



## Department of Energy

Bonneville Power Administration  
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POWER SERVICES

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In reply refer to: PGA-6

Comment submitted via [Online comment form](#) and Email: [angela.zeigenfuse@ecy.wa.gov](mailto:angela.zeigenfuse@ecy.wa.gov)

Ms. Angela Zeigenfuse  
Washington State Department of Ecology  
Water Quality Program  
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Subject: Comments on the United States Environmental Protection Agency's request to Washington Department of Ecology for Clean Water Act Section 401 water quality certifications on the four lower Snake and four lower Columbia River dams operated by the United States Army Corps of Engineers

Dear Ms. Zeigenfuse:

The Bonneville Power Administration (Bonneville) appreciates the opportunity to provide comments on the United States Environmental Protection Agency's (EPA's) request to Washington Department of Ecology (Ecology) for Clean Water Act (CWA) Section 401 certification on the four lower Snake and four lower Columbia River dams, operated by the United States Army Corps of Engineers (Corps), draft National Pollutant Discharge Elimination System (NPDES) individual permits:

- Ice Harbor Lock and Dam, NPDES Permit No. WA0026816
- Lower Monumental Lock and Dam, NPDES Permit No. WA0026808
- Little Goose Lock and Dam, NPDES Permit No. WA0026786
- Lower Granite Lock and Dam, NPDES Permit No. WA0026794
- Bonneville Project, NPDES Permit No. WA0026778
- The Dalles Lock and Dam, NPDES Permit No. WA0026701
- John Day Project, NPDES Permit No. WA0026832
- McNary Lock and Dam, NPDES Permit No. WA0026824

The eight federal draft NPDES permits would authorize discharges from cooling water, equipment, floor drains, sumps, facility maintenance water, and other miscellaneous discharges. Bonneville's comments focus on providing feedback on what additional water quality conditions should be considered by Ecology to make sure EPA's draft NPDES permits meet Washington State's water quality standards. Bonneville understands that Ecology's 401 certification will need to demonstrate compliance with the applicable provisions of sections 301, 302, 306, and 307 of the CWA and appropriate requirements of state law.

The Corps operates and maintains the four lower Snake and four lower Columbia River dams for multiple congressionally authorized purposes including flood risk management, navigation, hydropower generation, fish and wildlife conservation, irrigation, recreation, water quality, and municipal and industrial water supply though not every dam is authorized for every one of these purposes. While the Corps is congressionally authorized to operate these dams in the Pacific Northwest for multiple purposes, Bonneville is the federal agency Congress authorized to market and distribute the power generated at these dams. In return, Bonneville is required to pay, either directly to the Corps, or as a reimbursement to the U.S. Treasury, (1) all costs associated with power-specific operations and assets (e.g. turbines) and (2) a share of "joint costs," which benefit or mitigate, for all purposes of the dam (e.g. fish mitigation, water quality). For the dams funded using the Corps' Columbia River Fish Mitigation program (CRFM), which includes the lower Columbia and lower Snake River dams listed above, the Northwest ratepayers' (Bonneville's customers) share of joint costs totals 83% for capital investments and 82% for operations and maintenance expenses. Any additional costs applied to these eight dams as a result of this 401 certification or any other NPDES permit will increase Bonneville's costs, which in turn will impact Bonneville ratepayers throughout the Northwest.

Bonneville markets and distributes the hydropower generated at the four lower Snake and four lower Columbia River dams. Bonneville, as part of the U.S. Department of Energy, operates as a not-for-profit federal entity, selling cost-based electrical power and transmission services to benefit the Pacific Northwest, especially the public bodies and cooperatives which serve domestic and rural consumers. In providing these services, Bonneville must balance multiple public duties and purposes, including: assuring the Pacific Northwest has an adequate, efficient, economical and reliable power supply; promoting

energy conservation and the use of renewable resources; and, be consistent with the program developed by the Northwest Power and Conservation Council by protecting, mitigating, and enhancing fish and wildlife in the Columbia River basin that are affected by the development and operations of the federal dams from which Bonneville markets power.<sup>1</sup>

As the principal funding entity for the four lower Snake and four lower Columbia River dams, Bonneville respectfully submits the following comments:

1. It is important to recognize there are limitations to the conditions that may be imposed through Ecology's 401 certification.

As recognized by the EPA in its Fact Sheets for the lower Snake and lower Columbia River draft NPDES permits, these draft permits do not address water flowing through the dams' spillways or passing through turbines. *See National Wildlife Federation v. Consumers Power Company*, 862 F.2d 580 (6th Cir. 1988); *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982). For example, as also recognized in the EPA Fact Sheets, juvenile fish passage spill events, which are adaptively implemented to benefit juvenile and adult fish passage, are not regulated by NPDES permits. Juvenile fish passage spill is adaptively managed for these dams through the National Marine Fisheries Service Columbia River System Biological Opinion and should not be included in Ecology's 401 certification.

