State of Washington
DEPARTMENT OF FISH AND WILDLIFE REGION TWO
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Certification Program Director
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SUBJECT: Comments on the Pending LIHI Certification of Wells Dam

Dear Ms. Fischer,

Thank you for the opportunity to comment on the Low Impact Hydropower Institute (LIHI) certification application for Wells Dam submitted by Public Utility District No. 1 of Douglas County (DPUD). The Washington Department of Fish and Wildlife (WDFW) only became aware of this application in October. Both WDFW and the Confederated Tribes and Bands of the Yakama Nation (YN) were excluded from the contact list provided by DPUD in their application. WDFW and YN have statutory co-management authority over Columbia River salmon and steelhead, are signatories to DPUD's Anadromous Fish Agreement and Wells Habitat Conservation Plan (HCP), and are members of the HCP Policy, Coordinating, Hatchery, and Habitat Committees and Aquatic Settlement Work Group. We believe our input, along with the YN's, is critical information for LIHI as it assesses whether the Wells Hydroelectric Project merits certification.

Provided below are WDFW's comments on DPUD's LIHI certification application. Please know this is not a comprehensive assessment of DPUD's application. Had WDFW been given the opportunity to utilize the full 60-day comment period, additional concerns may have been identified. For instance, WDFW would have initiated a cross-program review to address the terrestrial wildlife and habitat sections of the application instead of just the fish-related sections.

COMMENTS

1. Adult Downstream Passage: Information provided by DPUD gives the erroneous impression that adult steelhead fallback is a minor risk to affected Columbia and Snake River steelhead populations. DPUD's characterization of this issue is not based on the best available science, much of which is quite new. Specifically, safe downstream passage of Endangered Species Act (ESA)-listed wild adult summer steelhead through Wells Dam (i.e., "fallback") is a significant concern to WDFW, as most adult steelhead

fallback during non-spill periods and must use turbine passage routes that impose high mortality rates (English et al. 2001, 2003, Fuchs et al. 2012). Adult steelhead that migrate upstream of Wells Dam but are from populations that spawn in downstream tributaries are known as "overshoots". Overshoot steelhead originate from both downstream populations (mostly Snake and Yakima Rivers, which are two different ESA-protected populations unaccounted for in DPUD's HCP) and from upper Columbia populations (Wenatchee and Entiat Rivers, which are part of the upper Columbia ESA population that is covered by the HCP). Adult steelhead overshoot their natal watershed for various reasons (Richins and Skalski 2018), but most notably to seek thermal refuge. Overshoot steelhead may also be classified as "voluntary fallbacks" because they are observed in a tributary or reach not adjacent to the fallback dam (English et al. 2001). A peer reviewed and published study conducted by WDFW (Murdoch et al. 2022) quantified the abundance and fate of known overshoot steelhead (adults PIT tagged as juveniles in their natal stream) in the Upper Columbia River (UCR) between 2010-2017, which previously had never been done. DPUD along with the other two mid-Columbia River public utility districts were given the opportunity to review and comment on the study prior to publication. In that study, adult steelhead from populations downstream of Priest Rapids Dam were classified as overshoots. Of those, 20% were observed above Wells Dam, but only a small percentage (22%) successfully migrated back to their natal tributaries downstream of Priest Rapids Dam. Because unsuccessful downstream passage for these fish may be attributed to one or more of the five hydroelectric projects (Priest Rapids, Wanapum, Rock Island, Rocky Reach, and Wells), project-specific estimates of downstream passage success were requested by the HCP Coordinating Committees. Wells Dam had the lowest success rate (50.1%) compared to the other hydroelectric projects (which ranged from 81.2 – 91.7%). Furthermore, an estimated 382 wild adult steelhead annually overshoot Wells Dam during the study period. Overshoots from within-basin steelhead populations are also of concern. An estimated 46% and 7% of Entiat River and Wenatchee River wild steelhead, respectively, overshoot Wells Dam.

Because Wells Dam is the farthest upstream project with anadromous fish passage on the Columbia River and is immediately downstream of Chief Joseph Dam, which releases cool water from the bottom of the reservoir, downstream passage of overshoot steelhead through Wells Dam is important for ESA-listed wild steelhead conservation. Discussions concerning overshoot steelhead have been occurring within the Rock Island, Rocky Reach, and Wells HCP Coordinating Committees for over two years, but consensus on the magnitude of the problem has not been reached. Resolution on this matter is critically important, as it may have implications for operations at Wells Dam (e.g., windows of fall and winter surface spill – as is provided by Grant PUD dams downstream as well as at federal dams on the lower Snake and Columbia rivers –could help facilitate improved fallback survival for overshoot steelhead).

