destruction, scarring, or defacing of natural surroundings in the vicinity of the work. • Properly store and dispose of all trash materials to avoid attraction of listed wildlife species (for example, gray wolf) to the construction site and reduce the potential for wildlife interactions with personnel during dispersal or foraging events. 	EA Appendix F
Air Quality and Climate	<ul style="list-style-type: none"> • Comply with all applicable federal, state, and local laws and regulations (see Appendix B of the EA) concerning prevention and control of air pollution. • Prevent, control, and abate dust pollution on access roads, haul roads, the administrative/storage/staging area, soil storage piles, and other disturbed areas. • Limit vehicle traffic on unpaved surfaces to 10 miles per hour to minimize dust generation. • Provide labor, equipment, and materials, and use efficient methods wherever and whenever required to prevent dust nuisance or damage to persons, property, or activities. • Provide means for eliminating atmospheric discharges of dust during mixing, handling, and storing of cement and concrete aggregate. • Use reasonably available methods and devices to prevent, control, and otherwise minimize atmospheric emissions or discharges of air contaminants. • Repair or adjust equipment and vehicles showing excessive exhaust gas emissions before operating to ensure emissions are reduced to acceptable levels. • Use electric power, when practical, to drive unwatering pumps where unwatering is necessary. 	EA Appendix F
Geology and Soils	<ul style="list-style-type: none"> • Use erosion blankets, dust control, and other methods of temporary sediment control and wind erosion control, to protect exposed soil surfaces from splash erosion, slow water flows across a site, and reduce wind erosion. • Utilize the planting of grasses, forbs, shrubs, or trees, or the placement of riprap, sandbags, sod, erosion mats, bale dikes, mulch, or excelsior blankets to prevent and minimize erosion and siltation during construction and during the period needed to reestablish permanent vegetative cover on disturbed sites. • Initiate erosion control and site restoration measures as soon as a particular area is no longer needed for construction, stockpiling, or access. Arrange schedules to minimize exposure of soils. Restore and reseed areas as soon as possible once project activity is complete in that area. • Apply standard erosion control measures during road construction to avoid excessive erosion. • Avoid temporary roads and trails across slopes greater than 30 percent when feasible. • Use existing roadways or travel paths whenever possible. • Minimize the number of temporary access roads and design roads to avoid adverse effects like creating excessive erosion. • Ensure standalone motorized equipment (such as pumps) have aprons or containment beneath them to prevent any leaks from entering soils. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Water Resources	<p>General</p> <ul style="list-style-type: none"> • Perform construction activities by methods that will prevent entrance, or accidental spillage, of solid matter, contaminants, debris, or other pollutants or wastes into streams, flowing or dry watercourses, lakes, wetlands, reservoirs, or underground water sources. • Take measures to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into waters of the United States (U.S.). • Use of acids to clean or prepare concrete surfaces for repair is prohibited. • To reduce environmental damage, do not use wetlands, riparian areas, steep slopes, or other critical environmental areas for equipment or material storage or stockpiling; construction staging or maintenance; or hazardous material or fuel storage, handling, or transfer. • Follow terms and conditions from the Clean Water Act (CWA) Section 404 permit and CWA Section 401 certification. <p>In-water work</p> <ul style="list-style-type: none"> • Perform in-water work during the Washington Department of Fish and Wildlife (WDFW) in-water work window (July 1 to February 28) each year, to avoid peak spawning and outmigration periods for adult and juvenile steelhead, unless otherwise approved in writing by the regulatory agencies. • Prepare a Work Area Isolation Plan for all work below the bankfull elevation requiring flow diversion or isolation. Include the sequencing and schedule of unwatering and rewatering activities, a plan view of all isolation elements, and a list of equipment and materials to adequately provide appropriate redundancy of all key plan functions (for example, an operational, properly sized backup pump and/or generator). • Use rapidly deployable prefabricated cofferdam systems to minimize impacts on subgrade and surrounding water. • When conducting in-water or bank work, fill machine hydraulic lines with vegetable oil for the duration of the project to minimize the impacts of potential spills and leaks. • Keep spill prevention and clean-up kits on-site when heavy equipment is operating within 25 feet of the water. • To the extent feasible, complete work requiring the use of heavy equipment by working from the top of the bank (that is, landward of the ordinary high watermark). • Check equipment daily for leaks and complete any necessary repairs prior to commencing work activities around the water. