

Finding of No Significant Impact

Clear Creek Dam Fish Passage

Yakima River Basin Water Enhancement Project

Yakima County, Washington

U.S. Department of the Interior

Bureau of Reclamation

Columbia-Pacific Northwest Region

Columbia-Cascades Area Office

PN FONSI # 23-04

Introduction

The Bureau of Reclamation (Reclamation) has prepared this Finding of No Significant Impact (FONSI) to comply with the Council on Environmental Quality regulations for implementing procedural provisions of the National Environmental Policy Act (NEPA). This document briefly describes the Proposed Action, other alternatives considered, Reclamation's consultation and coordination activities, and Reclamation's finding. Reclamation prepared the *Clear Creek Dam Fish Passage Final Environmental Assessment* (EA) in compliance with NEPA and other relevant federal and state laws and regulations. The EA documents and discloses potential effects to the quality of the human environment which could result from the construction of fish passage at Clear Creek Dam and related actions.

Location

On the east side of Washington's Cascade Mountain Range, about 30 miles southwest of Naches and 48 miles west of Yakima, Clear Creek Dam creates a reservoir (Clear Lake) with an active capacity of 5,300 acre-feet with a constant pool (lake) elevation of approximately 3011.3 feet over a surface area of approximately 260 acres. The project location is on federal lands, managed by Reclamation and the U.S. Forest Service (USFS) Okanogan-Wenatchee National Forest, in Township 13N, Range 12E, Sections 11 and 12.

Background

Yakima Project and Yakima River Basin Water Enhancement Project

The Yakima Project's (Project) authorization and water rights, issued under Washington State water law and the 1945 Consent Decree, are statutory constraints for water resources. Reclamation must operate the Yakima Project Divisions and storage facilities in a manner that avoids injury to water users within this framework. Legislation in 1994 provided that an additional purpose of the Yakima Project shall be for fish, wildlife, and recreation, but that this additional purpose "shall not impair the operation of the Yakima Project to provide water for irrigation purposes nor impact existing contracts."

The Project provides irrigation water for a narrow strip of fertile land that extends for 175 miles on both sides of the Yakima River in south-central Washington. Storage dams and reservoirs on the project are Bumping Lake, Clear Creek (Clear Lake), Tieton (Rimrock Lake), Cle Elum, Kachess, and Keechelus. The total storage of the five major reservoirs (Clear Lake is a minor reservoir managed for recreation) is a little over 1 million acre-feet (MAF), but the total yearly runoff passing through the storage reservoir system averages 1.71 MAF.

The historical lakes and tributaries upstream from these dams formerly supported runs of anadromous salmonids and resident species of fish. Varying amounts and quality of potential spawning and rearing habitat suitable for anadromous salmon and steelhead trout still exist above the dams. Two species listed under the Endangered Species Act (ESA) — bull trout and Middle Columbia River (MCR) steelhead — would likely benefit from passage at the dams.

Providing fish migration past these dams would: increase anadromous species abundance and spatial distribution; likely benefit Chinook salmon and might allow reintroduction of extirpated sockeye and coho salmon; and provide for genetic interchange for listed bull trout and other native fish. This would also help fish cope with potential future climate change impacts by providing access to high-quality habitat at higher elevations if lower elevation habitat is no longer suitable for supporting fish life stages at certain times of year.

Many tributary streams in the Yakima River basin were disconnected from the Yakima River and made inaccessible to migratory fishes (including salmon and steelhead) over the past century. Congress passed the Yakima River Basin Water Enhancement Project (YRBWEP) legislation in 1994 to help improve fish and wildlife habitat, including provisions to enhance Yakima River basin tributary streams affected by irrigation development.

The YRBWEP Workgroup (sponsored by Reclamation, the Washington Department of Ecology (Ecology), and the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation), and including Yakima Project irrigators, federal and state agencies, local governments, and environmental groups), collaboratively developed the Yakima River Basin Integrated Water Resource Management Plan (Integrated Plan). The Integrated Plan represents a comprehensive approach to water management and ecosystem restoration in the Yakima River basin.