2. Juvenile Downstream Passage: Information provided by DPUD states that bypass operations beginning in early April successfully pass at least 95% of anadromous juvenile

salmonids through the Wells Project. However, juvenile salmonid use and passage through the Wells Project is not assessed using detection data from fish entering or exiting the dam. Concerns have also been raised about the appropriateness of the early April start date for the bypass given ESA-listed wild spring Chinook are present prior to the non-bypass period (see below). Currently, PIT tagged fish from populations upstream of the Wells Project are detected at Rocky Reach Dam (67 km downstream) and estimates of mean travel time are used to estimate when fish passed Wells Dam. This methodology poses two primary concerns: (1) estimates of passage timing at Wells Dam are solely dependent on the operational period of the Rocky Reach surface collector and (2) estimates of passage timing are only based on those fish that survive and are detected at the Rocky Reach surface collector. Furthermore, because the Wells Juvenile Bypass PIT tag Detector has historically low detection probability (< 1%), sample sizes for this calculation are small. The Wells Bypass PIT tag detector is also operational during non-bypass operations. While most of the juvenile wild steelhead (65%) are detected during bypass operations, 75% of wild spring Chinook detection occurs during the non-bypass period (i.e., fall/early winter). In other words, current monitoring and detection at Wells appears to be incapable of providing a clear picture on the project's impacts on wild spring Chinook, the most imperiled salmonid species in the UCR.

Notwithstanding these concerns about wild spring Chinook monitoring and detection, DPUD at least provided statistics on yearling spring Chinook survival through the Wells Project exceeding 93% in all five of their studies. On the other hand, survival of subyearling summer Chinook within the Wells Project area is unknown despite being required by the Wells HCP. Two of the three primary UCR summer Chinook populations (Methow and Okanogan) spawn and rear upstream of Wells Dam and project-related impacts are unknown. Subyearling summer Chinook are relatively small compared to yearling migrants and tagging technology has historically been the primary reason survival could not be estimated. However, tag technology has improved significantly and is now safe for subyearlings. Discussions about this topic are ongoing within the HCP Coordinating Committees – a subyearling Chinook workshop was held in early 2024, and potential study designs are being discussed. It is reasonable to anticipate a study being implemented in the next few years to determine if survival standards for subyearling Chinook are being met, but the issue has yet to be resolved. Whether survival standards for subyearling Chinook are being met likely has implications for operations at Wells Dam.

3. Threatened and Endangered Species: DPUD referenced information that states their ESA Incidental Take Statement (ITS) issued by NOAA in 2003 covers all operation and maintenance activities at Wells Dam for UCR steelhead, UCR spring Chinook, UCR summer/fall Chinook, and Okanogan River sockeye salmon. While this is true for the species listed (even if the adequacy of project operations for some of these species likely needs to be revisited for the reasons explained in section 2), as briefly referenced above it was recently discovered during HCP Coordinating Committee discussions that DPUD's

ITS does not cover take of ESA-listed mid-Columbia and Snake River wild adult steelhead that migrate/overshoot above the Wells Project and seek to swim back downstream to their natal watershed. In 2024, NOAA informed HCP Coordinating Committees of their intent to initiate Section 7 consultation under ESA to address unauthorized take of overshoot steelhead from downstream populations. Per WDFW's perspective on the overshoot issue (see section 1 above), resolution on this matter is critically important to steelhead conservation, and likely has implications for operations at Wells Dam.

WDFW recognizes that many of our concerns have been identified over the past two to four years, and thus are relatively new and derive from recent science. This is because WDFW has only recently had the staffing capacity and expertise to assess these highly technical hydropower-fish issues and analyze our two decades worth of fishery data collected since DPUD received their current FERC license. WDFW has been and remains committed to working through adaptive management and new information clauses in the HCPs in a collaborative fashion to identify meaningful changes that benefit anadromous salmonids. That said, adaptive management under the HCP needs to become truly adaptive and significantly more nimble if it is to meet the challenges faced by UCR Chinook and steelhead. Should LIHI elect to award low impact certification to DPUD, WDFW recommends a shorter certification term and/or conditions that ensure appropriate actions are implemented in a timely manner to address and resolve concerns including but not necessarily limited to those outlined above. We would welcome additional conversation on how to structure the certification accordingly.

Thank you for this opportunity to comment and for taking a significant step to rectify WDFW's initial exclusion from notification about this application. Please contact Michael Garrity, Special Assistant for Columbia River Policy, at michael.garrity@dfw.wa.gov, with any questions or follow-up.

Sincerely,

Brock Hoenes
Director, North Central Region
Washington Department of Fish & Wildlife