



# Fact Sheet

**The U.S. Environmental Protection Agency proposes to modify National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA) to:**

<u>Facility</u>	<u>Permit Number</u>
Bonneville Project, U.S. Army Corps of Engineers	WA0026778
The Dalles Lock and Dam, U.S. Army Corps of Engineers	WA0026701
John Day Project, U.S. Army Corps of Engineers	WA0026832
McNary Lock and Dam, U.S. Army Corps of Engineers	WA0026824
Ice Harbor Lock and Dam, U.S. Army Corps of Engineers	WA0026816
Lower Monumental Lock and Dam, U.S. Army Corps of Engineers	WA0026808
Little Goose Lock and Dam, U.S. Army Corps of Engineers	WA0026786
Lower Granite Lock and Dam, U.S. Army Corps of Engineers	WA0026794

Public Comment Start Date:

Public Comment Expiration Date:

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## **The EPA Proposes to Modify NPDES Permits**

Region 10 of the Environmental Protection Agency (EPA) proposes to modify one of the requirements contained in the eight (8) NPDES permits for the Lower Columbia and Lower Snake River Hydroelectric Facilities referenced above. To ensure protection of water quality and human health, the permits set conditions on the discharge of pollutants from the dams to the Columbia and Snake Rivers.

Region 10 is proposing to modify the monitoring frequency for pH. The remainder of the permit conditions are unchanged and not subject to modification. Therefore, Region 10 is accepting comments only on the proposed modified conditions for pH.

This Fact Sheet includes:

- Information on public comment, public hearing, and appeal procedures
- A description of the proposed modifications to the pH monitoring frequency in the permits
- A map and description of the area where the dams are located
- Technical information supporting the draft modified pH monitoring frequency

## **State Clean Water Act Section 401 Certification**

The Washington Department of Ecology (Ecology) and the Oregon Department of Environmental Quality (Oregon DEQ) have stated that they will not be re-opening the Clean Water Act Section 401 water quality certifications for this permit. The proposed modification is consistent with the final Clean Water Act Section 401 certifications previously issued by both states.

## **Public Comment**

The EPA initially proposed permits for public comment on March 18, 2020, for the Lower Columbia River Hydroelectric Facilities, and on January 15, 2021, for the Lower Snake River Hydroelectric Facilities. The Lower Columbia River permits had two additional public comment periods on January 15, 2021, and September 16, 2022. The Lower Snake River permits had one additional public comment period on September 16, 2022. The EPA received comments from a variety of entities including State and Federal agencies, Tribal governments, private organizations, and individual citizens. Several changes were made to the draft permits due to these comments. However, there were no changes to pH monitoring conditions in response to comments received (EPA 2021b, EPA 2022b). The final Snake River permits became effective on April 1, 2022, and the final Columbia River permits became effective on July 1, 2023.

The EPA is reevaluating the pH monitoring frequency following a U.S Army Corps of Engineers (USACE) request for modification (USACE 2023a). USACE requested a change to pH monitoring at all the outfalls that are covered under the eight permits. USACE submitted data (USACE 2023b) to support this modification. The EPA reviewed the data and is proposing to modify the pH monitoring frequency.

Pursuant to 40 CFR 124.14(c), the EPA is only accepting comments on the proposed pH modifications to the permits. The current pH monitoring requirements and proposed modification to those requirements are discussed in further detail in this fact sheet.

Persons wishing to comment on or request a Public Hearing for the proposed permit modifications may do so in writing by the expiration date of the Public Comment period. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address, and telephone number. All comments on the EPA's proposed permit modifications or requests for a public hearing should be submitted via email to [whitten.hunter@epa.gov](mailto:whitten.hunter@epa.gov). If you are unable to submit comments via email, please call (208) 378-5761.

After the Public Comment period expires, and all comments have been considered, the EPA Region 10 Permitting, Drinking Water, and Infrastructure Branch Manager will make a final decision regarding the permit modifications. If no substantive comments are received, the tentative conditions in the proposed permit modifications will become final, and the permit modifications will become effective upon issuance. If substantive comments are received, the EPA will address the comments and issue the permit modifications. The permit modifications will become effective no less than 30 days after the issuance date unless an appeal is submitted to the Environmental Appeals Board within 30 days pursuant to 40 CFR 124.19.