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Water Resources	<p>In-water work</p> <ul style="list-style-type: none"> • Allow equipment to cross the stream in-water only under the following conditions: <ul style="list-style-type: none"> ○ Equipment is free of external petroleum-based products, and soil and debris have been removed from the drive mechanisms and undercarriage; ○ The substrate is bedrock or coarse rock and gravel; ○ Mats or logs are used in soft bottom situations to minimize compaction while driving across streams; ○ Stream crossings would be performed at right angles (90 degrees) to the bank if possible; ○ No stream crossings would be performed at spawning sites when spawners of Endangered Species Act (ESA) listed fishes are present or eggs or juvenile fish could be in the gravel. • The number of crossings would be minimized. • Cease project operations under high flow conditions that could inundate the project area, except as necessary to avoid or minimize resource damage. • Where practicable, install a turbidity and/or debris containment device prior to commencing in-water work. • When working in-water, turbidity monitoring would likely be required during active in-water work activities, subject to the U.S. Army Corps of Engineers (USACE) permit requirements or CWA Section 401 certification. Turbidity monitoring generally is required when working in streams with more than 40 percent fines (silt/clay) in the substrate. Turbidity will be monitored only when turbidity generating work takes place (for example, during the installation of cofferdams, pulling the culvert in-water, or reintroducing water). The applicant would measure the duration and extent of the turbidity plume (visible turbidity above background) generated. The data would be submitted to the USACE, National Marine Fisheries Service (NMFS; also known as National Oceanic Atmospheric Administration Fisheries), and the United States Fish and Wildlife Service (USFWS) immediately following project construction and as required. Turbidity measurements would minimize water quality impacts and estimate take. • Ensure equipment used in the in-stream channel has containment methods to address possible fuel and oil leaks. • Prevent eroded materials from entering streams or watercourses during unwatered activities associated with structure foundations or earthwork operations adjacent to, or encroaching on, streams or watercourses. <p>Erosion and spill prevention and control</p> <ul style="list-style-type: none"> • Prepare and carry out a Temporary Erosion and Sediment Control Plan and a Spill Prevention, Control, and Countermeasure (SPCC) Plan, commensurate with the size of the project, to prevent pollution caused by surveying or construction operations. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Water Resources	<p>Erosion and spill prevention and control</p> <ul style="list-style-type: none"> • Prepare the SPCC Plan prior to construction, as follows: <ul style="list-style-type: none"> ○ A SPCC Plan in accordance with 40 Code of Federal Regulations (CFR) 112 is required where release of oil and oil products could reasonably be expected to enter into or upon navigable waters of the U.S. or adjoining shorelines in quantities that may be harmful (40 CFR 110), and aggregate on site oil storage capacity is over 1,320 gallons. Only containers with capacity of 55 gallons and greater are included in determining on site aggregate storage capacity. ○ Prevent, stop, and control spills or leaks during construction activities: <ul style="list-style-type: none"> ▪ Stop the source of spill or leak. ▪ Stop the migration of the spill or leak. ▪ Place a berm of sorbent material around the perimeter of the spill. ▪ Solidify freestanding oil. • Prepare and follow Water Quality Monitoring Plan. • Keep a supply of emergency erosion control materials on hand and install and maintain in place temporary erosion controls until site restoration is complete. • Use landward erosion control methods to prevent silt-laden water from entering waters of the U.S. These may include, but are not limited to filter fabric, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas. • Control pollutants by use of sediment and erosion controls, wastewater and stormwater management controls, construction site management practices, and other controls including state and local control requirements. • Sediment and Erosion Controls: <ul style="list-style-type: none"> ○ Establish methods for controlling sediment and erosion that address vegetative practices, structural control, silt fences, straw dikes, sediment controls, and operator controls as appropriate. ○ Institute stormwater management measures as required, including velocity dissipators, and solid waste controls that address controls for building materials and offsite tracking of sediment. • Pollution Prevention Measures: <ul style="list-style-type: none"> ○ Use methods of dewatering, unwatering, excavating, or stockpiling earth and rock materials that include prevention measures to control silting and erosion and that will intercept and settle any runoff of sediment-laden waters. ○ Prevent wastewater from general construction activities, such as drainwater collection, aggregate processing, concrete batching, drilling, grouting, or other construction operations, from entering flowing or dry watercourses without the use of approved turbidity control methods. ○ Divert stormwater runoff from upslope areas away from disturbed areas. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Water Resources	<p>Erosion and spill prevention and control</p> <ul style="list-style-type: none"> • Turbidity Prevention Measures: <ul style="list-style-type: none"> ○ Use methods for preventing excess turbidity that include, but are not restricted to, intercepting ditches, settling ponds, gravel filter entrapment dikes, flocculating processes, recirculation, combinations thereof, or other approved methods that are not harmful to aquatic life. ○ Ensure that wastewaters discharged into surface waters meet conditions of any required permits, such as CWA Section 402, the National Pollutant Discharge Elimination System permit. • Do not perform excavation/fill or operate mechanized equipment in waterbodies without having first obtained a CWA Section 404 permit, and then only as necessary to construct crossings or perform the required construction. • Clean up spills or leaks in a manner that complies with applicable federal, state, and local laws and regulations (Appendix B of the EA). • Dispose of spilled or leaked materials: <ul style="list-style-type: none"> ○ Handle and dispose of spilled or leaked materials contaminated