

## **Response to Comments**

Grand Coulee Dam, WA0026867

May 18, 2023

### Summary

On January 13, 2022, the U.S. Environmental Protection Agency Region 10 (EPA) issued a public notice for the proposed issuance of a National Pollutant Discharge Elimination System (NPDES) permit for Grand Coulee Dam (WA0026867). The public comment period was scheduled to close on February 28, 2022. EPA received a request to extend the public comment period. EPA granted this request and extended the public comment period to March 30, 2022.

On January 13, 2022, EPA also requested Clean Water Act (CWA) § 401 certifications (401 certifications) from the Washington Department of Ecology (Ecology) and from the Confederated Tribes of the Colville Reservation (Colville Tribes). EPA received requests to extend the deadline for receipt of the 401 certifications. EPA granted these requests and extended the deadline to September 30, 2022. EPA received 401 certifications with conditions from Colville Tribes on September 29, 2022 and from Ecology on September 30, 2022.

On October 11, 2022, EPA submitted a Biological Evaluation (BE) to the U.S. Fish and Wildlife Service (USFWS) as required by the Endangered Species Act (ESA). In the BE, EPA determined that the permitting action was not likely to adversely affect (NLAA) any ESA-listed species or designated critical habitat that occur or may occur within the action area. EPA requested that the USFWS concur on this determination. On February 1, 2023, EPA received concurrence from USFWS.

This document presents EPA's response to comments received during the public comment period, identifies conditions incorporated into the permit as the result of the 401 certifications, and identifies conditions incorporated into the permit as the result of ESA consultation.

### *Changes in response to public comment:*

EPA received comments from the following entities:

- Bonneville Power Administration (BPA)
- Columbia Riverkeeper (CRK)
- Confederated Tribes and Bands of the Yakama Nation (Yakama)
- Bureau of Reclamation (BOR)

EPA has summarized similar comments from different entities in this document when developing its responses. The full comments received can be viewed at <https://www.epa.gov/npdes-permits/npdes-permit-chief-joseph-dam-washington>.

As a result of comments received, the following revisions were made to the permit:

- EPA has changed footnote two in Table 1 of the permit to replace the word “detection(s)” with “exceedance”.
- EPA has changed Table 1 in the permit to: “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.”
- EPA has changed the footnote for oil and grease monitoring frequency in Table 1 in the permit to: “During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. If there are exceedances in the first 12 months after the effective date of the permit in an outfall, the frequency will remain 1/week for that outfall. If there are no exceedances in an outfall, the required monitoring frequency is reduced to 1/month for that outfall.”
- EPA has increased the number of representative outfalls requiring continuous temperature monitoring in Part I.B.10, and included additional representative outfalls as options for representative monitoring as well, as follows (see bold):
  - a) The permittee must select **three** outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 004a, 004b, 004c, 004d, 004e, **004f, 004g, 004h and 004i**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.
  - b) The permittee must select **three** outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 008a, 008b, 008c, 008d, 008e, **008f, 008g, 008h, and 008i**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.
  - c) The permittee must select two outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 011a, 011b, 011c, 011d, 011e, **and 011f**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.
- EPA has updated the reference in Permit Part I.B.13(a) to reference Ecology’s 2022 publication, *Continuous Temperature Monitoring of Freshwater Rivers and Streams* (22-03-216).
- EPA has changed Permit Part II.B.5 to the following (see bold): “Reporting of BMP incidents. Prepare a written report to EPA and Ecology after the incident has been successfully addressed, describing the circumstances leading to the incident, corrective actions taken, and recommended changes to operation and maintenance practices and procedures to prevent incident recurrence. **The report must be submitted according to Part III.H.**”
- EPA has modified Permit Part II.E.4 to the following (see bold): “The CWIS Annual Certification must demonstrate that BTA has been properly operated and maintained and that no changes to **the CWIS or equipment related to the BTA or CWIS** have been made unless documented.”
- EPA has modified Permit Part II.E.3. to the following (see bold): “an evaluation of additional operations or technologies to minimize fish impingement and entrainment, **where feasible. If the permittee determines the evaluation of certain operations or technologies are not feasible, the permittee must provide an explanation in the CWIS Evaluation Report.**”

- EPA has modified Appendix B.3 to the following: “The BMP Plan will describe the quantity and type of all oil products used on-site and how they are monitored and tracked using guidelines from the facility’s Oil Accountability Plan. If the Oil Accountability Plan covers all elements of this permit requirement, the BMP Plan may reference the Oil Accountability Plan. Records are to be kept on-site and available for inspection by EPA, the Colville Tribes or Ecology. Oil gauges should be used that provide appropriate level of markings to ensure operators and maintenance personnel can easily identify an unusual condition. The permittee must notify EPA and Ecology if there is an unaccounted oil release into the environment consistent with the facility’s Oil Accountability Plan.”

#### *Changes in Response to Ecology’s and Colville Tribes’ Final 401 Certifications*

EPA has added all Ecology’s and the Colville Tribes’ 401 certification conditions to the permit pursuant to CWA section 401(d). The 401 certifications received for Grand Coulee Dam can be viewed at <https://www.epa.gov/npdes-permits/draft-npdes-permit-grand-coulee-dam-washington>.

Below are the 401 certification conditions related to general permit conditions, the quality assurance plan (QAP), best management practices (BMPs), Environmentally Acceptable Lubricants (EALs), polychlorinated biphenyls (PCBs), cooling water intake structure (CWIS), temperature and total dissolved gases (TDG). Based on specific language in the certifications, EPA has added language to relevant sections regarding EPA, Ecology and the Colville Tribes review and approval of QAP, BMP, EAL, CWIS, and water quality attainment plan (WQAP) reports and plans. For any plans, or portions of plans, requiring EPA, Ecology or the Colville Tribes approval, plans are considered approved if the agencies do not respond within 30 days after a plan has been submitted.