The Clear Creek Dam Fish Passage (CCDFP) project is part of the Integrated Plan Reservoir Fish Passage Element evaluated in the *Integrated Plan Programmatic Environmental Impact Statement* (PEIS;

Reclamation and Ecology 2012) and the preferred alternative, as outlined in the Record of Decision, July 2013. Pursuing the CCDFP project is essential to fulfill requirements of the 2002 Mitigation Agreement that Reclamation entered with Washington Department of Fish and Wildlife (WDFW), and to meet stipulations in the 2006 Settlement Agreement with the Yakama Nation to resolve litigation; both agreements stem from issues that arose with the Keechelus Dam Safety of Dams Modification project in 2002. More information can be found in the PEIS located on the Yakima Basin Integrated Plan webpage: <https://www.usbr.gov/pn/programs/yrbwep/2011integratedplan/index.html>).

Clear Creek Dam Fish Passage History

Clear Creek Dam was built in 1914 without fish passage. When Clear Creek Dam was rebuilt in 1992, two fish ladders were added to the bedrock spillway of Clear Creek Dam. These ladders are in the upper and lower section of the spillway. The lower ladder is a series of four Denil ladders interspaced with resting pools located on the right bank of the spillway. The upper ladder is a pool-and-weir design constructed on the left side of the spillway channel. The Denil ladder is considered too steep for successful passage and easily becomes clogged with sediment and gravels. As a result of studies conducted in 2012 through 2014, it was determined that there is no evidence that fish successfully migrated upstream through the fish ladder, and the fish ladder was all but abandoned (i.e., the fish ladder is still there but maintenance has ceased).

The North Fork Tieton River flows into Clear Lake and continues below the dam; it is designated critical habitat for bull trout. A population of bull trout spawns in the North Fork Tieton River above the dam, but studies have found this population of bull trout is disconnected by the dam. Many North Fork Tieton fish migrate downstream from the dam, where they find favorable rearing, foraging, and overwintering habitat in Rimrock Lake. During the summer, adult bull trout return to the North Fork Tieton to spawn, congregating in the stilling basin below Clear Creek Dam, where they are attracted to the cold water flowing through the outlet works. These fish are unable to migrate upstream because there is no upstream passage at the fishway that is in the spillway channel. In addition, the strong homing instinct of these fish prevents them from seeking spawning habitat elsewhere. As a result, these adult North Fork Tieton River fish remain in the Clear Creek Dam stilling basin and do not contribute to the North Fork Tieton spawning population.

New fish passage at Clear Creek Dam has been under consideration since 2005 when a pre-design memorandum was written exploring alternative methods of fish passage at the site. Due to funding limitations and uncertainties about the ability of adult bull trout to pass through the spillway at that time, the fish passage project at Clear Creek Dam was put on hold.

In the meantime, since there is no volitional fish passage at Clear Creek Dam, the U.S. Fish and Wildlife Service (USFWS) captures bull trout from below Clear Creek Dam and transports genetically identified North Fork Tieton River fish around the dam so they can reach spawning habitat in the North Fork Tieton River (this process in general is known as trap and haul). Fish capture and transport has been conducted annually by USFWS since 2016. As of July 2023, 152 adult bull trout have been transported above the dam by the USFWS's North Fork Tieton Transport Project (Transport Project). An additional 88 bull trout identified as South Fork Tieton or Indian Creek fish that also migrated to the base of the dam were released downstream of the stilling basin.

Reclamation funds, and will continue to fund, the Transport Project until fish passage is constructed at Clear Lake Dam.

