

We support the creation of the Fish Hatchery and believe it is needed for many purposes. There are significant concerns raised about the EIS contentions of limited impacts, however. Comments from our Chief Joseph Dam Project Office, Environmental Resources Section, Civil Projects Branch, and Water Management Section follow:

General: All aerial photos appear to be over 20 years old and do not reflect current conditions and facilities in place. New aerials should be used for an accurate representation of the project impacts.

General: In many of the figures, particularly the aerial photos with superimposed text and drawings, much of the text is illegible. Request improved versions.

Sec. 2.1.4: States "A paved access road would also be built from the existing fishing access down to the bank of the Columbia River where the fish ladder and adult collection/holding facility would be installed." The current gravel road is single-lane and opened only during the day in the summer due to hazardous conditions. There have been multiple washouts and vehicle accidents on this road. There would be significant engineering effort and cutting into the hillside to create a safe paved road in this location. The EIS should address the impacts of the road construction.

Sec. 2.1.4: This specific implementation seems to be relegating the effects on our visitors and existing recreational facilities to a minor status. In contrast, we believe the impacts will be greater than stated, and possibly significant, unless they are fully accounted for and mitigated by careful design, planted barriers and location of supporting facilities.

Sec. 2.1.4: The hatchery location is probably preordained by need to be close to the river on available land. The hatchery adjoins Chief Joseph Dam's Orientation Area not the misnomer "Visitor Center" as stated on page 2-5. The area serves as the primary entry point for visitors to the Chief Joseph Dam Project. The extensive North Shore Trail System begins at a trailhead at the Orientation Area, goes to a viewing platform along the river, and then follows the river bank until it crosses Half-Sun Way just before the Lower Spillway Road, then continues a varying path all the way to Bridgeport State Park. Aerial photography (Figure 2-2) dates from before the creation of the Orientation Area, i.e. before 1988 and all subsequent recreational development. Using such an old photograph implies that the land has been sitting there undeveloped. The hatchery will certainly affect visitor aesthetics and the use of these recreational facilities.

Sec. 2.1.4: The Orientation Area is one of the most heavily used areas of the Chief Joseph Dam Project. It serves as a highway rest area for a very large stretch of highway. It is the first chance that the Project has to impart information and form an impression in our visitors' minds. It is hard to judge if the fish hatchery will augment or detract from the visitors using this Orientation Area as currently presented in this plan. To clearly resolve that issue, visitor facilities should be developed into this hatchery complex and directly connected to the central Orientation area walkways, so visitors can easily walk into the hatchery area if they choose. That would create a net positive effect. Since visitors would likely stay longer in that case another parking area along Half-Sun Way should be created to handle the volume.

Sec. 2.1.4: To best augment our visitors' experience, the hatchery visitor facilities should be on the West end i.e. next to the Orientation Area. The current design shows them on the East end near the Lower Spillway Rd. If they are kept at that location, these facilities will not augment the Orientation Area nor will these facilities be visited by as many visitors.

Sec. 2.1.4: The Labyrinth/Maze were added to the Orientation Area to augment our visitors' experience. The Labyrinth is on the East side of the North Shore (NS) Trail just South of the central Orientation Area. The hatchery development as shown then would butt up against the whole East side of the Orientation Area, the Labyrinth, and the portion of the NS Trail that goes from the trailhead to the Viewing Platform on the bank of the river. The development would also be North and East of the trail as it continues along the riverbank and then goes inland to cross Half-Sun Way.

Labyrinths use the concept of a meditative journey to a physical center to achieve a spiritual journey to one's center. The visual distraction and perhaps audio distraction of an adjoining fish hatchery would be quite counterproductive to the Labyrinth's goal. That effect needs to be diminished by design and also by perhaps a naturally appearing series of vegetative barriers to isolate the Labyrinth users from the hatchery.

Sec. 2.1.4: The text on page 2-5 describes that raceway waste would be pumped to the west end of the complex and treated there. The west end of the complex is immediately joining the Orientation Area, with Labyrinth and the NS Trail System. Are there any odors produced by this waste treatment that are incompatible with recreating visitors? Will there be odors produced during concentrated waste removal? The location of these waste treatment ponds should be relocated to as far away from recreating visitors as possible. We suggest along Half-Sun Way where no trail goes by the area.

Sec. 2.1.4: The text on page 2-5 describes realigning 300 feet of the NS Trail, but doesn't identify which 300 feet so it is hard to judge the impact of that realignment.

Sec. 2.1.4: The waterlines on figure 2-2 will need to interface with the Lower Spillway Fishing Area development. That development includes steps down to the right training wall from the parking lot. The NS Trail on the right terrace would also need to be gone under. The well water lines appear to follow exactly the same path as the NS Trail does as it ascends the hill to the upper terrace.

Sec. 2.1.4: The housing area for the hatchery is planned for WA state land essentially right across Half-Sun Way from the Dunes Trailhead on the NS Trail. Mitigation for the effect of this housing area on the aesthetics of those recreating on the trail will be needed. It is strongly suggested that naturally appearing dunes and vegetation be used to screen this housing area from visitors using the trailhead, trail, golf course and traveling to and from all the facilities of Bridgeport State Park. A previous hatchery housing development, at the hatchery adjoining the Corps' Big Hole Gravel Pit, included the unsightly development of a vehicle junkyard on hatchery land. Such developments need to be strongly prohibited at this proposed housing area.