As discussed above, the lower Snake and lower Columbia River dams were congressionally authorized to provide flood risk management, navigation, hydropower generation, fish and wildlife conservation, irrigation, recreation, water quality, and municipal and industrial water supply, though not every dam is authorized for every one of these purposes. Therefore, any conditions imposed by the draft NPDES permits and Ecology's 401 certification should not interfere with the Corps' ability to maintain navigation in the lower Snake and lower Columbia Rivers or to operate these dams for the multiple purposes authorized by Congress. *See National Wildlife Federation v. U.S. Army Corps of Engineers*, 384 F.3d 1163 (9th Cir. 2004).

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<sup>1</sup> 16 U.S.C. § 839. Unlike most federal agencies, Bonneville does not receive annual congressional appropriations; instead, the agency is self-financed from revenues received from the sale of power and transmission services. Bonneville utilizes this revenue to not only pay for the continuing costs associated with its programs (including power, transmission, and fish and wildlife investments and maintenance) but also to repay the United States Treasury for the power share of the original federal investment used to construct the Federal Columbia River Power System. The Bonneville Administrator must operate the agency in a manner that allows it to recover its costs "in accordance with sound business principles." 16 U.S.C. § 839e(a)(1). This includes the objectives of setting the lowest possible rates for Bonneville services, while enabling Bonneville to make timely repayments to the Treasury and simultaneously fulfilling multiple public purposes for the benefit of the Pacific Northwest.

2. Ecology should grant 401 certification without conditions to the four lower Snake and four lower Columbia River dams.

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. Accordingly, EPA's draft NPDES permits include effluent limits and requirements that require the permittee to (1) meet national standards that reflect levels of currently available treatment technologies; (2) comply with the EPA-approved state water quality standards in state waters; and (3) prevent unreasonable degradation of the surface water quality. Based on EPA's Fact Sheets for the draft NPDES permits, the discharges at the four lower Snake and four lower Columbia River dams will not affect the quality of the waters of any State. Many of the outfalls covered by the draft permits are likely submerged, and the discharges from these outfalls make up a very small percentage of the total flow of the receiving waters. In fact, EPA's Fact Sheets for the draft NPDES permits state that ***"discharges from these facilities have minimal impact"*** on river temperatures. This statement is based on effluent temperature data collected and submitted by the Corps and then analyzed by EPA.

It is important to note that water temperatures are highly influenced by weather (e.g., high ambient air temperatures). However, because water temperature is important to threatened and endangered salmonids in the Columbia River, EPA is proposing year-round monitoring for temperature in their draft NPDES permits. The proposed year-round monitoring seems to be based solely on the criticality of temperature to threatened or endangered salmonids. However, based on the effluent data collected, it is clear that due to the relatively small flow rates discharged through these outfalls as compared to the flow through the turbines or their receiving waters, the temperature of discharged water would need to be greatly elevated to contribute to elevated water temperatures in the receiving water. Additionally, historical temperatures in the lower Snake River basin prior to the construction of the lower Snake River dams and the Hells Canyon Complex show that temperatures in the free-flowing lower Snake River often exceeded 68°F (20°C) in July and August and occasionally exceeded 25°C. These measurements were taken near the mouth of the Snake River from 1955 to 1958.<sup>2</sup> Thus imposing additional temperature control provisions through a 401 certification with targets that may be unattainable even in an unmodified system is overly burdensome.

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<sup>2</sup> Peery, C. A. and T. C. Bjornn. 2002. Water Temperatures and Passage of Adult Salmon and Steelhead in the Lower Snake River. Technical Report 02-1. U.S. Geological Survey, Idaho Cooperative Fish and Wildlife Research Unit, University of Idaho, Moscow, Idaho.

3. If Ecology includes 401 certification conditions then they should be tied to the scope of EPA's draft NPDES permits and the water quality parameters of concern identified in those permits, as opposed to the dams as a whole.

EPA's draft NPDES permits propose permit effluent limits for oil and grease and pH, and temperature monitoring for cooling water discharges. The draft permits would authorize discharges from cooling water, equipment, floor drains, sumps, facility maintenance water, and other miscellaneous discharges. The draft permits also require the development and implementation of a Best Management Practices (BMP) Plan and Annual Report, Environmentally Acceptable Lubricants (EAL) Annual Report, PCB Management Plan and Annual Report, and Cooling Water Intake Structures (CWIS) Annual Report. The BMP Plan establishes practices and procedures to prevent, minimize or eliminate the discharge of oil and grease. Most discharges that affect water quality are ancillary to the direct processes associated with the multi-purpose objectives of these dams, such as providing navigation or generating electricity. These discharges result primarily from oil spills, equipment leaks, and improper waste storage. Given that these dams discharge into Washington waters close to the Washington-Oregon border, EPA's draft NPDES permits have established effluent limitations and other requirements in the permits to ensure that both Washington and Oregon water quality standards are met. In this manner, the permits will be protective of receiving water uses in both Washington and Oregon.