## **Documents are Available for Review**

The draft permits, fact sheet, and other information can be found at these web addresses:  
<https://www.epa.gov/npdes-permits/discharge-permits-federal-hydroelectric-projects-lower->

snake-river and at <https://www.epa.gov/npdes-permits/discharge-permits-federal-hydroelectric-projects-lower-columbia-river>. For technical questions regarding the permits or fact sheet, contact Hunter Whitten at the phone number or email listed above.

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## **I. BACKGROUND INFORMATION**

### **A. GENERAL INFORMATION**

This fact sheet provides information on the proposed modification of pH monitoring requirements in the National Pollutant Discharge Elimination System (NPDES) permits for eight (8) hydroelectric projects along the Lower Columbia and Lower Snake Rivers. Further detailed information regarding these facilities can be found in the previous fact sheets from 2020, 2021, and 2022 (EPA 2020, EPA 2021a, EPA 2022a). The permits the EPA is proposing to modify are the following:

#### Lower Columbia River Hydroelectric Generating Projects NPDES Permits

- Bonneville Project (Permit No. WA0026778)
- The Dalles Lock and Dam (Permit No. WA0026701)
- John Day Project (Permit No. WA0026832)
- McNary Lock and Dam (Permit No. WA0026824)

#### Lower Snake River Hydroelectric Generating Projects NPDES Permits

- Ice Harbor Lock and Dam (Permit No. WA0026816)
- Lower Monumental Lock and Dam (Permit No. WA0026808)
- Little Goose Lock and Dam (Permit No. WA0026786)
- Lower Granite Lock and Dam (Permit No. WA0026794).

The Lower Columbia River Hydroelectric Facility permits were issued on December 15, 2021, became effective on July 1, 2023, and will expire June 30, 2028. The Lower Snake River Hydroelectric Facility permits were issued on September 9, 2021, became effective on April 1, 2022, and will expire on March 31, 2027. In addition, a minor modification was made to the Lower Dalles Lock and Dam permit on March 27, 2023.

For information regarding specific facility location, please refer to the previous Lower Snake and Lower Columbia River Hydroelectric Facility fact sheets (EPA 2020, 2021a, 2022a).<sup>11</sup>

## **II. RECEIVING WATER**

In drafting permit conditions, the EPA must analyze the effects of the facility's discharges on the receiving water. For further detailed information regarding these receiving waters, see the previous Lower Snake and Lower Columbia River fact sheets (EPA2020, 2021a, 2022a).

### **A. WATER QUALITY STANDARDS**

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. 40 CFR 122.4(d) requires that the conditions in NPDES permits ensure compliance with the water quality standards of all affected States and Tribes. A State's or Tribe's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria and an anti-degradation

policy. The use classification system designates the beneficial uses that each water body is expected to achieve, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the criteria deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

Since this proposed modification concerns effluent monitoring requirements for pH, only the pH water quality standards are relevant to this action. Other water quality standards are not discussed here but can be found in the previous fact sheets (EPA 2020, 2021a, 2022a).

In Washington, the water quality criterion for pH is found in WAC 173-201A-200(1)(g). The criteria for salmonid spawning, rearing and migration, requires pH levels within the range of 6.5 to 8.5 s.u., with a human caused variation within the above range of less than 0.5 units.

In Oregon, the site-specific pH criteria for the mainstem Columbia River is 7.0 to 8.5 s.u. (OAR-340-041-0104(1)). Oregon's water quality standards for pH also state that pH exceedances that are caused from dam impoundments may not violate standards if Oregon determines that the exceedance would not occur without the impoundment and all practicable measures in the impoundment have been taken to comply with the pH criteria (OAR-340-041-0021(2)).

### **III. CAUSE FOR MODIFICATION**

NPDES permits may be modified for cause as provided for in 40 CFR 122.62. Specifically, 40 CFR 122.62(a)(2) states that permits may be modified when the EPA "has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance."