Sec. 2.1.4: Access to this housing area and also all utility lines serving it (and the hatchery) will need to account for the NS trail which is on the N side of Half-Sun Way. The housing area might better be located for our purposes not so far east, so it would not be as easily seen by visitors who use Bridgeport State Park and the NS Trail. Access could then be using the existing dirt road that goes north from Half-Sun Way (opposite the Corps Pump Rd.) to service the high BPA towers or by having access off of the existing Jack Wells Cutoff Rd.

Figure 2-3: Much of the text in the figure is illegible. In particular, we cannot tell whether the proposed wet well for collecting relief tunnel water is shown. Also don't know if proposed pipelines are shown.

Figure 2-4 (Hatchery Water Supply Features): Points out the locations for the 3 water supply sources, but no features or details of the design are really shown. It would be better if a larger scale could be used so that more individual features, as they are currently known, could be depicted.

Sec. 2.1.5, 3rd to last para.: Change 3rd to last sentence to include the fact that a new set of stoplogs would be needed.

Sec. 2.1.5, last para: Summer temperatures of relief tunnel water may actually be more suitable for desired conditions, because temperatures in relief tunnel water are 180° out of phase with reservoir temperatures.

Sec. 3.2.1, and Sec. 3.2.2: These sections do not mention findings of Ashbrook et al (2006), which documents movement of radio-tagged adult summer/fall Chinook in the Chief Joseph Dam tailrace and into tributaries above Wells Dam. This study was done in part specifically to inform the location of the hatchery attraction ladder. Suggest all relevant results of the study be incorporated into appropriate locations in the EIS.

Ashbrook, C.E., E.A. Schwartz, C.M. Waldbillig, and K.W. Hassel. 2006. Migration and movement patterns of adult Chinook salmon (*Oncorhynchus tshawytscha*) above Wells Dam. Report submitted to Colville Confederated Tribes and Bonneville Power Administration. Washington Dept. of Fish and Wildlife, Olympia, Washington. 74 pp.

Sec. 3.4.2: Yes, terraces were seeded to 2 species of non-native grasses. These grasses were selected because they had high tolerance to herbicide application for broadleaf control (intent of original conversion was noxious weed control then later wildlife habitat), drought tolerance in event of potential periodic irrigation failures, and tight soil holding capabilities. No native species provides this combination while allowing maximum effort for noxious weed control.

Sec. 3.4.2: Impacts to shrub steppe and sagebrush/bitterbrush vegetation are probably understated. Once this habitat is gone, it is gone forever. We realize that the entire area upstream from the VOA will be converted but suggest we minimize disturbances elsewhere. Concern is statements about 3 houses and storage area and "trailer park" etc. in the proposed housing plan. Seems pretty vague.

Appendix B: Suggest changing “resident” designation to “native.” “Resident” generally means non-anadromous.

Sec. 3.5.2, Slope Stability, 2nd to last sentence: Pipelines are actually buried, for seismic and security reasons, rather than being exposed.

Section 3.6.1 Affected Environment, Water Quality, 1st para: The 2006 Washington Dept. of Ecology (WDE) standards were approved by the EPA on December 21, 2006.

Section 3.6.1 Affected Environment, Water Quality, 2nd para: This paragraph should note the classification of the Columbia River at Chief Joseph Dam. The WDE standards are slightly different than the Colville Tribe standards for the Columbia River. For example, the Colville Tribe classifies the Columbia as Class I above the dam and Class II below the dam, while the WDE classifies the Columbia above and below the dam as a Non-Core Salmon/Trout designation. Temperature criteria are different for the WDE and Tribe standards.

Sec. 3.6.1, Affected Environment, Water Quality, Columbia River, 1st para: States “Total phosphorous [sp] measurements for Rufus Woods Lake in 1995 averaged 30 mg/L.” Units are incorrect; should be µg/L. Should also update nutrient data. Total phosphorus concentrations measured in Rufus Woods Lake during 2004 ranged from about 5 to 10 µg/L.

Sec. 3.6.1, Affected Environment, Water Quality, Columbia River, 4th para.: Full year temperature data are collected downstream of the dam at the tailwater station CHQW. Last sentence needs clarifying; what does “elevated” mean in reference to pH? Do you mean that values tended toward basic rather than acidic?

Sec. 3.9, Cultural Resources: Does not appear to have accounted for all relevant site documentation from Corps of Engineers. We will supply needed information separately. Contact Lawr Salo, USACE Seattle District, 206-764-3630.

Table 4-1; and Appendix A: Suggest inclusion of consultation with, and concurrence from, the Washington Department of Archeology and Historic Preservation (DAHP)/State Historic Preservation Office (SHPO) concerning determinations under Sec. 106 of National Historic Preservation Act. Suggest also including specific documentation of Tribal Historic Preservation Office consultation as well.