#### General 401 Certification Permit Conditions

The following general 401 certification conditions were added to the permit:

- EPA has added the following condition to Part I.B of the permit in accordance with the Colville Tribes’ Certification:
  - “The permittee shall be responsible for achieving compliance with the Water Quality Standards for waters of the Colville Reservation from both point and non-point source discharges.”
- EPA has added the following condition to Part I.B of the permit in accordance with Ecology’s Certification:
  - “The permittee is not authorized to exceed water quality standards established in chapter 173-201A WAC.”
- EPA has renamed Permit Part V.L. ‘State **and Tribal** Law’ and added the following language to the section in accordance with the Colville Tribes’ Certification condition:
  - “The Colville Tribes’ certification of this permit does not exempt and is provisional upon compliance with other applicable statutes and codes administered by federal and Colville Tribes agencies. Pursuant to Colville Tribal Law & Order Code Title 4 Natural Resources and Environment, the facility

operator may also require a Waste Discharge permit from either BPA or the Department as applicable as provided in Chapter 4-8 Water Quality Standards and Chapter 4-10 Water Resources Use and Permitting adopted thereunder.”

The Colville Tribe also included the following statements in the 401 certification:

- *“Members of the Confederated Tribes of the Colville Reservation rely heavily on locally caught fish for subsistence and ceremonial uses and have higher consumption rates than the general public. The promulgation of new or amended Water Quality standards or regulations having a direct bearing upon permit conditions or require permit revision, the CTCR may require reopening and modification of the current permit. Other issues that may impact Water Quality Standards for further consideration include:  
--Reopening certification due to substantial changes in conditions or operations  
--Releasing water stored pursuant to the US-Canada Treaty  
--Implementation of the Columbia River System Operation Environmental Impact Statement preferred alternative  
--Seasonal reservoir drawdowns  
--Columbia River System Operations Biological Opinion(s)  
--Increase water flows for recreation”*

EPA will continue to coordinate closely with the Colville Tribes as circumstances in the Columbia River System evolve and will consider modification of the permit in response to the issues identified above. EPA will provide public notice if the permit is modified, unless the modification constitutes a ‘minor modification’ pursuant to 40 CFR 122.63.

- *“Culture: Cultural sites, (archaeological and traditional places) are adversely impacted by various types of non-point “pollution”; caused by CJD, including but not limited to cultural plants, cultural ceremonies, cultural medicines, cultural foods, and, IN PARTICULAR anadromous aquatic species, sustainers of Native American life, traditions, and physical, mental, emotional, and spiritual well-being. Please see Attachment One: “National Point Discharge Elimination System Cultural Resource Assessment.””*

EPA acknowledges the cultural importance of the Columbia River to the Colville Tribes, and the impacts of Grand Coulee Dam on the cultural resources referenced above. This NPDES permit will regulate the point source discharge from the dam, which is a step towards protecting these Colville cultural resources. The “National Point Discharge Elimination System Cultural Resource Assessment” attachment referenced above can be read in full in the Colville Tribes’ 401 certification at <https://www.epa.gov/npdes-permits/draft-npdes-permit-grand-coulee-dam-washington>

#### QAP – Related 401 Certification Permit Conditions

- EPA has modified Part II.A and Schedule of Submissions in the permit to add language from Ecology’s and the Colville Tribes’ 401 certifications related to QAPs (see bold):

- Within 180 days of the effective date of this permit, the permittee must submit a **QAP to EPA for review and approval, and to the Colville Tribes for review.** The permittee may submit **the QAP** as an electronic attachment to the DMR.
- The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP **and submit the revised QAP to EPA for review and approval, and to the Colville Tribes for review.**

#### BMP – Related 401 Certification Permit Conditions

- EPA has modified Part II.B. and the Schedule of Submissions in the permit to add language from Ecology’s and the Colville Tribes’ 401 certifications related to BMPs (see bold):
  - The permittee must submit a **BMP Plan to EPA for review and approval, and to the Colville Tribes for review,** within 180 days of the effective date of the permit. The permittee may submit the BMP Plan as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY\_MM\_DD\_WA0026867\_BMP\_05899, where YYYY\_MM\_DD is the date that the permittee submits **the BMP Plan.**
  - Under BMP Plan Modification in Part II.B in the permit, EPA has added the following language: **“The permittee must submit the revised BMP plan to EPA for review and approval, and to the Colville Tribes for review.”**
  - **The BMP Annual Report must report sampling data that is designed in a way to quantify source identification and reductions in order to substantiate the adaptive management process. The sample and design and data analysis including methods and method reporting levels, must be included in the QAP (Part II.A.) and updated as necessary.**
  - **The BMP Annual Report must include the adaptive management procedures implemented based on the results of all monitoring used to evaluate BMPs.**
  - Under Signature and BMP Plan Review (Part II.B.4.c), EPA has added the following language: “Within 30 days of such notification from the Director, (or as otherwise provided by the Director), or an authorized representative, the permittee shall make the required changes to the BMP Plan and shall submit to the Director a **revised BMP Plan with the requested changes for review and approval, and to the Colville Tribes for review.**”

#### EAL – Related 401 Certification Permit Conditions

- EPA has modified Part II.C. and the Schedule of Submissions of the permit to add language from Ecology’s and the Colville Tribes’ 401 certifications related to EALs (see bold):
  - “The permittee must submit the **initial** EAL Annual Report by February 28 following the first full calendar year of permit coverage **to EPA and Ecology for review and approval, and to the Colville Tribes for review.** The permittee must submit **subsequent** EAL Annual Reports **to EPA for review and approval, and to the**

**Colville Tribes for review, by February 28 each year. The EAL Annual Reports must be comprehensive, complete, accurate, and concur with the state’s interpretation of technical feasibility.** Annual EAL reports must be signed in accordance with Part V.E. (“Signatory Requirement”).”

- The permittee may submit the EAL Annual Report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY\_MM\_DD\_WA0026867\_EAL\_05899, where YYYY\_MM\_DD is the date that the permittee submits the **EAL Annual Report**.