Bull trout population recovery is a nationwide focus and is extremely important to the Yakima basin. The *Yakima Bull Trout Action Plan* was written in 2012 by Yakima basin fish biologists and included information on bull trout population status, trend and distribution, and habitat, along with a detailed analysis of threats by life stage for each population and specific monitoring and restoration actions that address those threats (Reiss et al. 2012). Installation of fish passage at Clear Creek Dam is considered among the highest priority actions for bull trout recovery in the Yakima River basin. The USFWS issued the *Recovery Plan for the Coterminous United States Population of Bull Trout* (Recovery Plan) in 2015 (USFWS 2015). Recovery plans delineate reasonable actions that are believed to be required to recover and protect listed species. In the Recovery Plan, recovery actions for bull trout included “minimize demographic threats to bull trout by restoring connectivity or populations where appropriate to promote diverse life history strategies and conserve genetic diversity” (USFWS 2015) and the proposed upstream fish passage would restore the connectivity of the North Fork Tieton bull trout population.

Purpose and Need

The purpose of the CCDFP project is to improve the long-term viability of the North Fork Tieton bull trout population by allowing bull trout to move freely between spawning and rearing habitat areas. Improvements in the long-term viability of bull trout in the CCDFP project area would be accomplished through the following actions:

- Implementation of fish passage that complies with current regulatory criteria
- Reduction in take

An additional benefit of providing upstream resident fish passage at Clear Creek Dam includes the ability to expand habitat access for anadromous fish once fish passage is installed at Tieton Dam and anadromous fish are reintroduced into Rimrock Lake.

The need for the proposed action is the existing Clear Creek Dam fishway, which has been identified as impeding upstream passage of bull trout to the upper reaches of North Fork Tieton River and its tributaries. The Clear Creek Dam fishway consists of two separate fish ladders constructed to provide fish passage over a section of bedrock cascades that also serves as the dam spillway.

Alternatives Considered

The alternatives analyzed include a No Action alternative (Alternative A) and the Proposed Action (Alternative B). The No Action alternative does not meet the defined purpose and need for action but was evaluated because it provides an appropriate baseline for comparison.

Alternative A – No Action

No volitional fish passage would be constructed. Reclamation would continue to operate and maintain Clear Creek Dam consistent with current practices, and dam safety inspections would continue as scheduled. Reclamation would continue to fund the USFWS's North Fork Tieton Transport Project (Transport Project) to capture bull trout from below Clear Creek Dam and transport genetically identified North Fork Tieton River fish around the dam so they can reach spawning habitat in the North Fork Tieton River (this process in general is known as tap and haul). The No Action alternative does not meet the defined purpose and need for action but was evaluated because it provides an appropriate baseline for comparison.

Alternative B – Proposed Action

Under the Proposed Action, Reclamation will construct a pool and weir fish ladder to provide upstream fish passage at Clear Creek Dam. Implementation of the CCDFP Project will include construction of the cast-in-place concrete fish ladder, miscellaneous metalwork, and fencing. Mechanical features to be installed include pump, false weir, valving, slide gates and piping. Electrical features to be installed include lighting, security cameras and receptacles, and other ancillary items. Site development to be completed includes a generator building and resurfacing access roads. Appendix A of the EA includes project specification requirements and best management practices (BMPs) that form Reclamation's environmental commitments, which are incorporated into the Proposed Action.

Decision and Finding of No Significant Impact

Reclamation, based upon a review and evaluation of the information contained in the EA, has determined that the Proposed Action (Alternative B) – to implement fish passage at Clear Creek Dam – does not constitute a major federal action significantly affecting the quality of the human environment under CEQ's revised NEPA regulations (40 CFR Parts 1500-1508, 2020).

Summary of Environmental Effects

In considering the potentially affected environment (Per 1501.3(b)(1)), Reclamation considered, as appropriate to the Proposed Action, the affected area and its resources, and the degree of the effects (Per 1501.3(b)(2)). The following discussions summarize the effects that the selected alternative – the Proposed Action (Alternative B) – would have on each resource category analyzed in the EA. Chapter 3 of the EA provides a full analysis and explanation of how each resource was evaluated.

