Supplement Analysis
for the
Mid-Columbia Coho Restoration Program Final EIS
(DOE/EIS-0425)

Trinity Acclimation Pond (SA-3)

Bonneville Power Administration
Department of Energy

Introduction

In 2012, BPA completed the Mid-Columbia Coho Restoration Program Final Environmental Impact Statement (EIS) (DOE/EIS-0425) and Record of Decision (ROD) documenting its decision to fund the Yakama Nation to implement the remaining phases of a comprehensive coho restoration program in the Wenatchee and Methow river basins. Since 1996, the program has been working towards the goal of establishing naturally reproducing, self-sustaining coho populations in several tributaries throughout the two basins. The action proposed in the EIS included a small new hatchery in the Wenatchee basin and 24 acclimation ponds in targeted tributaries in the two basins. Since the EIS was completed, the Yakama Nation determined the need for another acclimation site, known as Trinity, because two acclimation sites previously analyzed in the EIS (Chickamin and Minnow) were no longer available.

This supplement analysis (SA) was prepared to determine if the Trinity acclimation site represents a substantial change to the coho program as considered in the EIS, or if it presents significant new circumstances or information relevant to environmental concerns that bear on the proposed action or its impacts. The findings of this supplement analysis determine whether a supplemental EIS is needed pursuant to 40 Code of Federal Regulations (CFR) § 1502.9(c).

Proposal Description

Development of the Trinity acclimation site would include use of an existing pond and construction of a new pond and associated facilities adjacent to Phelps Creek, near its confluence with the Chiwawa River in Chelan County, Washington. The land is owned by Trinity Conservancy and has an existing man-made pond, a wooded area, and a developed area with a hydroelectric plant that supplies power to several nearby households. The hydroelectric plant gets water through a pipe from Phelps Creek and currently discharges the water through an outlet pipe into the Chiwawa River. Through a FERC re-licensing process, Trinity Conservancy must redirect the discharge water by constructing a new outlet pipe south into Phelps Creek and by developing an open-channel habitat area where the pipe enters Phelps Creek (Figure 1). The Yakama Nation proposes to build the coho acclimation facilities in tandem with the FERC-mandated alterations, sourcing water from the plant's outlet pipe and discharging to the new open channel habitat area.

The acclimation project would include the following:

- Construction and use of a 36-foot by 125-foot acclimation pond that would receive four cubic feet per second (cfs) of water from the hydroelectric outlet pipe. This pond would discharge into Trinity Conservancy's planned open channel and would have a Passive Integrated Transponder (PIT)-tag detector at the outlet.