with 50 parts per million or greater polychlorinated biphenyls. • Handle and dispose of spilled or leaked materials, that are either uncontaminated or contaminated with less than 50 parts per million polychlorinated biphenyls, in accordance with applicable federal, state, and local regulations. <p>Discharge water and wastes</p> <ul style="list-style-type: none"> • Treat all discharge water created by construction (such as concrete washout, pumping for work area isolation, vehicle wash water, and drilling fluids) to avoid negative water quality and quantity impacts. Use bioswales for the removal of fines; use infiltration for concrete washout water with an altered pH; and use straw bales and silt fences to direct discharged water from aggregate wash plants into channels that flow into the settling pond. • Route wastewater from project activities and water removed from within the work area to an upland disposal site (landward of the ordinary high watermark) to allow removal of fine sediment and other contaminants prior to being discharged to the waters of the U.S. • Generally, deposit all waste material, such as construction debris, silt, excess dirt, or overburden resulting from the project, above the limits of floodwater in an upland disposal site. • Develop and implement the Stormwater Pollution Prevention Plan and ensure that it addresses potential pollution-generating activities that may be reasonably expected to impact the quality of stormwater discharges from the construction site. <p>Storage and staging</p> <ul style="list-style-type: none"> • Store and protect manufactured products in accordance with manufacturer's instructions and the Reclamation Safety and Health Standards (available at: http://www.usbr.gov/safety/rshs/index.html). 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Water Resources	<p>Storage and staging</p> <ul style="list-style-type: none"> • Obtain instructions from the manufacturer before delivery of materials to the jobsite and maintain a copy of the instructions at the job site; these instructions may include but not be limited to protection of materials subject to adverse effects from moisture, sunlight, ultraviolet light, or weather during storage at jobsite. • When not in use, store vehicles and equipment containing oil, fuel, and/or chemicals in a staging area located at least 150 feet from the boundary of wetlands and waterbodies. If possible, locate staging at least 300 feet away from the boundary of wetlands and waterbodies, and on impervious surfaces to prevent spills from reaching groundwater. • Avoid storing equipment overnight in the in-stream channel. • Avoid stockpiling or depositing excavated materials or other construction materials near or on streambanks, lake shorelines, or other watercourse perimeters where they can be washed away by high water or storm runoff or can in any way encroach upon the watercourse. • Petroleum product storage tank management: <ul style="list-style-type: none"> ○ Place oil or other petroleum product storage tanks at least 20 feet from streams, flowing or dry watercourses, lakes, wetlands, reservoirs, and any other water source. • Avoid using underground storage tanks. <ul style="list-style-type: none"> ○ Construct storage area dikes at least 12 inches high or graded and sloped to permit safe containment of leaks and spills equal to storage tank capacity located in the area plus sufficient freeboard to contain the 25-year rainstorm. Line diked areas with an impermeable barrier at least 50 millimeters thick. ○ Line areas for refueling operations with impermeable barrier at least 40 millimeters thick covered with 2 to 4 inches of soil. <p>Reclamation of temporary disturbance</p> <ul style="list-style-type: none"> • Remove and revegetate all temporary access (including gravel surfaces) after project completion. • Within 7 calendar days from project completion, protect any disturbed bank and riparian areas using native vegetation or other erosion control measures as appropriate. For erosion control, sterile grasses may be used in lieu of native seed mixes. Alternative methods (such as spreading timber harvest slash) may be used for erosion control if approved by the USACE. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Biological Resources (Aquatic Ecosystems)	<p>Riparian areas</p> <ul style="list-style-type: none"> • Minimize the removal of riparian vegetation. • To the extent practicable, ensure that all native, noninvasive organic material (large and small wood) cleared for access remains on site. • Mark the boundaries of clearing limits associated with site access and construction to avoid or minimize disturbance of riparian vegetation, wetlands, and other sensitive sites. • Replant and monitor areas of disturbance following the Revegetation Plan (Appendix E of the EA), and/or Aquatic and Wetland Habitat Restoration Plan (Appendix G of the EA). These plans will be completed before the start of project construction. • Install fencing as necessary to prevent access to revegetated sites by livestock, beavers, or unauthorized persons. Install beaver fencing around individual plants where necessary. <p>Fisheries and aquatic wildlife</p> <ul style="list-style-type: none"> • Obtain Reclamation approval before using jackhammers exceeding 30 pounds. Blasting is not permitted. • Meet existing flow requirements for Salmon Creek. If flow requirements cannot be maintained during construction activities, pumps or siphons would be used to maintain suitable stream flows for listed fish species. • Follow current protocol and standards for fish exclusion, capture, handling, and relocation. Conduct fish handling and remove in accordance with fish exclusion protocols developed by the Washington Department of Transportation and in accordance with NMFS and USFWS guidelines. Ensure a fish biologist with the experience and training necessary to handle ESA species coordinates all fish handling and rescue activities. Work closely with staff biologists to ensure species are handled to the most minimal extent possible. Adhere to the Fish Salvage Plan included with Appendix K of the EA. • Follow any additional conservation measures that meet ESA consultation standards with the USFWS and the NMFS. 	EA Appendix F