Threatened and Endangered Species

The Proposed Action would have no effect on Canada lynx and yellow-billed cuckoo; they are either not present in or near the Action Area, or suitable habitat is not present there. The Proposed Action would have a long-term beneficial effect on the migration habitat for both Clear Lake and the North Fork Tieton River by constructing a fish ladder that can permanently reconnect habitat between Rimrock Reservoir and Clear Lake and the North Fork Tieton River. Reclamation has determined

that implementing the Proposed Action of installing fish passage facilities at Clear Creek Dam, along with additional actions related to this activity, “may affect, and is likely to adversely affect (MALAA)” bull trout and bull trout designated critical habitat for the Columbia River Bull Trout Distinct Population Segment, and has also determined that this action “MALAA” northern spotted owl (NSO) and NSO designated critical habitat due to habitat modification within the Action Area during project-related activities. Although the Proposed Action would have temporary adverse effects to these species during project implementation, the overall project would have a long-term “beneficial effect” to bull trout and designated critical habitat due to expected abundance gains for the North Fork Tieton River local population over time. Reclamation initiated formal consultation on the CCDFP project with USFWS on December 4, 2024, with the submittal of the CCDFP Biological Assessment (Reclamation 2023b).

The USFWS issued Reclamation a Biological Opinion (Reference Number 2024-0022999) on April 12, 2024. The USFWS concurred with Reclamation’s determination that the Proposed Action MALAA bull trout and bull trout designated critical habitat. The USFWS determined that the Proposed Action is “not likely to adversely affect” NSO and its designated critical habitat.

Recreation

White Pass Ski Co., the concessionaire which operates all developed sites in the Clear Lake Recreation Area, would experience a loss in revenue while the developed campgrounds are closed. Their operations at Clear Lake Boat Launch and Day Use area would not be impacted because these sites would remain open.

For all remaining recreation resources and special uses, the impacts are considered temporary, minor, and local in nature, only occurring within and immediately adjacent to the project area and limited to the duration of construction activities. The recreation facilities analyzed included the campgrounds and day use areas and the OHV Play Area/Cold Creek Sno-Park. The recreation activities analyzed included: developed camping, dispersed camping, fishing, paddle sports/boating/swimming, trail use/nature viewing, hunting, and winter sports. The special uses analyzed included: organization camps, outfitters and guides, recreation events, and recreation residences.

Water Resources

Clear Lake would experience a localized, temporary, minor adverse impact with the lowering of the pool by 12 feet to facilitate construction of the reservoir structure; however, as soon as the drawdown period ended, the lake would begin refilling. Local, temporary, minor water quality issues may arise due to construction activities, such as cofferdam placement, but impacts would be reduced by implementation of BMPs and mitigation measures (EA, Appendix A) and by contractor monitoring. Instream and near-stream work has the potential to temporarily degrade water quality by increasing turbidity (i.e., placement and removal of cofferdams or runoff originating from upland work sites), and by the introduction of point source toxic substances such as fuel or hydraulic fluid from construction equipment. Withdrawing water for dust abatement and other construction purposes could have a localized, temporary, negligible impact on water quantity; this type of water use would be mitigated. The Proposed Action would have negligible impact to water temperatures

or to the currently existing natural thermal regime or presence of thermal refuges in tributary streams or within the reservoir; negligible changes to pH are expected as a result of underwater concrete placement.

Operations of the fish ladder would have a long-term, moderate, beneficial impact on stream temperatures between Clear Creek Dam and the confluence with Rimrock Lake, and it is not expected to degrade other water quality parameters. Due to the short length of the reach between the dam and Rimrock Lake, it is unlikely that the quality of water passing through the fish ladder would significantly change compared to ambient conditions.

