



United States Department of the Interior



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VIA ELECTRONIC MAIL ONLY

Ms. Angela Zeigenfuse
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject: 401 Certification for the Proposed Grand Coulee Dam Federal National Pollutant Discharge Elimination System Permit (#WA0026867)

Dear Ms. Zeigenfuse:

The Bureau of Reclamation appreciates the opportunity to share comments with the Washington Department of Ecology (Ecology) on its 401 certification for the draft Grand Coulee Dam Federal National Pollutant Discharge Elimination System (NPDES) permit (#WA0026867).

As Ecology is aware, Grand Coulee Dam and the other Columbia River System facilities provide a critically important source of electricity free of carbon emissions. Flexibility in the operation of these facilities plays a vital role in allowing integration of solar and wind generation. The Columbia River System also supports an array of other federal policy prerogatives, from mitigating flood risks to augmenting river flows to support salmon.

Reclamation intends these comments to inform Ecology's perspective of the issues addressed in the draft NPDES permit and the relation to broader regulatory considerations. As described below, changes to operations, particularly at a facility as large as Grand Coulee Dam, require careful consideration to ensure a complete understanding of probable consequences. We are committed to collaborating with Ecology in such evaluations, with an eye toward defining implementable solutions.

Operations

Congress directed Reclamation to operate Grand Coulee Dam for purposes of flood risk management, navigation, power generation, and irrigation. Reclamation also operates the dam to support the survival of Endangered Species Act listed salmon and steelhead, releasing flows seasonally to aid chum spawning and incubation below Bonneville Dam, salmon spawning and incubation at Vernita Bar, and also augmenting flow to aid migrating salmon in the spring and summer. In coordination with other federal system facilities, Reclamation operates the dam to respond to variable factors including water supply conditions, power demand, and adaptively-managed fish flows. These factors change from month to month and season to season.

Reclamation and its partner agencies must account for these many factors across each of the system facilities in the Columbia River basin. Flexibility within the system to accommodate competing needs is limited and adjustments should be made only after careful study of the problem and solutions.

Given these dynamics and the risks of unintended consequences from changing operations, Reclamation welcomes the opportunity to participate in collaborative study design and modeling of potential operational changes, particularly if Ecology considers certification requirements relating to water quality standards attainment and a water quality attainment plan for temperature. Reclamation and its partner agencies have unique knowledge of how the Columbia River system operates that can help support Ecology's evaluations. With that in mind, Reclamation emphasizes that changes to system operations must first be modeled and carefully considered in the context of requirements of federal law and a range of evolving basin conditions. Reclamation hopes that Ecology's schedule will allow for the flexibility to complete such a deliberate approach to a problem of this complexity.

Temperature

Temperature impairment occurs at certain times of the year in certain segments of the Columbia River, a fact well known to Ecology. As recognized in part in the 2021 temperature total maximum daily load (TMDL) for the Columbia River issued by the Environmental Protection Agency, this impairment is the result of multiple causes, some beyond the control of United States entities. Reclamation accordingly recognizes that the thermal issues facing the Columbia River are complex and require creative and collaborative solutions. In the context of this 401 certification, Reclamation urges Ecology to recognize that the cooling water discharges the Grand Coulee NPDES permit authorizes do not contribute meaningfully to temperature impairment in the Columbia River. Reclamation is committed to working with Ecology on these broad challenges, including evaluating the ways Reclamation's operational decisions influence river temperatures. Reclamation hopes Ecology will support through its section 401 certification of the NPDES permit such a collaborative approach to better understanding problem causes and potential solutions.

Temperature Impairment Sources

Some of the largest sources of heat pollution within the area subject to the TMDL are beyond its reach. Ecology has correctly identified that the temperature TMDL did not provide a road map to addressing climate change, for example, or how it could be factored into EPA's model. Events like the 2021 Pacific Northwest Heat Dome show the importance of this disconnect, and present unique challenges to water managers that were not captured in the temperature TMDL.

Similarly confounding implementation, inflowing temperatures from Canada into Lake Roosevelt often exceed water quality criteria. This is a boundary condition, not dissimilar to climate change, that Ecology has identified in the TMDL as unaddressed by EPA. Reclamation does not agree, however, that feasible solutions can be identified by simply arbitrarily resetting

temperature conditions.¹ If the TMDL treats each facility's temperature load allocations as part of a cumulative whole, the load allocation of water inflowing at the border must also be considered in assessing relative temperature impacts of each facility.

Incoming temperatures from Idaho were also identified as an unaddressed boundary condition by Ecology. Reclamation agrees that EPA did not chart a clear path to addressing this boundary condition either. In addition, Idaho Department of Environmental Quality has signaled in response to comments on the Hells Canyon Complex TMDL that it may not be able to help with incoming temperatures from Idaho on the Snake River.²

Given that there does not appear to be a regulatory mechanism to reliably address these boundary conditions, Reclamation acknowledges the difficult position that Ecology faces implementing the temperature TMDL. Reclamation hopes that difficulty translates into a section 401 certification that reinforces a collaborative approach and recognizes the importance of these factors not addressed in the TMDL.

316(b) Best Available Technology

Reclamation urges Ecology to support EPA's approach to determining best available technology under section 316(b) for existing hydroelectric facilities. This approach presents a reasonable framework to consider site specific information with an eye toward meeting the statutory objective of minimizing the risk of entrainment of aquatic biota. Reclamation is committed to working with EPA to further expand understanding of potential entrainment pathways and risks, along with possible solutions.

Conclusion

In conclusion, Reclamation supports Ecology's careful consideration of the NPDES permits for Federal hydroelectric facilities, recognizes the intricacies of the system, and highlights the expertise that Reclamation and its partner operating agencies have to offer in evaluating system actions. Reclamation appreciates the opportunity to submit these comments to Ecology and looks forward to cooperating on these issues moving forward.

Sincerely,

Roland K. Springer
Deputy Regional Director

¹ [Washington State Department of Ecology's Comment on EPA's TMDL for Temperature in Columbia and Lower Snake Rivers \(wa.gov\) pg. 8](#)

² [IDEO response to comments on HCC 401 certification \(ideq.gov\) pg.2](#)