Biological Resources (Terrestrial Wildlife)	<ul style="list-style-type: none"> • Schedule all necessary vegetation removal, trimming, and grading of vegetated areas outside of the bird breeding season (generally March 1 to August 31) to the maximum extent practicable. • Avoid construction activities during bird breeding season to the extent practicable. When project activities cannot occur outside the bird breeding season (generally March 1 to August 31), conduct surveys prior to scheduled activity to determine if active nests are present on or near the project area and buffer any active nesting locations found during surveys. Surveys should be conducted by a qualified biologist no more than 7 days prior to disturbance activities. If active nests are detected during these surveys, a no-activity buffer zone around the nest will be established by a qualified biologist based on species, project disturbance level, topography, existing disturbance levels, and habitat type until fledging has occurred. If a bird establishes a new nest during ongoing project activities, the nest vegetation will not be removed or modified, and no buffer zone will be required. Conduct an additional nesting bird survey if project activities are paused for more than 7 days. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Biological Resources (Vegetation)	<ul style="list-style-type: none"> • To the maximum extent practicable, preserve and protect from damage or injury caused by construction operations and equipment all existing trees, shrubs, and other naturally occurring vegetation, except where clearing operations are required for permanent structures, approved construction roads, or excavation operations. • To the maximum extent practicable, minimize clearing vegetation to that area needed for construction. In sensitive habitat areas, including but not limited to wetlands and riparian areas, clearing may be restricted to only a few feet beyond areas required for construction. • Implement Revegetation Plan in coordination with the Forest Service. Reseed or replant areas of short-term disturbance according to the Revegetation Plan (Appendix E of the EA). Replant disturbed areas with native vegetation and weed-free topsoil to the extent possible. Choose species appropriate for site conditions. Where applicable, consult with the WDFW, the Washington Department of Natural Resources, and the Confederated Tribes of the Colville Reservation (CTCR) to determine the recommended plant species composition, seeding rates, and planting dates. Consider species beneficial to wildlife when determining seed mix and plant species composition. • Reseed staging areas following completion of construction according to the Revegetation Plan (Appendix E of the EA) where applicable. • Revegetate the borrow area according to the Revegetation Plan (Appendix E of the EA). • Place soil or rock stockpiles, excavated materials, or excess soil materials outside sensitive habitats, including water channels, wetlands, riparian areas, and on native or naturally occurring vegetation. • Mark the boundaries of clearing limits associated with site access and construction to avoid or minimize disturbance of riparian vegetation, wetlands, and other sensitive sites. • To the maximum extent possible, locate staging areas, access roads, and other site disturbances in disturbed areas, not in native or naturally occurring vegetation to minimize impact on native vegetation. • Following completion of construction, restore contractor use areas to preconstruction conditions where applicable. • Reseed areas of short-term disturbance according to the Revegetation Plan (Appendix E of the EA). • After revegetation efforts have been successfully established, fencing, boulders, or other barriers would be placed along the west side of the access road prism to restrict vehicles to the existing access road and protect revegetation efforts. • Use cleaning procedures that result in equipment being cleaned as well as or better than the procedures described in Reclamation’s Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species (Reclamation 2021). • Inspect construction equipment following procedures described in the Reclamation Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species (Reclamation 2021) before allowing the equipment onsite. • Do not use trees for anchorages except in emergency cases or as approved by Reclamation. Where approved, wrap the trunk with a sufficient thickness of approved protective material before rope, cable, or wire is placed. • Use safety ropes where tree climbing is necessary; do not use climbing spurs. • Clean construction equipment before bringing it on site to remove dirt, vegetation, and other organic material to prevent introduction of noxious weeds and invasive plant and animal species. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