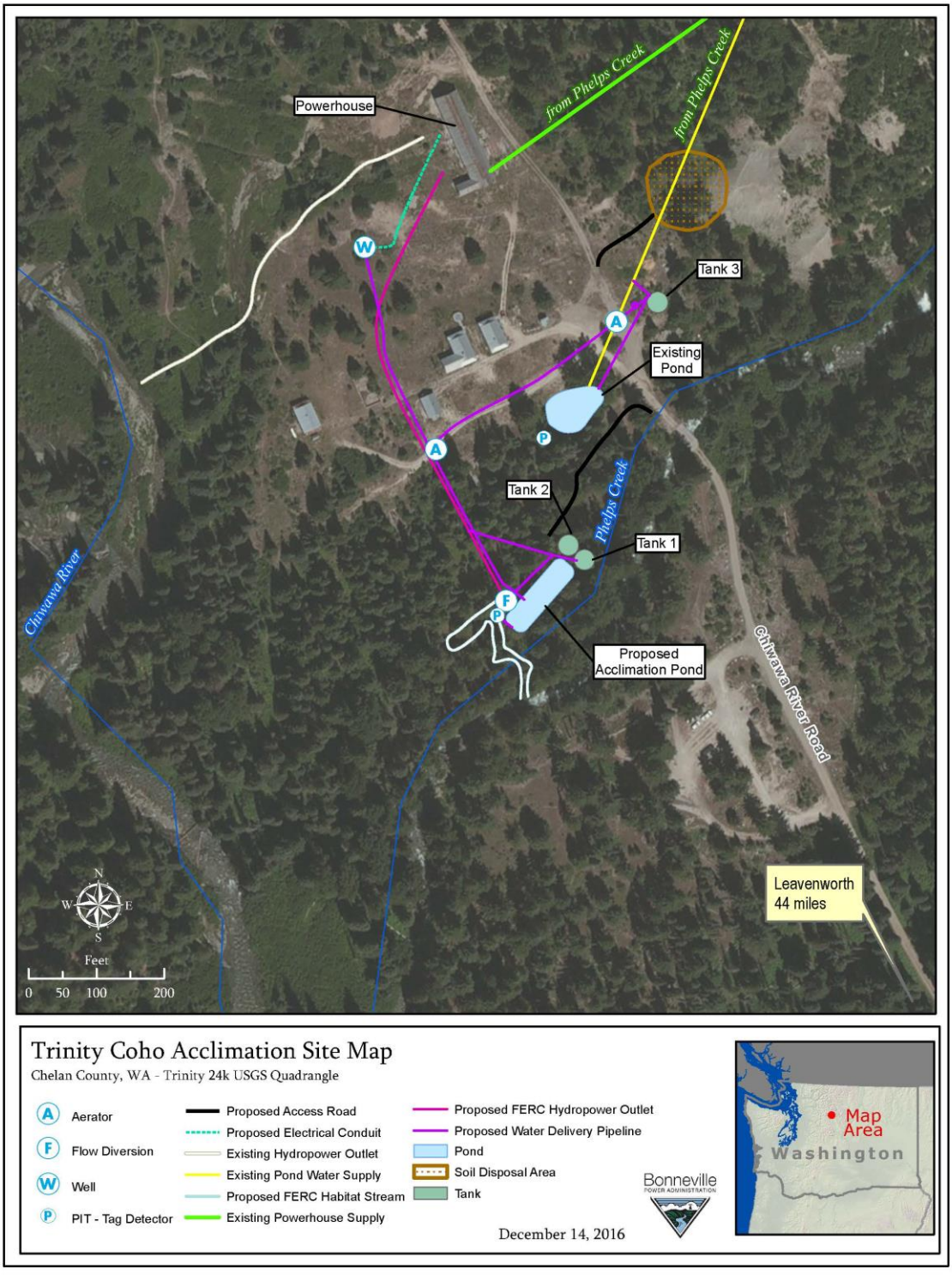

Figure 1. Trinity Coho Acclimation Facility Site Plan

- Use and dredging of an existing 60-foot by 90-foot man-made pond that is fed by a pipe from Phelps Creek and has an open-stream outlet to the Chiwawa River. A PIT-tag array would be installed at the outlet, and the pond would be deepened by about two feet (removal of about 300 cubic yards of sediment).
- Installation of three 30-foot-diameter circular tanks—two adjacent to the new acclimation pond and one just northeast of the existing man-made pond.
- Construction of two permanent gravel-surfaced access roads, one 125 feet long and one 275 feet long.
- Installation of a well with two aerators and a buried water-delivery pipeline to the ponds and tanks to provide a backup water supply of up to 1.5 cfs when surface water is unavailable, to temper water during icy conditions, and to de-ice the facilities.
- Installation of electrical conduit and a back-up generator.

Site development would require removal of about 10 confer trees, and dredged soil would be deposited on the northeast side of the property.

Because water for the acclimation facilities would come from existing surface-water withdrawals (existing pipeline to the existing pond and the hydroelectric plant discharge water to the new pond and tanks), the project would not increase the amount of surface-water use or change surface-water flow paths, except for the short diversion through Tank 3. Although the existing surface-water rights do not allow for fish propagation, the Yakama Nation would apply to the Washington State Department of Ecology for fish propagation water rights using the existing water withdrawal rates.

The Yakama Nation proposes to acclimate 100,000 coho smolts at the Trinity site. Coho would overwinter in the tanks from fall to late winter, and then acclimate in the ponds from late winter until early spring. The smolts would leave voluntarily from the ponds into the Chiwawa River or into Phelps Creek (that flows into the Chiwawa).