#### PCB-Related 401 Certification Permit Conditions

- EPA has modified Part II.D. of the permit to add language from Ecology’s and the Colville Tribes’ 401 certifications related to PCBs (see bold):
  - The permittee must submit the PCB Management Plan (PMP) to **EPA and Ecology for review and approval, and to the Colville Tribes for review**, within one year from the effective date of the permit
  - The PCB Annual Report must be submitted to **EPA for review and approval, and to the Colville Tribes for review**, by February 28 following the first full calendar year of permit coverage, and annually thereafter. The file name of the electronic attachment must be as follows: YYYY\_MM\_DD\_WA0026867\_PCB\_Annual\_Report\_55099, where YYYY\_MM\_DD is the date that the permittee submits the report. The PCB Annual Report must be retained on site and made available to EPA, Ecology and the Colville Tribes upon request.

#### CWIS – Related 401 Certification Permit Conditions

- EPA has modified Part II.E. of the permit to add language from Ecology’s and the Colville Tribes’ 401 certification conditions related to the CWIS (see bold):
  - The permittee must prepare an initial CWIS Annual Report by February 28 following the first full calendar year of permit coverage and submit it to **EPA and Ecology for review and approval, and to the Colville Tribes for review. The first annual report must include information on all CWIS that address the missing application submittal requirements of 40 CFR 122.21(r)(2) and (3) and applicable provisions of paragraphs (4), (5), (6), (7) and (8).** The permittee must submit subsequent CWIS Annual Reports to EPA for review and approval, and to the Colville Tribes for review, by February 28 each year.
  - **The Permittee must develop a CWIS operations and maintenance manual that includes procedures for evaluating both impingement and entrainment related to the CWIS. This does not include the intake for hydroelectric generating waters. The permittee must maintain a copy of the manual on-site at the facility and make it available to EPA or an authorized representative upon request.**
  - **Nothing in this permit authorizes take for the purposes of a facility’s compliance with the Endangered Species Act.**

## Temperature and TDG – Related 401 Certification Permit Conditions

- EPA has added the following language at Part II.F. and Schedule of Submissions in the permit from Ecology’s and the Colville Tribes’ 401 certification conditions:
  - (Based on Ecology’s and the Colville Tribes’ Conditions) The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load (TMDL) and associated implementation plans (RCW 90.48.080 and WAC 173-201A-510(5)).
  - (Based on Ecology’s Condition) The permittee must comply with TDG standards in Washington Administrative Code (WAC) 173-201A-200(1)(f), or any future modification to the standards thereof.
  - (Based on Ecology’s Condition) The permittee must implement the TDG abatement strategies and meet the load allocation as stated in the Mid-Columbia River and Lake Roosevelt Total Dissolved Gas TMDL issued in June 2004. (see also the TMDL Appendix A: Implementation Plan). (RCW 90.48.080) Compliance with the TDG criterion does not apply when the inflows to the project from Lake Roosevelt exceed the rate equivalent to the 7Q10 flows as defined in WAC 173-201A-200(1)(f)(i). The 7Q10 exceedance flow for the Columbia River at Grand Coulee Dam is 222 kcfs.
  - (Based on the Colville Tribes’ Condition) Except during involuntary spill events, dam operations-including spill to enhance fish passage-should not cause or contribute to exceedance of the applicable TDG water quality criteria or any short-term modification thereto authorized under Washington/Colville Tribes Water Quality Standards. Dam operations must allow the variance of up to 120% TDG during the spring fish passage period.
  - The permittee must consult with Ecology and the Colville Tribes to develop a WQAP per the conditions below:
    - (Based on Ecology’s and the Colville Tribes’ Conditions) The WQAP shall include all applicable requirements in WAC 173-201A-510(5) *Compliance schedule for Dams*, and must include a detailed strategy for achieving Washington’s and the Colville Tribes’ water quality standards for temperature and TDG and associated designated uses.
    - As an element of the WQAP, the permittee must include a TDG monitoring and quality assurance project plan (QAPP). This QAPP is in addition to the quality assurance plan defined in Part II.A. of the permit. At a minimum, the QAPP must contain the following provisions:
      - (Based on Ecology’s Condition) A map of the TDG monitoring and compliance locations
      - (Based on Ecology’s Condition) A description of the monitoring, sampling frequency, equipment and sampling procedures, analytical methods, quality control procedures, data handling and assessment procedures, and reporting protocols.

- (Based on the Colville Tribes' Condition) A description of the frequency, timing and location of field monitoring for gas bubble trauma in fish populations and other forms of vertebrate and invertebrate aquatic life, which must be conducted throughout the fish spill season, including when TDG levels exceed the water quality criteria during flood or involuntary spill events.
  - (Based on Ecology's Condition) The permittee must review and update the QAPP annually based on data quality objectives related to evaluation of TDG abatement and control strategies.
  - (Based on Ecology's and the Colville Tribes' Condition) Implementation of the monitoring program must begin as soon as Ecology and the Colville Tribes explicitly or implicitly approve their portions of the QAPP. Changes to the QAPP must be provided to Ecology and the Colville Tribes before taking effect.
- The permittee must submit the TDG water quality data and TDG gas bubble trauma data, to EPA, Ecology and Colville Tribes by February 28 following the first full calendar year of TDG monitoring, and annually thereafter. The TDG Data Report must be sent to EPA as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY\_MM\_DD\_WA0026867\_TDG data\_43599, where YYYY\_MM\_DD is the date that the permittee submits the report. The TDG data must be sent to Ecology and Colville Tribes at the addresses at Permit Part II.F.7, unless agreed upon by Ecology or the Colville Tribes.
  - The permittee must submit the WQAP to the Colville Tribes and Ecology as follows:
    - The permittee must provide the scope of the WQAP to Ecology and the Colville Tribes for review one year after the permit effective date.
    - The permittee must submit the WQAP QAPP to the Colville Tribes and Ecology for review and approval one year after the permit effective date. Ecology will have approval authority for II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
    - The permittee must provide the final WQAP to Ecology and the Colville Tribes for review and approval within two years of the permit effective date. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
    - The permittee must submit a progress report to Ecology and the Colville Tribes for review and approval within six years of the permit effective date. The permittee must submit a summary report to Ecology and the Colville Tribes for approval within nine years of the permit effective date and prior to the end of the ten-year dam compliance period. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
  - The permittee must submit the WQAP and TDG Data Report to Ecology and the Colville Tribes at the following addresses, unless agreed upon by Ecology or the Colville Tribes:

Watershed Management Section, WQP-HQ  
Washington Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600

Confederated Tribes of the Colville Reservation  
Environmental Trust Department  
ATTN: Watershed Program Manager  
PO Box 150  
Nespelem, WA 99155

#### [Editorial Corrections to the Permit](#)

EPA has corrected the following editorial errors in the Grand Coulee Dam permit and added clarifications.