USFWS-Managed Species	<p>Gray Wolf</p> <ul style="list-style-type: none"> • All activities associated with the proposed action, including noise generating activities, would be restricted within a 1-mile buffer zone around known homesites⁹ from April 1 through July 15 (the denning and rendezvous period). This measure intends to avoid or minimize disturbances that could disrupt wolf pup-rearing activities and reproductive success. Coordination with USFWS may result in modification of the buffer zone or its duration when the risk of disturbance can be effectively minimized. Relevant considerations include topographic features that would isolate project activities from the homesite, or wolf data (that is, pack dynamics and movements) indicating that pup-rearing activities are not occurring at the homesite. Any modifications to the spatial extent or timing of the buffer zones would require coordination with, and approval by, USFWS in advance of implementation. <ul style="list-style-type: none"> ○ If a wolf homesite is discovered within the project area during implementation between April 1 and July 15 (the denning and rendezvous period), all project activities within 1 mile of the homesite shall cease immediately (as practicable without endangering human safety, etc.) and Reclamation must notify USFWS by the end of the next business day. Reclamation would then coordinate with the USFWS and WDFW to implement an effective buffer zone (consistent with above) before project activities can resume to avoid repeated disturbances. ○ Reclamation would communicate with USFWS during the denning and rendezvous period (April 1 through July 15) each year to obtain current information on den and rendezvous sites occurring within the established buffer zone. ○ Wildlife would be prevented from accessing food or food waste on site or in the vicinity of project operations. Whenever possible, remove or securely store any food and food waste daily. ○ Any wolf sightings within the project area would be reported to USFWS and the WDFW's online portal (https://survey123.arcgis.com/share/27bfa4a037fd46c7956ef1bde9dd57fb) within 1 business day. The USFWS and Reclamation would discuss if any additional management actions would be needed to avoid or discourage wolf presence. <p>Bull Trout</p> <ul style="list-style-type: none"> • Any bull trout encountered during fish relocation would be allowed to leave the work area on its own volition before project elements resumed/commenced. No capture or handling of bull trout would occur. 	EA Appendix F USFWS 2025 (letter of concurrence)
Cultural Resources	<ul style="list-style-type: none"> • Follow and implement the Plan and Procedures for the Inadvertent Discovery of Cultural Resources and Human Remains for the inadvertent discovery of cultural resources and a Native American Graves Protection and Repatriation Act (NAGPRA) Plan of Action for Human Remains in the case of inadvertent discovery of cultural resources or human remains during construction. 	EA Appendix F

⁹ A den or rendezvous site used by a wolf pack during the pup-rearing season.

Resource Topic	Best Management Practices and Conservation Measures	Source
Tribal Interests	<ul style="list-style-type: none"> • Develop and implement NAGPRA Plan of Action. • Per Reclamation policy, avoid impacts on Indian Sacred Sites whenever possible. Continued coordination with affected Tribes may result in future identification of sacred sites. If this occurs, Reclamation will further evaluate impacts on these resources. Consultation with the CTCR will identify how to protect sacred sites if they are identified and how to provide continued access if any such sites are affected by project construction. • If Indian Trust Assets are identified in the project area, coordinate with the affected Tribes to determine how to protect such sites and how to provide continued access if any sites are affected by project construction. Avoid impacts to sacred sites whenever possible, consistent with Executive Order 13007. • If adverse impacts on Indian Trust Assets cannot be avoided, the co-lead agencies would engage with the appropriate Tribes to discuss ways to avoid, minimize, or mitigate the adverse impacts. • Notify Tribes and time construction activities to decrease the visual and auditory impacts on areas important to Tribes. • Consider the timing of activities to account for and avoid impacts on Tribal uses. • Implement and adhere to all requirements specified in the MOA between Reclamation and the CTCR. 	EA Appendix F
Noise	<ul style="list-style-type: none"> • Use reasonably available methods and devices to control, prevent, and reduce noise. • Develop and furnish a Noise Monitoring and Abatement Plan prior to construction. • The Noise Monitoring and Abatement Plan would detail the contractor's means and methods to reduce the noise levels of the operation to the extent feasible. Equipment mufflers are required and must meet or exceed factory original equipment manufacturer standards for noise reduction. • Comply with the requirement of noise reduction measures detailed in the Noise Monitoring and Abatement plan for both daytime and nighttime work. Follow more restrictions and noise reduction measures for nighttime work than daytime work as per the approved Noise Monitoring and Abatement Plan. • Continuously monitor noise (day and night) during construction in at least two locations to be determined by Reclamation. • Determine the baseline noise levels based on daytime measurements prior to construction. • Consider the hours of 10:00 p.m. to 7:00 a.m. to be reduced noise hours. Reduce nighttime noise levels, as measured at nearest noise-sensitive areas (Map 3-6 in Appendix A of the EA), by 10 decibels over the daytime measurement at the same location. <ul style="list-style-type: none"> ○ Only work acceptable to Reclamation's Contracting Officer's Representative will be allowed during these hours. Maximum allowable noise level for identified locations adjacent to the work areas shall be established and enforced. • Conduct only the construction activities specified in the approved Noise Monitoring and Abatement Plan during nighttime hours (that is, reduced noise hours), unless approved 72 hours in advance by Reclamation. • Jackhammering in excess of 30 pounds is not permitted without Reclamation approval. • Blasting is not permitted. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Noise	<ul style="list-style-type: none"> • Pile driving is not permitted unless approved by the appropriate regulatory agency. • Pumps would be limited to a maximum sound pressure level of 75 decibels at 3 feet per pump. 	EA Appendix F