The goal described in the 2012 EIS was to acclimate and release 350,000 coho smolts into the Chiwawa River subbasin. Of these, 200,000 smolts were to be acclimated and released from two sites that are no longer available, Chikamin and Minnow. The remaining 150,000 smolts were to be acclimated at an existing pond known as Clear. As is now proposed, 100,000 smolts would acclimate at Trinity, and the remaining 250,000 smolts would acclimate at the existing Clear site. (BPA analyzed the effect of increased numbers of fish at Clear in an SA released in February 2015. This SA is available at *www.bpa.gov/goto/midcolumbiacoho.*)

Construction is proposed to occur over 20 working days from June through September 2017. Overwintering would begin in 2017, and spring acclimation would begin in 2018.

Operations would consist of daily feeding, predator deterrence, and release monitoring. During the winter months, the hydropower plant caretaker would feed the fish, whereas Yakama Nation would feed fish two to three times per week in the spring, once the road is accessible. Yakama Nation staff would also perform growth sampling monthly in the winter, and weekly or bi-weekly in the spring, accessing the site either by automobile or snowmobile, depending on road conditions. Predator control would include non-lethal deterrence, primarily accomplished by frequent human presence in the area during peak predation hours (near dawn and dusk). Coho smolts would be released by removing the enclosure device in May or June. Operations may also include maintenance dredging of existing domestic pond as needed in the future.

The design, construction, and operation of Trinity would be consistent with those described in the 2012 EIS for sites proposed in the Chiwawa basin. Total coho release numbers in the Chiwawa River basin would remain as described in the 2012 EIS (no more than 350,000 smolts).

Public Comments

To help determine issues to be addressed in this supplement analysis, BPA asked for public comments on the Trinity acclimation site proposal, along with another site, Merry Canyon. BPA sent a letter describing the acclimation sites and requesting comments from local landowners, Tribes, local, state and federal agencies, and other interested parties.

Two entities commented–one comment was specific to the Merry Canyon site and the second was from the Washington State Department of Ecology recommending that the ponds be sited to avoid impacts to wetlands. As described in this SA, the project would not impact wetlands.

Analysis

Consistent with the acclimation sites evaluated in the EIS, Trinity would be of comparable size, would accommodate a similar number of smolts, would be operational from winter through May, and smolts would leave the site into free-flowing waters by their own volition. Construction would occur in a forested area and in a disturbed area consisting of a sparsely-vegetated rural residential yard and small hydropower facility. Excess soils would be disposed of in an approved upland disposal site, or side cast into an upland area, as shown in Figure 1. Construction would occur during the summer dry season (July through September) and would incorporate best management practices, as discussed in the EIS and ROD. Since all construction would occur in the dry, construction-related sediment is not expected to enter any fish-bearing water.

Soils: Construction would disturb about 35,000 square feet of soils, much of which is in previously disturbed areas, and none of which is designated as prime farmland. Of the disturbed area, 9,200 square feet (22,000 cubic feet) would be permanently removed for the pond, tanks, and well. The remainder would be replanted. The 29,000 cubic feet of excess spoils would be disposed of in an area of about 3,000 square feet in size. Because most of the construction would be done in previously disturbed areas, impacts to soils would be low, consistent with the EIS.

Surface-Water Supply: The site would use existing surface-water withdrawals from Phelps Creek, as currently allowed under the existing water right, and would not require additional withdrawals. Therefore, surface-water withdrawal at this site would have no effect on surface-water supply. Use of groundwater would have low effects on surface-water supply, because withdrawal would occur only sporadically (estimated to be less than one week per year), would not occur during low-flow periods, and would not be withdrawn at a rate that would drop stream levels below statutory minimum in-stream flows. Additionally, the groundwater would be released into Phelps Creek, possibly resulting in slightly increased surface flows. Thus, groundwater withdrawal would result in no effect or possible improvement to surface water supply. These effects would be consistent with (and potentially, less than) those described in the EIS, which predicted minor changes to surface-water supply.

Groundwater Supply: According to Washington State Department of Ecology records, there are no existing water-supply wells located in the vicinity of the site; therefore, no other groundwater users would be affected by the limited groundwater withdrawal proposed to operate the site. These effects would be consistent with (and potentially less than) those described in the EIS, which predicted minor changes to groundwater supply.