- EPA has corrected typos, formatting, and punctuation errors and added abbreviations in the permit
- EPA has narrowed the Temperature Data Report submittal to require only Excel or Excel-compatible file submittals. Permit Part I.B.11(b) now states (see bold): “Use the temperature device manufacturer’s **or compatible** software to generate (export) an Excel or Excel-compatible ~~text or electronic ASCII text file.~~”
- The reference to Part I.10 in Permit Part I.B.14 has been corrected to read Part I.B.10.
- The reference to Part I.10 in Permit Part I.B.12 has been corrected to read Part I.B.10.
- EPA has clarified the submittal process for plans and reports in Permit Part III.B.3 and other sections of the permit that refer to plans and reports.
- EPA has changed Permit Part III.G. to include a phone number for contacting the Colville Tribes, with the understanding that this number might change.
- EPA has updated some submittal requirements to allow for electronic submittal of reports. (See Permit Part III.G, III.I and V.K.)
- EPA updated the penalty amounts in Section IV.B *Penalties for Violations of Permit Conditions* to reflect current amounts at the time of permit issuance.
- EPA has changed Permit Part III.G.2 to the following (see bold): “The permittee must also provide a written submission within five **calendar** days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above.”

## Response to Comments

The comments are in the following categories: General Comments; CWIS; Permit Conditions – Monitoring, Effluent Limits, and Plans; 401 Certification; and Tribal Consultation and Engagement.

### *General Comments*

**Comment 1.** Reclamation appreciates EPA’s willingness to recognize the safety risks of collecting effluent samples in a dam tailrace at submerged outfalls, including the staff agreement to perform sampling at internal points in the facility. To reflect this safety protocol, Reclamation recommends the following addition clarifying the sample collection sites.

*The permittee must collect effluent samples from the effluent stream **at the safest location** after the last treatment unit prior to discharge into the receiving waters. (BOR p. 4)*

**Response.** EPA understands that the combined discharge water is not accessible for direct sampling in some cases as referenced above. EPA supports the use of a flow-weighted grab sample from two sampling points for outfalls with inaccessible sampling locations as long as the sampling points are “after the last treatment unit” – in this case after being utilized to cool equipment or having any potential contact with oil and grease or other pollutants – and “prior to discharge into the receiving waters”, as described in Part I.B.16 of the permit. The permit also states in Part III.A that “samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.” A flow-weighted grab sample where sample water is combined at a flow-weighted proportion to represent outfall water quality prior to water quality analysis, is considered by EPA to be representative of a grab sample at the inaccessible outfalls. No changes were made to the permit as a result of this comment.

### *Cooling Water Intake Structures (CWIS)*

**Comment 2.** The permits are for cooling water and sump discharges from Grand Coulee Dam. Given the expansive size of the facility, it regularly undergoes wider facility changes that do not impact the nature of the permitted discharges. Because those changes are in turn not relevant to a CWIS annual certification, we request EPA clarify here that “facility” should mean the CWIS only, not the entire facility of Grand Coulee Dam, most of which bears no relation to cooling water intake structures.

*The permittee must include a CWIS Annual Certification and submit it to EPA, Colville Tribes, and Ecology on February 28th after the first year of the effective date of the permit and annually thereafter. The CWIS Annual Certification must demonstrate that BTA have been properly operated and maintained and that no changes to the ~~facility~~ CWIS have been made unless documented. (BOR p. 4)*

**Response.** The intent of the permit condition is to ensure that no changes are made to the CWIS that would affect best technology available (BTA) in a manner that would increase the

amount of entrainment or impingement of organisms. EPA agrees to change the wording because many changes to the facility at large may not impact the CWIS or BTA. EPA has modified Permit Part II.E.4 to the following (see bold): “The CWIS Annual Certification must demonstrate that BTA has been properly operated and maintained and that no changes to **the CWIS or equipment related to the BTA or CWIS** have been made unless documented.” EPA has also modified Permit Part II.E.3. to the following (see bold): “an evaluation of additional operations or technologies to minimize fish impingement and entrainment, **where feasible. If the permittee determines the evaluation of certain operations or technologies are not feasible, the permittee must provide an explanation in the CWIS Evaluation Report.**”

*Permit Conditions – Monitoring, Effluent Limits and Plans*

PCBs and COD

**Comment 3.** Riverkeeper supports EPA’s decision to require the Permittees to monitor their discharges for PCBs. The Columbia River already contains unsafe levels of PCBs, and lubricants and construction materials at dams on the Columbia contain PCBs that have a history of reaching the river. To generate the best and most relevant information about the Dams’ PCB pollution, EPA should require the Permittees to do at least quarterly monitoring with method 1668 or another test sensitive enough to detect PCBs at the level of Washington’s water quality criteria. While the proposed 608 testing methodology in the Draft Permits may be useful in some instances, the more sensitive method 1668 test is critical to understanding the PCB loading caused by the Dams. (CRK p. 7)

**Response.** Part VI.D of the Fact Sheet (page 42) describes the basis for requiring the use of EPA Method 608.3 for sampling dam discharge water. Method 608.3 is an EPA-approved method for PCBs and analyzes for PCB Aroclors. The range of potential sources of PCBs at dams are likely to exhibit Aroclor patterns if present in discharge water, in contrast to PCB congeners which may indicate background PCBs present in the Columbia River or sources of inadvertently produced PCBs within the dam. Since the PCB requirements in this permit are focused on sources of PCBs from the dams, sampling methods for Aroclors are more appropriate. The reporting limit for this method and matrix is expected to be 0.1 µg/L, which is sufficient to capture PCB discharges associated with PCB sources in the dam. No changes were made to the permit in response to this comment.