Visual Resources	<ul style="list-style-type: none"> • Minimize, to the greatest extent practicable, clearings and cuts through vegetation. Irregularly shape authorized clearings and cuts to soften undesirable aesthetic impacts. • Preserve natural landscape and preserve and protect existing vegetation not required or otherwise authorized to be removed. To the maximum extent possible, preserve existing and use native plants for landscaping. • Use the following lighting controls during construction to minimize the potential for impacts from artificial light at night from construction: <ul style="list-style-type: none"> ○ Shine direct stationary floodlights downward at an angle less than horizontal. ○ Shield floodlights so that floodlights will not be a nuisance to surrounding areas. ○ Direct lighting so that residences and adjacent roadways are not in the light's direct beam. • Correct lighting control problems when they occur, as approved by Reclamation's Contracting Officer's Representative. • In construction areas, always minimize waste and prevent trash build up. • Remove all unused materials and trash from construction and storage sites during the final phase of work. Place all removed material in approved sanitary landfills or storage sites and leave work areas conforming to the natural landscape. • Grade disturbed land following construction to provide proper drainage and to blend with the natural contour of the land. • Ensure developed facilities complement and are subservient to the surrounding landscape, wherever possible and compatible with scenic values. 	EA Appendix F
Transportation and Traffic	<ul style="list-style-type: none"> • Perform work on rights-of-way established by the government as necessary to construct and maintain any roads, bridges, or drainage structures within the project area required for establishment and use of haul routes for construction operations. • Minimize congestion or interference with local traffic at the entrance to the project area. • Maintain roadways, parking areas, and haul routes within the project area in a sound, smooth condition. • Promptly repair ruts, broken pavement, potholes, low areas with standing water, and other deficiencies within the project area to maintain road surfacing and drainage in original or specified condition. • After revegetation efforts have been successfully established, erect barriers or line the west side of the access road prism within the project area with large boulders to restrict vehicles to the existing access road and protect revegetation efforts. • Reclamation would comply with county restrictions and coordinate, communicate, and collaborate with the county on transportation and access. 	EA Appendix F
Land Use	<ul style="list-style-type: none"> • Restore contractor use areas to preconstruction conditions as applicable. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Public Health and Safety	<p>Hazardous waste disposal</p> <ul style="list-style-type: none"> • Dispose of hazardous wastes by removal from the jobsite. • Recycle hazardous waste whenever possible. • Dispose of hazardous waste materials that are not recycled at appropriately permitted treatment or disposal facilities. • Transport hazardous waste in accordance with 49 CFR 171-179. • Clean up any accidental release of hazardous materials according to the contractor’s SPCC Plan. • Provide protection for personnel and existing facilities from harm due to demolition activities. • Ensure lead abatement, if needed, is conducted by individuals trained and certified in lead abatement processes. • Follow regulations included in CFR 1926.62 for lead removal and 40 CFR 402/404 for the safe removal of lead-based paints to limit lead exposure and ensure the health of construction workers. • Report the inadvertent discovery of hazardous wastes or materials to Reclamation within 24 hours of discovery. Cease construction in the vicinity of the discovery until the appropriate disposal procedures are identified and conducted in coordination with Reclamation. • Separate coated surfaces containing lead by type at the time of demolition and collect and analyze representative samples for materials with lead-based coatings to determine appropriate handling and disposal methods for each waste stream. • If previously unsampled potential asbestos-containing material is encountered during demolition, either sample or manage/abate the material as asbestos-containing material. <p>Wildfire</p> <ul style="list-style-type: none"> • Develop and follow Emergency Evacuation Plan. • For fire protection and prevention, comply with Section 1.09 of Reclamation’s Safety and Health Standards (Reclamation 2024). Per these standards, prepare and follow a Fire Protection and Prevention Plan. • For fire protection and prevention, comply with applicable federal, state, and local wildfire prevention measures, including those outlined in Okanogan County’s Comprehensive Emergency Management Plan (Appendix B of the EA). • As part of the Fire Protection and Prevention Plan, develop a list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard. • Develop a means to educate all construction workers about the risk of starting a wildfire, how to avoid it, and who to contact in case a wildfire is started. • Create a fire break around and adjacent to work areas by clearing away all flammable vegetation or combustible growth. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Public Health and Safety	<p>Wildfire</p> <ul style="list-style-type: none"> • Passenger vehicles and construction machinery requirements: <ul style="list-style-type: none"> ○ Equip passenger vehicles, cars, pickups, light trucks, with one water fire extinguisher or backpack pump 5-pound minimum capacity, excluding personal vehicles parked at the proposed administrative/storage/staging area. ○ Equip any internal combustion engine operated on or near forest, brush, or grass-covered land with a spark arrester or construct, equip, and maintain the engine for the prevention of fire. • Fire tools required in areas where portable tools powered by internal combustion engines are used within 25 feet of any flammable material: <ul style="list-style-type: none"> ○ Maintain one serviceable round-point shovel, minimum overall length 46 inches. ○ Provide a fire extinguisher, not rated less than 10B, within 50 feet of any location where more than 5 gallons of flammable liquids or 5 pounds of flammable gas are present, with the exception of integral fuel tanks in motor vehicles. ○ Keep required fire tools within 25 feet of operating equipment powered by an internal combustion engine. • Fire tools and preventative actions required at shops, staging areas, and other stationary work areas where equipment, machinery, or tools that could cause sparks are used: <ul style="list-style-type: none"> ○ Clear away flammable materials within a 25-foot buffer around these locations. • Provide a water truck equipped with 500 feet of 1.5-inch, single-jacket hose, nozzle, and pressure pump. A truck with 300 gallons (minimum) of water must be on site at each work feature where work is being performed, with a trained operator during work hours. The water truck may be used for other watering work, such as dust suppression, but it must be immediately available for fire suppression duty. • Halt all construction activities in case of a wildfire in the area. Comply with area evacuation orders enacted by the Okanogan County Fire District, Okanogan County Emergency Management, and the Washington Department of Natural Resources or other jurisdictional entity and ensure an orderly evacuation of the area. 	EA Appendix F
Utilities and Service Systems	<ul style="list-style-type: none"> • Coordinate a locate for underground utilities with the Washington Utility Notification Center (http://www.callbeforeyoudig.org/washington/index.asp) prior to construction. 	EA Appendix F

Resource Topic	Best Management Practices and Conservation Measures	Source
Cultural Resources	<p>Interpretive Display</p> <ul style="list-style-type: none"> • Reclamation shall develop an interpretive display for installation at the Conconully Dam site. The display may include text and images that explain and illustrate the history of the Conconully Dam in the context of the Okanogan Project, and may also include historic components as appropriate. Review and acceptance of the interpretive display will follow the procedures in Stipulation III of this MOA. This stipulation will be considered complete when the interpretive display has been installed and Reclamation notifies the consulting parties by email. ○ Deliverables will be provided to WA State Historic Preservation Office (SHPO) and CTCR (the Parties) for review and comment. Reclamation, as soon as feasible, shall submit a digital copy of the draft product (e.g., interpretive sign text, draft proof of interpretive panel design) to the Parties for review. The Parties shall be afforded a 30-day comment period to review and comment on the draft product. If Reclamation does not receive comments within that 30-day review period, Reclamation may proceed. Comments received will be addressed in the final product. Reclamation shall ensure that consolidated Party comments and edits have been addressed. Upon acceptance of the final product, Reclamation shall provide a digital copy to the Parties. <p>Okanogan Project Barn Preservation</p> <ul style="list-style-type: none"> • Reclamation shall provide monetary assistance in the amount of \$15,000 towards rehabilitation of stone masonry foundation on north side and corners on the USRS Okanogan Project Headquarters Barn (DAHP Property: 114553). Repairs will include application of mortar and parging to the foundation stonework. Said rehabilitation shall be accomplished in accord with the Secretary of the Interior’s Standards for Rehabilitation shall afford the WA SHPO the opportunity to review and comment on the project scope of work. <p>Archaeological Construction Monitoring, Post-Review Discovery, and Inadvertent Discovery Plan</p> <ul style="list-style-type: none"> • Reclamation will arrange for archaeological monitoring of any ground disturbance planned within the “monitoring zone” described in MOA Appendix B. • Post-review discovery: If pre-contact or historic period cultural artifacts or features are identified during the construction monitoring within a previously recorded archaeological site, they will be recorded as being part of that site. If previously unknown cultural resources are discovered that may be historically significant or unanticipated effects on historic properties are found, Reclamation will implement the post-review discovery plan and complete an impact assessment as described in MOA Appendix B. • Inadvertent discovery: If human remains, funerary objects, sacred objects, or objects of cultural patrimony are found, Reclamation will initiate appropriate notification and consultation depending on the location of the find. If the inadvertent discovery takes place on Federal lands, Reclamation will follow the regulations specified in 43 CFR §10. This work will be conducted as described in MOA Appendix B. 	Reclamation et al. 2026 (MOA)

Resource Topic	Best Management Practices and Conservation Measures	Source
Cultural Resources	<p>Archaeological Construction Monitoring, Post-Review Discovery, and Inadvertent Discovery Plan</p> <ul style="list-style-type: none"> • Curation: Reclamation will ensure that artifacts and associated records resulting from Monitoring and Reporting and Post-Review Discoveries stipulations below are curated by an institution meeting the standards set forth in 36 CFR §79. Modern debris, less than 50 years old, observed will be documented as present and discarded. Human remains and cultural items identified under 43 CFR §10 will not be curated. <p>Additional Stipulations</p> <ul style="list-style-type: none"> • Reclamation will adhere to all stipulations described in the MOA (i.e., Deliverable Review, Monitoring and Reporting, Post-Review Discoveries, Dispute Resolution, Amendments, Termination, Duration, Execution, and General Provisions) as applicable. 	Reclamation et al. 2026 (MOA)
