

September 25, 2019

Susan Braley  
Washington Department of Ecology  
Water Quality Program  
PO Box 47600  
Olympia, WA 98504-7600

**RE: Comments on the State of Washington’s Proposed Rulemaking on Water Quality Standards for Surface Water of the State of Washington (WAC 173-201A).**

Dear Ms. Braley,

Thank you for the opportunity to comment on the State’s proposed rulemaking on revisions to Chapter 173-201A WAC, Water Quality Standards for Surface Water of the State of Washington. Public Utility District No 2 of Grant County, Washington (Grant PUD) is the owner and operator of the Priest Rapids Hydroelectric Project, which includes Wanapum and Priest Rapids dams on the Columbia River, licensed by the Federal Energy Regulatory Commission (FERC)<sup>1</sup>. Grant PUD is committed to efficiently and reliably generating and delivering clean and renewable energy to the Grant County and region. We are also committed to meeting our fish, wildlife, and water quality requirements and supporting the recovery of ESA-listed salmon and steelhead that are part of our FERC License and associated Biological Opinions, Settle Agreements, and 401 Water Quality Certification<sup>2</sup>. We are encouraged by Washington Department of Ecology’s (Ecology’s) commitment to update existing water quality standards in the interest of benefiting both hydropower flexibility and salmon survival. Under the proposed rule change, an additional “option” has been included in the special fish passage exemptions for the Snake and Columbia rivers when spilling water at dams to aid fish passage, which includes the ability to spill up to total dissolved gas (TDG) levels of 125% in the tailrace and removal of the 115% TDG standard at the next downstream dam (forebay). The focus of our letter is on how the proposed rule change for TDG could affect hydropower’s efforts to both comply with the State’s water quality standards and to support the recovery of salmon and steelhead in our region.

**1. The removal of a forebay standard poses a regulatory risk to downstream dam operators.**

As described in the draft Environmental Impact Statement (draft EIS), the forebay standard serves as a river wide safety factor, safeguarding dams from exceeding the tailrace standard during the spill season. From the draft EIS:

*The forebay requirement of 115% primarily serves as a safety factor to ensure dams will not reach or exceed 120% TDG during the hydropower spill season. If TDG enters the forebay at 115%, then the hydropower project is provided a 5% TDG addition as part of hydropower operations as measured in the tailrace downstream of the project (i.e. 120%*

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<sup>1</sup> FERC issued Grant PUD a new license for the Priest Rapids Project in April of 2008 (123 FERC ¶ 61,049).

<sup>2</sup> Ecology issued Grant PUD a 401 Water Quality Certification as part of the FERC Licensing Process in March of 2008 (Order No. 5419).

*TDG tailrace requirement). Furthermore, the forebay requirement requires hydropower projects to consider impacts of their operations on downstream projects.*

Ecology is acknowledging that a forebay criteria provides an allowance for normal hydropower and spill operations to add TDG to the river and that the forebay requirement obligates dam operators to consider their downstream neighbor. Without any forebay standard under Section 200(1)(f)(ii)(B) of the proposed rule change, Ecology may be putting downstream dam operators in a position where compliance is unfeasible. Ecology should consider how the removal of a forebay standard would affect the operations and compliance of downstream dams and how Ecology will regulate an upstream project's affect to the incoming TDG of the next downstream dam.

## **2. The removal of a forebay standard poses a biological risk beyond 125%.**

The forebay standard requires dam operators to manage TDG so that downstream projects can spill without accreting TDG beyond the tailrace standard. As described above, Ecology has an expectation that normal hydropower and spill operations will add up to 5% TDG to the river. Without a forebay standard under Section 200(1)(f)(ii)(B) of the proposed rule change, TDG may accumulate without a 'reset' to ensure that TDG levels do not exceed 125%. In the Mid-Columbia, where there are multiple dam owners and operators and therefore no inherent interest in managing TDG for downstream projects, TDG could accumulate downstream and cascade beyond 125%. Ecology should consider the risks to fish in the absence of a TDG reset.

## **3. How will Ecology apply the rules and standards when there are multiple standards in a reach of a river?**

The draft EIS and rule change does not address how the standards would be applied if some projects remain at the existing/baseline special fish passage exemption (115%/120%) under Section 200(1)(f)(ii)(A) while other neighboring projects opt into the revised/additional option to the special fish passage exemption (125%) under Section 200(1)(f)(ii)(B) of the proposed rule change. For example, how would the rules be applied when a downstream project opts to remain at the baseline standard and a dam immediately upstream opts into the new standard? Would the upstream dam be required to meet the 115% forebay standard? If not, is it reasonable to expect the downstream project to meet a 120% standard when the upstream project is operating to 125% with no forebay standard?

## **4. We encourage Ecology to remain flexible in developing the Implementation Plan and to work with project operators to design plans that meet Ecology's goals.**

For example, Ecology is asking hydropower projects that opt into 'Option 2 (tailrace-only criterion)' under Section 200(1)(f)(ii)(B) of the proposed rule change to include a minimum of three native non-salmonids species with a minimum sample size of ten per species in weekly evaluations of gas bubble trauma. During the spring season, when these evaluations would be occurring, collecting three native species in addition to the collection of salmonids would be challenging. Grant PUD has been collecting fish in the project area for decades for both monitoring gas bubble trauma and predator management activities. Our experience tells us that this requirement may be impracticable. We would look forward to the opportunity to design a site-specific biological monitoring plan that suits the needs of Ecology and is achievable.

**5. Grant PUD is meeting survival standards for ESA-listed and non-listed salmon under the current TDG standards.**

Grant PUD's FERC license, Salmon and Steelhead Settlement Agreement, and Biological Opinions have established a roadmap for Grant PUD to meet survival standards for salmon passing through our project area and to mitigate for unavoidable losses. This roadmap included significant modifications to Priest Rapids and Wanapum dams, including fish bypasses that efficiently move juveniles past the dams with nearly 100% survival and modernized turbines that minimize impacts to passing fish. Together, these actions have allowed Grant PUD to meet the juvenile survival standards for ESA-listed species at our dams and in our reservoirs *while also meeting the State's current TDG water quality standards*.

Meanwhile, our mitigation for unavoidable losses, including hatchery and habitat programs, are designed to support the recovery of those listed species. We are concerned that Ecology's proposed rule change may result in chronically high TDG in the Columbia River harming both juveniles and adults originating from the Upper Columbia Basin. For example, Methow River spring Chinook, an ESA-listed population that Grant PUD has invested heavily in, migrates through 524 miles of the Columbia River as juveniles and adults during the springtime when TDG will be at its highest. We encourage Ecology to monitor the potential negative effects to salmon identified in the draft EIS closely and to rely on empirical data for its decision making.

Grant PUD appreciates Ecology's consideration of our comments and your efforts to coordinate with us on the proposed update to the State's existing water quality standards in the interest of benefiting both hydropower flexibility and salmon survival.

Ecology staff with questions on Grant PUD's comments should contact me at 509-793-1468, [rhendr1@gcpud.org](mailto:rhendr1@gcpud.org), or Peter Graf at 509-888-4479, [pgraf@gcpud.org](mailto:pgraf@gcpud.org).

Sincerely,



Ross Hendrick  
Senior Manager – Environmental Affairs

Cc: Chad Brown – Ecology  
Breean Zimmerman - Ecology