**Comment 4.** Bonneville requests EPA to clarify Part I.B.6 of the permit which states, “The permittee is prohibited from discharging polychlorinated biphenyl (PCB) compounds such as those commonly used for transformer fluid.” This statement does not provide a clear definition of what constitutes a discharge of PCBs. The statement could be interpreted to mean that PCBs must be discharged at concentrations below the freshwater toxicity criteria, or below the reporting or detection limit for a specific analytical method. Bonneville requests that EPA provide clarification for this statement. (BPA p. 5)

**Response.** Part I.B.6 of the permit prohibits the discharge of PCBs. The PCB Management Plan, which includes monitoring, planning, and actions, is a means to ensure compliance with

the prohibition of PCBs. For this permit, EPA considers PCB concentrations below the EPA Method 608.3 detection limit to be in compliance with the no discharge provision. No changes were made to the permit in response to this comment.

**Comment 5.** Bonneville requests that all outfalls discharging under 1 million gallons/day (MGD) should be waived from sampling due to their de minimis impact. Bonneville requests that the timing and extent of the monitoring, analysis, and reporting requirements for pH, temperature, chemical oxygen demand (COD), oil and grease, and PCBs be re-evaluated for utility, practicability, and cost effectiveness. Commenters note that the facility does not add to or concentrate COD. Additionally, this water quality parameter is not influenced by activities at the dam and reflect pass through influent water quality. Bonneville requests that EPA coordinate directly with the Reclamation to identify representative monitoring and sampling locations and monitoring frequency that results in data utility, practicability and cost effectiveness.

Bonneville requests that EPA reduce the scope of monitoring, analysis, and reporting to include only those scientific investigations that are necessary to study the effects of the discharge that may be impacted by processes at the facility, and not a byproduct of influent pass-through such as chemical oxygen demand (COD) and pH. Costs for implementing Grand Coulee's draft permit, along with costs for implementing the draft NPDES permit for Grand Coulee Dam and EPA's NPDES permits for the four lower Snake and pending four lower Columbia River facilities, will further increase the significant financial impact to Bonneville and the region's ratepayers when less burdensome monitoring and sampling would produce sufficient scientific information. (BPA p. 3 and 5)

**Response.** See the Response to Comment 6 with regard to oil and grease monitoring frequency; See Response to Comment 10 with regard to pH monitoring frequency; See Response to Comment 12 with regard to temperature monitoring frequency.

The justification for PCB monitoring in the permit can be found in the Grand Coulee Dam Fact Sheet on pages 35-36. PCB monitoring is required only at outfalls where BOR identifies a potential source of PCBs and potential pathways for PCB discharges in the PCB Management Plan. The frequency and duration of characterization monitoring at these outfalls is minimal, and is necessary given the potential PCB pollution pathways that may be identified by BOR.

With regard to COD, EPA determined that additional data were necessary for the next permit cycle, since there was no clear explanation for the higher-than-expected concentrations of COD at certain outfalls submitted as part of the permit application. The permit requires quarterly grab samples at four outfalls, which does not present an undue burden.

With regard to waiving sampling from outfalls discharging under 1 mgd, all outfalls with numeric effluent limits require monitoring to determine compliance with the limits. See 40 CFR § 122.41(j).

Monitoring requirements already reflect the minimum frequency and representativeness to quantify discharge concentrations, based on review of existing data and facility processes. No

changes have been made to the permit in response to this comment.

## Oil and Grease and pH

**Comment 6.** Bonneville recommends reducing oil and grease monitoring requirements to more closely align with Grand Coulee’s risk of discharging oil and grease and for parity with Washington’s permit for Wanapum Dam and draft permit for Wells Dam. In the EPA Fact Sheet, EPA acknowledges, “The facility has Francis turbines, which are used at dams with a large hydraulic head and use fewer lubricants than the Kaplan turbines at many other Columbia and Snake River Dams. Francis turbines are less likely to involve oil and grease discharges to hydroelectric generation water, but leaks are still possible.” Commenters also note that Kaplan turbines have servomotors to adjust vanes that are located within the turbine shaft. These adjustable components require lubrication that places oil and grease closer to the equipment-to water interface. Francis turbines at Grand Coulee and Chief Joseph, by contrast, have nonadjustable blades and the servomotors are not inside of the turbine shaft, increasing distance of lubricated parts from equipment to water interface. Due to this difference in the oil to equipment to water interface and thus lower risk of oil discharge, an oil and grease sampling regimen designed to detect leaks on Kaplan type turbines cannot reasonably be applied to Francis turbines

**Comment 7.** The draft permit for Grand Coulee requires weekly monitoring for oil and grease for at least the first year of monitoring. In contrast, Wanapum Dam and Wells Dam operate Kaplan turbines and are required to monitor oil and grease monthly for the entirety of its permit and draft permit term, respectively. As Grand Coulee’s Francis turbines are not more likely to discharge oil and grease, Bonneville requests a reduction in oil and grease monitoring to monthly for the entire permit term. (BPA p. 5; BOR p. 2-3))

**Response.** EPA is the permitting authority for the federal dams. With regard to sampling frequency for oil and grease, Grand Coulee Dam is treated the same as other federal dams. EPA recognizes that the permit includes numeric limits for a large number of outfalls, which require effluent monitoring to determine compliance with these limits. Since this is the first permit being issued to this facility, the initial cost in both money and employees can be significant (e.g., installing the necessary monitoring equipment). EPA considered these factors when developing monitoring requirements in this permit, while also determining what is necessary to ensure that sufficient data are collected to determine compliance and to characterize effluent in future permits.