NMFS-managed Species and Habitat	<p>Upper Columbia River Steelhead</p> <ul style="list-style-type: none"> • Reclamation will comply with the Incidental Take Statement provided in the NMFS Biological Opinion. • Reclamation will comply with the following terms and conditions in the NMFS Biological Opinion: <ul style="list-style-type: none"> ○ Reclamation and/or a designated representative, will monitor the restoration reach and take all appropriate action to ensure that all habitat features described in the BA and the project designs are established and are functioning properly. The monitoring will: ○ Evaluate survival of riparian and floodplain plantings, brush banks, and willow baffles, and will replant or repair as needed to ensure that survival goals are met. Evaluations will occur annually for a period of 3 years. ○ Evaluate the constructed habitat features in the Salmon Creek stream channel and in the side channel complex, note any discrepancies with the 100% design plans, and take necessary action to correct any discrepancies. ○ Monitor the restored channel, the floodplain, and the side channel complex for any erosion or instability that is inconsistent with the 100% design plans, and take necessary action to correct any inconsistencies. ○ Develop and implement a plan to ensure long-term function of habitat features constructed with materials that will likely deteriorate over time, such as large woody material. Continue implementation until natural recruitment of woody material is sufficient to maintain the habitat features. ○ The habitat restoration portion of the project will be designed so that full channel dewatering will only occur during one construction season, unless unforeseen circumstances occur (e.g., unusual weather, shorter than normal construction season, equipment failure, etc.). ○ In conjunction with the WDFW, the CTCR Fish and Wildlife Department, and the Okanogan Irrigation District (OID), develop and implement an end-of-irrigation-season flow ramping schedule designed to minimize juvenile steelhead stranding in the side-channel complex. The schedule shall be implemented after restoration construction is completed and will remain in effect until ESA section 7 consultation on the Okanogan Project operation and maintenance plan is complete. 	NMFS 2026 (BiOp)

Resource Topic	Best Management Practices and Conservation Measures	Source
NMFS-managed Species and Habitat	<p>Upper Columbia River Steelhead</p> <ul style="list-style-type: none"> ○ Reclamation must report all monitoring items to the following email address: icbd.reports.wcr@noaa.gov. Unless otherwise noted, reports will be provided to NMFS each year by August 1, and will include: <ul style="list-style-type: none"> ▪ A summary of construction completed in Salmon Creek, the outlet channel, the spillway channel, and adjacent wetlands; ▪ Amount of stream channel dewatered (linear); ▪ Number and species of fishes captured during dewatering and salvage; ▪ Dates, times, and results of the turbidity monitoring; ▪ A summary of monitoring and actions taken to ensure success of the restoration actions implemented to minimize the loss of productivity that will be caused by permanently excluding steelhead from 642 feet of the Salmon Creek stream channel. ● As practicable, Reclamation should implement the following conservation recommendations to minimize or avoid adverse effects of the proposed action on steelhead or their critical habitat: <ul style="list-style-type: none"> ○ Make changes to the OID diversion to ensure unimpeded upstream fish passage. ○ Reduce take of Upper Columbia River steelhead resulting from operation and maintenance of the OID diversion: <ul style="list-style-type: none"> ▪ Make changes needed to ensure that the OID diversion screen operates effectively. ▪ Until changes can be made, salvage fish in the OID ditch each year when the diversion is turned off. ○ Implement and/or assist with additional projects to improve Upper Columbia River steelhead rearing and migration survival, such as: <ul style="list-style-type: none"> ▪ Improving flows in the project area during the non-irrigation season. ▪ Improving physical habitat in Salmon Creek downstream from the project area. ● Reclamation will reinitiate consultation: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action. 	NMFS 2026 (BiOp)

Resource Topic	Best Management Practices and Conservation Measures	Source
NMFS-managed Species and Habitat	<p>Essential Fish Habitat</p> <ul style="list-style-type: none"> • As practicable, Reclamation should implement the following conservation recommendations to minimize, mitigate or otherwise offset adverse effects of the proposed action on EFH: <ul style="list-style-type: none"> ○ Implement and/or assist with projects that will improve flows throughout the lower 17.1 miles of Salmon Creek, outside the irrigation season; ○ Implement and/or assist with projects that will improve flows in Salmon Creek downstream from the OID diversion, during the irrigation season; ○ Make changes to the OID diversion that are needed to reduce entrainment of juveniles and to ensure unimpeded upstream fish passage of adults; and, ○ Pursue opportunities to restore habitat in Salmon Creek downstream from the project area. 	NMFS 2026 (BiOp)

References

- NMFS (U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service). 2026. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Conconully Safety of Dams Modification Project, NMFS No: WCRO-2025-02522, West Coast Region, February 10, 2026.
- Reclamation (U.S. Department of the Interior, Bureau of Reclamation). 2021. Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species. United States Department of the Interior, Bureau of Reclamation, Policy and Programs, Environmental Compliance Division. Internet website:
<https://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2021.pdf>.
- _____. 2024. Reclamation Safety and Health Standards. Section 1.09, Fire Prevention and Protection. Internet website:
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