Water Quality: Effects on water quality from *construction*, including dredging of the existing pond, would be low and similar to other sites described in the EIS—turbidity or potential for accidental fuel or oil spill. Water quality impacts would be mitigated by the use of best management practices (such as work-area dewatering, erosion control, and spill containment systems) as discussed in the EIS and ROD.

Operations are likely to have low to no effects on water quality. The EIS analysis showed that operation of acclimation facilities does not alter temperatures of the receiving water. Additional water quality more

recent analysis[1] estimated that operations would produce 32 grams per day of total phosphorous (TP), contributing negligible amounts TP to Phelps Creek and less than1% of the TP load in the Chiwawa River. The lower Wenatchee River, downstream of the project area, has an established Total Maximum Daily Load for TP; however, the analysis found that additional TP would not be measurable in the lower Wenatchee River. Overall, Trinity would have low effects on water quality, consistent with the EIS, which predicted minor, localized increases in phosphorous in the receiving water bodies.

Fish: ESA-listed bull trout, spring Chinook, and steelhead are not present in the existing man-made pond, but do occur in the receiving water bodies (Phelps Creek and Chiwawa River), where they could be present during both construction and operations. No effects to listed fish are expected during construction since, no fish occur in the existing pond, all work would occur in the dry, and best management practices would be used to control erosion and spills as described in the EIS and ROD.

During operations, surface-water withdrawals would be non-consumptive and would not exceed the water right. As such water would not drop below statutory minimum levels set by the State of Washington. Therefore, there would be no to low impacts on ESA-listed and other fish due to water withdrawals, consistent with impacts described in the EIS.

Because operations would have low effects on water quality, impacts to fish would be low. This impact would be consistent with impacts described in the EIS.

In November 2015, BPA submitted a biological assessment to NMFS, which concluded that this action was not likely to adversely affect listed fish.

Wildlife: The Trinity site is adjacent to the Wenatchee National Forest, and wildlife species in the area include ESA-listed Canada lynx and northern spotted owl, as well as martin, and mule deer and elk (all listed as State of Washington Priority Habitat and Species [PHS]). Although PHS data indicate one detection of Canada lynx in the area, the data further specify that the detection refers to "areas over 4,200 feet in elevation." Given that the site is at about 2,700 feet in elevation and is already subject to moderate human disturbance due to the presence of an operating power plant, Canada lynx are not likely to be present and would not be impacted by construction, operations, or maintenance of the site.[2]

Suitable habitat and designated critical habitat for the northern spotted owl are both present at Trinity. Construction at this site may remove approximately ten conifer trees within an area that could potentially be suitable habitat for northern spotted owl. In addition, construction and generator noise is expected to extend up to 35 yards from the site. However, none of the trees are nest trees, and given the small impact area, the low value of the habitat, and the large areas of similar surrounding habitat, effects are likely to be low and consistent with the impacts identified in the EIS. In a Biological Opinion dated July 18, 2016, U.S. Fish and Wildlife Service agreed that the project is not likely to adversely affect spotted owls.

WDFW data show that a PHS-listed marten concentration occurs in and around the affected area. Project construction would not physically remove suitable habitat for marten, which typically occurs in mature or old-growth forest, as none occurs in the affected area. However, noise and visual disturbance could cause individual martens to temporarily avoid the area. This is within the range of effects addressed by the EIS, which predicted temporary avoidance during construction.

WDFW data show that a PHS-listed mule deer and elk fawning area occurs just outside of the project area, opposite Phelps Creek. Construction would not physically remove any of this habitat; however, noise and visual disturbance could extend to the habitat, causing individuals to temporarily avoid the area.

[1] Pradeep Mugunthan, Anchor QEA, LLC, Memorandum to Greg Ferguson, Sea Springs Co. Evaluation of Water Quality Impacts from Relocated Coho Acclimation Sites Proposed in the Mid-Columbia Coho Reintroduction Program, October 15, 2014.