All outfalls with numeric effluent limits require monitoring to determine compliance with the limits. See 40 CFR § 122.41(j). The permit requires weekly grab samples in the first 12 months of the effective date of the permit, and monthly grab samples thereafter if there are no exceedances of the effluent limit in the first year. As explained in the Grand Coulee Dam Fact Sheet Section IV.D. p. 27-28, this level of monitoring is necessary to ensure oil and grease discharges are appropriately characterized. This is the first NPDES permit for Grand

Coulee Dam, and outfall-specific oil and grease data are limited to one to two samples per outfall from the permit application. EPA acknowledges that Francis runner (fixed blades) turbines involve much less oil interfacing with water than the Kaplan (hydraulically controlled movable blades) turbines in the Lower Columbia and Lower Snake River federal dams, where final permits also require weekly sampling for at least the first year. However, weekly monitoring for the first year is needed to provide quantitative, outfall-specific data. EPA considers this to be a reasonable approach to ensure compliance while also allowing for less frequent monitoring during the permit term if monitoring shows compliance with the limits in the first year of the permit term. No changes were made to the permit as a result of this comment.

**Comment 8.** Section 301(a) of the Clean Water Act prohibits discharges of oils, greases, lubricants, cooling water, and other pollutants to the Columbia River from the Dams without NPDES permit authorization. Because of the lack of NPDES permits, the Permittees have failed to monitor, report, and reduce pollution discharges pursuant to the Clean Water Act and its state and federal implementing rules for decades. The Dams discharge oils, greases, lubricants, heat, and other pollutants. Some of the pathways by which these pollutants reach the Columbia River—such as oil sumps and cooling water discharge ports—are regulated as point sources in the Draft Permits. Other pollution pathways are not identified or regulated as point sources, including (but not limited to) the following:

- Francis turbines, that leak and discharge oil and grease to the Columbia River;
- Wicket gates, with gate bearings lubricated with grease or another lubricant that is continuously fed into the bearings and discharged directly into the river; and
- Lubricated wire ropes where the lubricant comes into direct contact with river water.

All such discharges occur through point sources and must be addressed as such in the final NPDES permits. Oil and grease releases from point sources at the Dams are routine. As EPA is aware, and as Riverkeeper detailed in its Notice Letters that caused the Permittees to apply for these permits, Permittees have reported a number of such releases from the Dams. Periodic communications received by Riverkeeper from parties with reason to know about the operations of these Dams suggest that the oil discharges reported by the Permittees are not the only oil releases that have occurred. Discharges at the Dams highlight the need for these NPDES permits and the important role they will play in reducing pollution in the Columbia Rivers. (CRK p. 5)

**Response.** As discussed on pages 13-14 of the Grand Coulee Dam Fact Sheet, the proposed permit addresses wastewater discharges from discrete outfalls at the dam. The permit does not authorize waters that flow over the spillway or pass through the 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). Accordingly, there are no specific effluent limits or monitoring requirements that apply to the pass-through water associated with the turbines. However, the permit does contain an oil accountability, tracking and reporting BMP requirement that applies to the whole facility, which provides accountability for any oil and grease discharges at the facility. Through this mechanism, BOR will be accountable for all oil and grease at the dams, even if it isn't directly associated

with a permitted outfall. No changes were made to the permit as a result of this comment.

**Comment 9.** Bonneville requests changing the reduction condition to be relative to the permit effluent limit. In Part I.B. Effluent Limitations and Monitoring, a note in Table 1 of the draft permit states that “if there are no exceedances of the pH limit or detection of oil and grease in an outfall, the required monitoring frequency for that pollutant is reduced to 1/month for that outfall. If there are exceedances/detections in the first year of the permit in an outfall, the frequency will remain 1/week for the remainder of the permit term for that outfall.”

The Method 1664 oil and grease method detection limit is 1.4 mg/L, whereas the draft permit’s oil and grease effluent limit is 5 mg/L. Bonneville requests that “exceedance” replaces “detection” and “/detection” is removed. Otherwise, the condition for reducing monitoring frequency will be overly stringent. (BPA p. 5).

**Response.** EPA has changed footnote one in Table 1 of the permit to replace the word “detection(s)” with “exceedance”. If measurements are taken and there are no effluent limit exceedances, the monitoring frequency can be reduced as stated.

**Comment 10.** Reclamation recognizes that, because the sump discharges collect leaks and water from the entire facility, there is a small risk that pH affecting compounds could enter these discharges. However, for generating unit discharges, Grand Coulee Dam cannot modify the pH of the influent. These waters enter the facility, cool equipment, and are discharged. Presumably, the EPA considers this sampling requirement to relate to lubricant discharges, but oil and grease does not impact the pH of water, even in the presence of a discharge. Commenters also note that according to the EPA Fact Sheet, section III(D) Impaired Waters / TMDLs section, which accompanied the draft NPDES permit, it appears that there are no water quality-limited stream segments for pH in proximity of Grand Coulee Dam.

Reclamation understands that in response to comments on the four lower Snake River federal dams NPDES permits requesting pH monitoring removal from the entire permit, EPA stated that pH can be an indicator of problems with maintenance and operations. On that basis, EPA declined to remove the requirement. Reclamation is aware of no basis to conclude that pH monitoring can indicate problems with maintenance or operation of generating units. Reclamation accordingly urges EPA either to explain the bases for this conclusion, or not require pH monitoring for generator outfalls.

The currently proposed permit requirements are also inconsistent with other recent final or draft NPDES permits issued by Washington State for non-federal Columbia River facilities that have significantly less stringent requirements for pH (Wanapum: 2 out of 12 outfalls, sumps only, monthly samples only and Wells: 16 out of 26 outfalls, non-cooling water only, monthly samples only). Should EPA continue to require pH monitoring at cooling water

outfalls, despite the project's inability to influence pH in cooling waters, Reclamation requests that the pH monitoring schedule be set to match the recommended oil and grease schedule of one event monthly for the entire duration of the permit term. This sampling schedule will provide over four hundred potential compliance samples per year, far more than needed in light of the minimal risk of pollutant discharge, while reducing unnecessary costs to the taxpayers and the region's electric ratepayers. (BPA p. 3-4; BOR p. 3)

**Response.** pH can be an indicator for problems with operations and maintenance if large amounts of chemicals or other pollutants are released. EPA concluded that the double-walled cooling water piping reduces the risk of cooling water contact with oil and grease and other pollutants, but it does not remove the risk for equipment failures to cause discharges. In addition, the permit prohibits the discharge of toxics, deleterious materials, and excess nutrients that can cause visible slime growth or other nuisance aquatic growths impairing beneficial uses of the receiving water. pH serves as a proxy for these discharges.