Transportation, Traffic, and Public Safety

The impacts to traffic, transportation, and public safety are considered temporary, minor, and local in nature, only occurring within the Clear Lake vicinity, and limited to the duration of construction activities. There would be localized temporary, negligible impacts to emergency vehicle access because road closures would utilize barriers that could easily be moved to accommodate emergency vehicle access. There is not expected to be a significant impact on traffic volumes on US 12 or NF-1200, which are the primary roads that would be used by construction personnel and material suppliers. Post-construction, road use by Reclamation may be slightly increased in the first couple of years compared to current site visits for operations and maintenance, as the fish ladder operations would be monitored and refined.

Air Quality and Climate

Construction activities would create localized, temporary, minor amounts of fugitive dust during surface-disturbing activities and from travel on unpaved portions of access roads and staging areas. Construction activities under the Proposed Action would also generate a temporary, unavoidable adverse source of criteria air pollutants and small amounts of hazardous air pollutants through the combustion of fuel by: vehicles used to commute to and from the construction site; trucks; construction equipment; and diesel-powered pumps and generators.

Reclamation calculated 710.72 metric tons of greenhouse gases (GHG) would be produced as a result of the Proposed Action. Since the Draft EA, Reclamation and the USFS determined that a majority of the excess spoils could be utilized for improving drainage at the Sno-Park, minimizing the amount of material that would be hauled to an appropriate disposal facility. Since the initial GHG analysis was 3 percent of the former reporting threshold of 25,000 metric tons, Reclamation determined that a new analysis was not warranted to account for a reduction in GHG production.

Vegetation, including Special Status Species, and Wetlands

Under the Proposed Action, there would be local, long-term, moderate, adverse impacts to the vegetation in the local project area, which would be mitigated through implementation of the planting plan by the USFS Restoration Services Team. The lowering of the reservoir would not result in any local, temporary, or adverse impacts to wetlands and wetland vegetation, because the wetlands are not within the reservoir and the creeks would maintain the surface water connection to and moisture levels of the wetlands. There would be no impacts to ESA-listed plant species. No

buffer is needed to protect the identified fungus as only one exterior edge of the occurrence will face the new opening and the majority of the microhabitat will be protected.

Cultural Resources

The undertaking would have No Adverse Effect on Historic Properties (36 CFR 800.5(b)). Pursuant to 36 CFR 800.2(c), the identified consulting parties for this undertaking included the Washington Department of Archaeology and Historic Preservation (DAHP), the Yakama Nation, and the USFS Okanogan-Wenatchee National Forest. Reclamation has developed an Inadvertent Discovery Plan (IDP) to be included in contract documents, and the contractor would be required to always have the IDP onsite and to follow it if a discovery is made during construction. There would be no effect to sacred sites or traditional cultural places within 1 mile of the project. Reclamation would conduct cultural resource surveys during construction, as agreed upon during consultation with DAHP, Yakama Nation, and USFS.

Wildlife and Fish

Installation and operation of the fish ladder would have regional, long-term beneficial impacts to all fish, as they would be able to move freely in and out of Clear Lake. Construction activities would have localized, temporary, minor impacts on the movement of wildlife and fish in the project area; in addition, there would be localized, short-term, minor impacts to terrestrial wildlife due to the modification or removal of vegetation on which they are dependent on for cover and forage. There is a potential for some temporary or short-term adverse impacts on fish habitat in the North Fork Tieton River below Clear Creek Dam during construction. In addition, kokanee spawning and egg development could be adversely affected by cofferdam placement in the river or sediments washing downstream from the project area; this would be mitigated by the timing of cofferdam placement and removal, as well as by BMPs. There is no anticipated effect to WDFW's fish stocking program.

Noise

The Proposed Action is exempt from complying with noise standards under Yakima County Code 6.28.040 (12) (Yakima County 1987).

Unaffected Resources

The Proposed Action would not cause any short- or long-term direct or indirect effects to the following resources:

- Indian Trust Assets
- Indian Sacred Sites
- Environmental Justice and Socioeconomic Resources

Cumulative Effects

In consultation with USFS, Reclamation has determined that there are no past, present, or reasonably foreseeable future actions to consider in a cumulative impact analysis.

Approved:

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Date