In this case, the EPA proposes to modify the monitoring schedule for pH in response to new information regarding the upstream pH levels. Specifically, the ambient river upstream of the dams in some cases already exceeds the permitted discharge limit for pH (7.0-8.5 s.u.) as shown in Table 1.

**Table 1 : pH measurements greater than 8.5 (s.u) in the Snake and Columbia Rivers**

<b>Location</b>	<b>Study Site</b>	<b>Date Range</b>	<b>pH Data Points</b>	<b>Percent of Data Points Exceeding 8.5 s.u.</b>
Columbia River Near Umatilla	31A070	Dec 1967 – July 2023	423	2%
Columbia River at The Dalles	30A070	March 1968 - Sep 1995	82	2%
Columbia River at Hood River	LASAR34161	June 2007 – Dec 2011	75	3%
Snake River Near Pasco	33A050	July 1960 - June 2023	450	2%
Snake River Near Anatone	35A200	April 1972 - Sep 1979	57	5%
Snake River Below Ice Harbor	33A070	Nov 1968 - Nov 1990	223	1%

Source: Washington Department of Ecology Environmental Information Management System (<https://apps.ecology.wa.gov/eim/search/Default.aspx>)

In the current permits, pH monitoring is required at all outfalls on a weekly basis for the first year of permit coverage. If any outfalls show pH violations in this first year of monitoring, then weekly monitoring is required at that outfall for the duration of the permit. If there are not exceedances at an outfall, the monitoring frequency at that outfall is reduced to monthly.

Historical readings in the Columbia and Snake Rivers show that there is the possibility for background levels of pH to be over 8.5 s.u. Figure 2 highlights multiple instances where the ambient river pH is over 8.5 s.u. in both the Snake and Columbia Rivers.

In the EPA’s more recent permit issuances (Chief Joseph Dam, WA0026891; Grand Coulee Dam, WA0026867; and Dworshak Dam, ID0028586), weekly sampling is only required for the first year regardless of violations, followed by monthly monitoring for the remainder of the permit term. One year of weekly pH monitoring, followed by monthly pH monitoring for the remainder of the permit term, is considered by the EPA to generate sufficient data to inform the reissuance of the permits. The basis for this modification is this new information regarding ambient receiving water pH, and the possibility that under the current permits, the USACE may need to maintain weekly monitoring due solely to ambient river pH exceedances. Table 2 illustrates the pH monitoring requirements in the existing permits. Table 3 illustrates the pH monitoring requirements in the proposed modification to the permits.

**Table 2: Current pH Monitoring**

Parameter	Units	Limit	Sample Location	Sample Frequency	Sample Type
pH	std units	6.5-8.5	Effluent	1/week or 1/month <sup>1</sup>	Grab
1) In the first year of the permit, if there are no exceedances of the pH limit or detection of oil and grease, the required monitoring frequency for that pollutant is reduced to 1/month. If there are <b>violations</b> /detections in the first year of the permit, the frequency will remain 1/week for the remainder of the permit term.					

**Table 3: Proposed pH Monitoring**

Parameter	Units	Limit	Sample Location	Sample Frequency	Sample Type
pH	std units	6.5-8.5	Effluent	1/week or 1/month <sup>1</sup>	Grab
1) During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. In subsequent years, the required monitoring frequency is 1/month.					

#### IV. OTHER LEGAL REQUIREMENTS

##### A. ENDANGERED SPECIES ACT AND ESSENTIAL FISH HABITAT

The EPA completed formal consultation under the Endangered Species Act for the issuance of the Lower Columbia and Lower Snake Dam permits with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) (EPA 2021c). Re-initiation of formal consultation is required under the following circumstances (40 CFR 402.16):

1. If the amount or extent of take specified in the incidental take statement is exceeded;
2. If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
3. If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or,
4. If a new species is listed or critical habitat designated that may be affected by the identified action.

The proposed modifications would change only the pH monitoring frequency at all dam outfalls. This will not increase the amount or extent of take, change the effects upon listed species or critical habitat, or cause any effects not considered in the Biological Opinions. The proposed modifications therefore do not trigger re-initiation of formal consultation under 40 CFR 402.16.