Since EPA's initial conclusion is that pH can be influenced by dam operations, and since there is limited baseline information from permit applications, the permit includes numeric water quality-based effluent limits based on Washington water quality standards for all outfalls at the dam. EPA, however, believes that weekly sampling in the first year and monthly sampling thereafter will be sufficient to characterize pH in effluent.

All outfalls with numeric effluent limits require monitoring to determine compliance with limits. See 40 CFR § 122.41(j). The permit requires weekly grab samples for the first year, and monthly grab samples thereafter. As explained in the Grand Coulee Dam Fact Sheet V.C. p. 32 weekly monitoring is necessary to ensure pH discharges are appropriately characterized. This is the first NPDES permit for Grand Coulee Dam, and outfall-specific pH data are limited to one to two samples per outfall from the permit application. Weekly monitoring for the first year is needed to provide quantitative, outfall-specific information data. EPA considers this to be a reasonable approach to ensure compliance while also allowing for less frequent monitoring during the remainder of the permit term.

EPA has changed Table 1 in the permit to: "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" EPA has changed the footnote for oil and grease monitoring frequency in Table 1 in the permit to: "During the first 12 months after the effective date of the permit, the required monitoring frequency is 1/week. If there are exceedances in the first 12 months after the effective date of the permit in an outfall, the frequency will remain 1/week for that outfall. If there are no exceedances in an outfall, the required monitoring frequency is reduced to 1/month for that outfall."

## Temperature

**Comment 11.** The EPA's assessment and regulation of temperature impacts are inadequate. The EPA only considered and set controls for the discharge of "wastewater" from the Facilities. However, it is not apparent that the EPA evaluated, or set controls for, temperature impacts of any wastewater other than cooling water. The EPA must correct this

deficiency by evaluating and setting necessary temperature controls for all wastewater discharges.

With respect to cooling water, the EPA minimizes the effect of discharges on water temperature by asserting that these discharges will combine with water passed over the spillways. This ignores the fact that water above the dams is excessively warm, in part because of other upstream dams. Each dam on the Columbia River has a compounding effect on water temperature. Any dilution of the permitted discharges will be offset by the cumulative temperature impact of dams on the Columbia River. The EPA should consider how the Facilities contribute to this cumulative impact and regulate discharges from the Facilities accordingly.

Importantly, the NPDES Permits only regulate "wastewater" from the Facilities and do not "address waters that flow over the spillway or pass through the turbines." This ignores a significant part of the Facilities' contribution to the temperature impairment of the Columbia River: reservoir heat loading. The EPA's Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load ("TMDL") acknowledged that heat loading in dam impoundments contributes a substantially greater temperature impact than any point sources or tributaries in the Columbia River. This finding is supported by the Chief Joseph Dam Fact Sheet, which notes that influent temperature measurements range from 7.8° C to 19.9° C (46° F to 67.8° F) while effluent temperatures range from 18° C to 37.6° C (64.4° F to 100.4° F). This is an increase of approximately 20° to 30° C.

The EPA cites *National Wildlife Federation v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982) and *National Wildlife Federation v. Consumers Power Co.*, 862 F.2d 580 (6th Cir. 1988) as supporting its decision to not regulate discharges over the spillway and through the turbines. However, "neither case categorically exempts all dams from the discharge permit requirements of the Clean Water Act." They only stand for the proposition that dam operators discharge a pollutant for purposes of the Clean Water Act when they have added pollutants to navigable waters "from the outside world."

The spillways and turbines of the Facilities do add pollutants "from the outside world" into navigable waters. The reservoir for Grand Coulee Dam is a component piece of the greater Grand Coulee Dam facility. The construction of Chief Joseph Dam created the Rufus Woods Lake reservoir. Both reservoirs can be fairly characterized as being part of their respective Facilities. Temperature pollution accumulates in the reservoirs through heat loading. This pollution would not exist, at least in its current levels, but for the existence of the Facilities (i.e., the Facilities add pollution "from the outside world"). The Facilities then move the polluted water over the spillways and through the turbines to discharge into downstream navigable waters. In other words, the Facilities' spillways and turbines do not simply "pass pollution from one body of navigable water into another." The EPA must regulate these discharges through the NPDES Permits in order to properly address temperature impairment in the Columbia River.

For decades, the U.S. Army Corps of Engineers ("Corps") have operated the Facilities

without discharge permits and in exceedance of applicable water quality criteria. The Facilities, as well as the other dams, restrict the natural flow of the Columbia River, which contributes to water temperatures that are harmful or lethal to salmonids. Climate change is exacerbating these problems. If the EPA continues to ignore the temperature impacts of the Facilities and the other dams on the Columbia River, the target temperatures in the TMDL will not be met and salmon populations will continue to suffer.

Apart from the points described above, YN-DNR offers the following recommendations for improving temperature controls in the NPDES Permits:

- The EPA must ensure that the NPDES Permits are stringent enough to achieve state and tribal water quality standards for temperature and to prevent degradation of surface water quality both upstream and downstream of each Facility.
- The EPA should include stringent conditions in the NPDES Permits to adequately protect downstream state and tribal water quality.
- The EPA should require the Corps to implement additional mitigation measures at the Facilities. These measures could include: drawing down of selected reservoirs; increasing summer flows for temperature and fish migration; and modifying flows for fish habitat.
- The EPA should require the Corps to submit a water quality attainment plan ("WQAP") detailing temperature control strategies for achieving applicable water quality criteria and protecting downstream fish migration and habitat needs. The Corps should provide the WQAP to YN-DNR for review and comment. (Yakama Nation p. 2-4)

**Response.** Dams increase temperatures in the Columbia and Snake Rivers as both point sources and non-point sources. The Columbia River TMDL assigns WLAs to the point source portion of the dams (discharges from outfalls, such as cooling water and sump outfalls) and load allocations (LAs) to the non-point source portion of the dams (reservoirs and impoundments). The permit includes heat load limits consistent with WLAs to point sources in the Columbia River Temperature TMDL as required by 40 CFR § 122.44(d).