[2] R. Walker, Grette and Associates, Technical Memorandum, October 29, 2014

This is within the range of effects addressed by the EIS, which predicted temporary avoidance during construction.

Plants: Construction would disturb a 43,000-square foot area. Most of the disturbance would occur in previously disturbed grassy areas that receive routine maintenance (such as mowing). However, construction of the new acclimation pond, tanks, and some pipelines would disturb a forested area, requiring the removal of approximately ten conifer trees. No plants listed under the Endangered Species Act (ESA) are present at the site. BPA submitted a biological assessment to U.S. Fish and Wildlife Service, who concurred in a Biological Opinion dated July 18, 2016 that the project would have no effect on listed plants. Suitable habitat is not present for any plants included on PHS list;[3] thus, impacts to PHS-listed plants are not anticipated. Impacts to vegetation would be small relative to total native habitat in the area and consistent with the impacts described in the EIS.

Wetlands*:* No wetlands are present at the site[4]. Therefore, the construction and operation of the acclimation site would have no impact on wetlands.

Floodplains: Though the project is not located within a FEMA-mapped flood hazard area, a portion of the site is likely in the Phelps Creek floodplain. Tank construction may occur in the floodplain, but the tanks do not appreciably add net fill, nor are they large enough to obstruct or displace stream flows in a manner that would cause flooding. Pond construction would remove material to upland areas from the floodplain, which could increase flood storage capacity, a low beneficial impact. Construction of one of the gravel access roads could occur in the floodplain, but would not add fill or impervious surfaces, and therefore would have no to low effects on floodplains, consistent with the EIS.

Cultural Resources: In letters dated August 4, 2014, October 20, 2015, and August 8, 2016, the State of Washington Department of Archaeology and Historic Preservation concurred with BPA's determination of "no historic properties affected" by construction of the site. This finding is consistent with the cultural resources impact analysis in the EIS.

Visual Quality: Project elements that occur in the open field near the hydropower plant would be buried and replanted and therefore would not be visible to the casual viewer. The newly constructed pond and tanks could be visible from the road, but would be partially screened by trees. The ponds and tanks would not be visible from the Chiwawa River, because they are more than 700 feet away and screened by dense vegetation. Thus, construction and operation of the acclimation site would have low impacts on visual quality, consistent with the EIS.

Recreation and Noise: Most of the site is surrounded by the Wenatchee National Forest. Forest recreation and a rural residence are the primary nearby land uses. The Buck Creek trail head and the Forest Service Phelps Creek campground are both in the project vicinity. Recreational users may be impacted by noise during construction. Construction would be limited to approximately 20 working days, weekdays from June through September during daylight hours only. These impacts would be consistent with (and potentially, less than) the impact analysis in the EIS.

Operational impacts would be infrequent and of short duration, limited to noise from the generator and an alarm horn to indicate problems with water levels or power supply. Operational impacts would only occur from late winter through early spring when most forest users are snowmobilers. Additionally, the alarm is likely to sound infrequently—less than ten times during the operational period. Since the project vicinity is a popular snowmobile recreation area during the winter and early spring, operational noise is expected to be similar to or below baseline levels. No year-round residences occur in areas that could be affected by operational noise, except for the caretaker of the hydropower facility. Thus, the impacts from construction and operations on recreation and noise would be similar to the impacts analyzed in the EIS.

[3] R. Walker, Grette and Associates, Technical Memorandum, October 29, 2014
[4] Grette and Associates, Technical Memorandum, *Trinity Parcel Wetland Review*, February 2014

Findings

This supplement analysis finds that the potential impacts from the proposed acclimation site have been examined, reviewed, and consulted upon and are similar to those analyzed in the Mid-Columbia Coho Restoration Program EIS (DOE/EIS-0425), Record of Decision, and related biological assessments. Neither construction nor acclimation would occur until the ESA consultation is completed. There are no substantial changes in the proposed action and no significant new circumstances or information relevant to environmental concerns bearing on the proposed action or its impacts within the meaning of 10 CFR § 1021.314(c)(1) and 40 CFR §1502.9(c). Therefore, BPA will not prepare a supplemental EIS to the Mid-Columbia Coho Restoration Program EIS.

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