4. Additional 401 certification conditions are not necessary, could prevent adaptive management of the National Marine Fisheries Service 2019 Columbia River System Biological Opinion (2019 CRS BiOp) and could restrict the Corps' ability to carry out its congressionally authorized purposes.

The construction and operation of these eight Corps' dams were Congressionally-authorized many years ago and do not require additional licensing, permits, or authorizations. Conditions that impair the Corps' ability to effectively operate and maintain the dams for the multiple Congressionally-authorized purposes would not be required or allowed under Section 401 of the Clean Water Act.

The Corps operates and maintains these dams for flood risk management, navigation, hydropower generation, fish and wildlife conservation, irrigation, recreation, water quality, and municipal and industrial water supply. Although the Corps is authorized to operate the

dams for these purposes, those operations are subject to the natural variability of the environment and river system itself. Given that these are run-of-river dams, flow management for the purpose of water quality management is not possible at most dams other than John Day Dam, which has limited storage.

In addition, modifying juvenile fish passage spill operations for the purposes of managing water quality is already provided for through the adaptive management provisions in the 2019 CRS BiOp<sup>3</sup>. River flow levels and spill rates are currently managed effectively with input from the existing Regional Forum, which provides for adaptive management where necessary. The Regional Forum includes representatives from sovereign entities throughout the Pacific Northwest and includes representatives from the state of Washington and tribes. Adaptive management of these dams uses a well-established collaborative approach and is a specific point of emphasis for Bonneville and the Corps. Imposing additional conditions through the 401 certification process can lead to a loss of this existing adaptability and a loss of existing regional collaboration and creativity to solve complex issues. Degradation of water quality could also occur if 401 certification limits the flexibility to test new technologies or operations that the Regional Forum considers that have the possibility of improving water quality.

5. The Corps has already taken and continues to take actions that have resulted in improved fish passage in order to comply with the Endangered Species Act (ESA). Additional conditions through the 401 certification process are unwarranted.

The 2019 CRS BiOp, implemented through the Corps' annual Fish Passage Plan, Fish Operations Plan, and Water Management Plan, provides clear regionally developed guidance on how to comply with the ESA and are the guiding documents for mitigating fish impingement and entrainment and use of the BTA. Additional guidance or conditions through 401 certification are not warranted. The Corps is already implementing these actions. Although Bonneville continues to disagree with EPA that Section 316(b) applies to hydroelectric facilities, any additional conditions through the 401 certification under CWA Section 316(b) could inhibit the implementation of future technological evolutions, such as installation of improved fish passage (IFP) turbines. Preliminary results from 2019 studies at Ice Harbor Dam of juvenile fish passage survival where the Corps has installed one IFP turbine showed an average of 98% survival. Additional studies will be completed after all three of the IFP turbines have been installed.

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<sup>3</sup> A wide range of juvenile fish passage spill levels were assessed through modeling and estimated to have limited impact to water quality parameters during the Columbia River System Operations Environmental Impact Statement development.

6. No additional conditions related to monitoring, reporting and analysis are necessary through the 401 certification.

As per CWA Section 301, the Corps has already established a system for monitoring, reporting, and analyzing the impact of discharges on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is limited to include only those scientific investigations that are necessary to study the effects of the discharge. Additionally, the Corps is already gathering and reporting adequate data and providing analysis that demonstrates such proposal to be, over the life of the projects, the most cost efficient alternative to comply with sections 301 or 302 of the CWA, or the requirements of Section 201 of the CWA. Additionally, the Corps has acted in good faith and has demonstrated reasonable assurance that there will be compliance with the applicable provisions of sections in the draft NPDES permit. The discharge at the dams will not result in the discharge of pollutants in quantities that would pose a reasonable, unacceptable risk to human health or the environment according to EPA's Fact Sheet.

7. Lastly Bonneville requests, to the extent Ecology intends to impose 401 conditions, that Ecology work collaboratively with the Corps (as the applicant) and Bonneville (as the funding agency) before instituting any conditions in a draft 401 certification to ensure that they are implementable and practicable.

Bonneville appreciates the opportunity to provide comments on EPA's request to Ecology for CWA Section 401 certification on the draft NPDES permits for the four lower Snake and four lower Columbia River dams to ensure that any new requirements are reasonable, purposeful, and cost effective. This is especially important to Bonneville because the 401 certification may be issued with additional conditions, which would further impact Bonneville's costs and the region's ratepayers. For awareness, Bonneville embarked on a multi-year effort at cost management for all of its program areas to help stabilize its revenue requirements and limit or eliminate the need for continued rate increases. Bonneville is seeking to manage costs in order to ensure a sustainable path into the future that will allow continued provision of a diverse array of public benefits to the Pacific Northwest, including a reliable and effective

carbon-free power supply, fish and wildlife protection, and energy conservation. Thus, we look forward to working with Ecology and EPA to ensure any new requirements for hydroelectric facilities discharge monitoring provide important data for the region in a cost-effective manner.

Sincerely,

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