The effects of the permits on essential fish habitat (EFH) are described in Section 3 of the NMFS biological opinion (NOAA 2021). The proposed modifications will not change the effects of the discharge on EFH as quantified in the biological opinions.



## V. STATE CERTIFICATION

Ecology and Oregon DEQ have stated that they will not be re-opening the Clean Water Act Section 401 water quality certification for this permit. The proposed modification is consistent with the final Clean Water Act Section 401 certifications previously issued by both states.

## VI. PERMIT EXPIRATION

This modification will 'not change the expiration date of the permits, which are March 31, 2027 for the Lower Snake River facilities and June 30, 2028 for the Lower Columbia River facilities.

## VII. REFERENCES

- Ecology. 2023. Washington Department of Ecology Environmental Information Management System, October 2023. <https://apps.ecology.wa.gov/eim/search/Default.aspx>
- EPA. 2010. U.S. EPA NPDES Permit Writers' Manual. U.S. Environmental Protection Agency, Office of Water, EPA-833-K-10-001, September 2010. [http://cfpub.epa.gov/npdes/writermanual.cfm?program\\_id=45](http://cfpub.epa.gov/npdes/writermanual.cfm?program_id=45)
- EPA. 2018. Biological Evaluation of the NPDES General Permit for Hydroelectric Facilities Within the State of Idaho, Permit Number IDG360000. February 2018.
- EPA. 2020. NPDES Permit Fact Sheet, U.S. Army Corps of Engineers Lower Columbia River Hydroelectric Facilities. March 18, 2020. <https://www.epa.gov/sites/default/files/2020-03/documents/r10-npdes-usace-lower-columbia-hydroelectric-facilities-fact-sheet-2020.pdf>
- EPA. 2021a. NPDES Permit Fact Sheet, U.S. Army Corps of Engineers Lower Columbia River Hydroelectric Facilities. January 15, 2021. <https://www.epa.gov/sites/default/files/2021-01/documents/r10-npdes-usace-lower-columbia-hydroelectric-facilities-fact-sheet-2021.pdf>
- EPA. 2021b. Response to Comments on Lower Snake River Federal Dam NPDES Permits. <https://www.epa.gov/system/files/documents/2021-09/r10-npdes-usace-snake-river-dams-rtc-2021.pdf>
- EPA. 2021c. Biological Evaluation of EPA-Issued NPDES Permits for Federal Dams in the Lower Columbia and Snake Rivers Basin. May 2021
- EPA. 2022a. NPDES Permit Fact Sheet, U.S. Army Corps of Engineers Lower Columbia River Hydroelectric Facilities. September 16, 2022. <https://www.epa.gov/system/files/documents/2022-09/R10-NPDES-USACE-Lower-Columbia-Hydroelectric-Facilities-Fact-Sheet-2022.pdf>
- EPA. 2022b. Response to Comments on Lower Columbia River Federal Dam NPDES Permits. <https://www.epa.gov/system/files/documents/2022-12/R10-NPDES-USACE-Lower-Columbia-Hydroelectric-Facilities-RTC-2022.pdf>
- NOAA. 2014. Endangered Species Act Section 7(a)(2) Supplemental Biological Opinion, Consultation on Remand for Operation of the Federal Columbia River Power System. January 17, 2014.

NOAA. 2019. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the Continued Operation and Maintenance of the Columbia River System. March 29, 2019

NOAA. 2021. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Issuance of NPDES Permits for Eight Federal Dams on the Lower Columbia and Lower Snake Rivers. September 10, 2021

Oregon DEQ. Oregon Administrative Rules 340-041. Water Quality Standards.  
<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=1458>

USACE. 2023. Letter from Steven Barton, U.S Army Corps of Engineers, to Susan Poulson re: Request for modification to reduce pH monitoring from weekly to monthly at all outfalls for NPDES Permits for Lower Columbia River and Lower Snake River Hydroelectric Facilities. August 14, 2023.

USACE. 2023. pH data from the Lower Snake River and Lower Columbia River Hydroelectric Facilities submitted to EPA, August 14, 2023

Ecology. Washington Administrative Code 173-201A.  
<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A>