The 401 certifications from Ecology and the Colville Tribes include conditions that require the permittee to comply with the LA to the dam impoundment in the Columbia River Temperature TMDL, and the Ecology certification requires the permittee to develop a WQAP that complies with the temperature LA for Ecology's review and approval, and the Colville Tribes' review.

As a result of the WQAP conditions in the 401 certifications from Ecology and the Colville Tribes, EPA has included the following language to Part II.F. in the permit related to the temperature LAs in the Columbia River Temperature TMDL:

- (Based on Ecology's and the Colville Tribes' Conditions) The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature TMDL and associated implementation plans (RCW 90.48.080 and WAC 173-201A-510(5)).
- The permittee must consult with Ecology and the Colville Tribes to develop a water quality

attainment plan (WQAP) per the conditions below:

- (Based on Ecology's and the Colville Tribes' Conditions) The WQAP shall include all applicable requirements in WAC 173-201A-510(5) *Compliance schedule for Dams*, and must include a detailed strategy for achieving Washington's and the Colville Tribes' water quality standards for temperature and TDG and associated designated uses.
- As an element of the WQAP, the permittee must include a TDG monitoring and quality assurance project plan (QAPP). This QAPP is in addition to the quality assurance plan defined in Part II.A. of the permit. At a minimum, the QAPP must contain the following provisions:
  - (Based on Ecology's Conditions) A description of the monitoring, sampling frequency, equipment and sampling procedures, analytical methods, quality control procedures, data handling and assessment procedures, and reporting protocols.
  - (Based on Ecology's and the Colville Tribes' Conditions) Implementation of the monitoring program must begin as soon as Ecology and the Colville Tribes explicitly or implicitly approve their portions of the QAPP. Changes to the QAPP must be provided to Ecology and the Colville Tribes before taking effect.
- The permittee must submit the TDG water quality data and TDG gas bubble trauma data to EPA, Ecology and the Colville Tribes by February 28 following the first full calendar year of TDG monitoring, and annually thereafter. The TDG Data Report must be sent to EPA as an attachment to NetDMR. The file name of the electronic attachment must be as follows: YYYY\_MM\_DD\_WA0026867\_TDG data\_43599, where YYYY\_MM\_DD is the date that the permittee submits the report. The TDG data must be sent to Ecology and the Colville Tribes at the addresses at Permit Part II.F.8, unless agreed upon by Ecology or the Colville Tribes.
- The permittee must submit the WQAP and WQAP QAPP to the Colville Tribes and Ecology as follows:
  - The permittee must provide the scope of the WQAP to Ecology and the Colville Tribes for review one year after the permit effective date.
  - The permittee must submit the WQAP QAPP to the Colville Tribes and Ecology for review and approval one year after the permit effective date. Ecology will have approval authority for II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
  - The permittee must provide the final WQAP to Ecology and the Colville Tribes for review and approval within two years of the permit effective date. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).
  - The permittee must submit a progress report to Ecology and the Colville Tribes for review and approval within six years of the permit effective date. The permittee must submit a summary report to Ecology and the Colville Tribes for approval within nine years of the permit effective date and prior to

the end of the ten-year dam compliance period. Ecology will have approval authority for II.F.5(a), II.F.5(b)(i) and (ii), and the Colville Tribes will have approval authority for II.F.5(b)(iii).

- The permittee must submit the WQAP, QAPP, and TDG Data Report to Ecology and the Colville Tribes at the following addresses, unless agreed upon by Ecology or the Colville Tribes:

Watershed Management Section, WQP-HQ  
Washington Department of Ecology  
PO Box 47600  
Olympia, WA 98504-7600

Confederated Tribes of the Colville Reservation  
Environmental Trust Department  
ATTN: Watershed Program Manager  
PO Box 150  
Nespelem, WA 99155

**Comment 12.** Bonneville requests reconsideration of the temperature monitoring frequency proposed in the draft NPDES permit. Many of the outfalls covered by the draft NPDES permit are likely submerged, and the discharges from these outfalls make up a very small percentage of the total flow of the receiving waters.

Because the cooling water impacts are de minimis, the draft NPDES permit requirement that continuous monitoring thermistors be installed at identified discharge points is unnecessarily burdensome due to the uniformity of the effluent. Further, this will lead to needless and excessive costs and will result in duplicative data that will provide little additional utility. Collecting continuous monitoring at the identified discharge points will not provide additional information on river temperature characteristics due to the small percentage of water used for cooling water compared to river flow. This requirement is expensive and overly burdensome resulting in no additional data value –other than to confirm a de minimis impact.

Moreover, EPA proposes year-round monitoring for temperature in the draft NPDES permit. River water temperatures are highly influenced by weather (e.g., high ambient air temperatures). Bonneville recommends replacing the continuous monitoring requirement with monthly monitoring frequency for the permit term. (BPA p. 4)

**Response.** Since available temperature data are limited to approximately one sample for each outfall, the permit requires temperature monitoring to assess compliance with the heat limits and to better characterize temperature at these outfalls. While EPA expects that the point source temperature impacts are likely small from Grand Coulee Dam, characterizing temperature is important because effluent data are limited and more information is needed to confirm that temperature impacts are small. In addition, a large number of outfalls discharge cooling water, and bull trout and other species are vulnerable to high temperatures. The

permit requires a minimum of monthly sampling of temperature at each outfall or continuous temperature monitoring. For outfalls that require continuous monitoring, the permit allows for representative sampling with similar outfalls (i.e., outfalls that discharge the same type of effluent) because the amount of heat released and the resulting effluent temperatures from these outfalls are expected to be similar. For instance, the permit allows the facility to select six out of sixteen identical cooling water outfalls for continuous monitoring as opposed to reporting continuous monitoring at all outfalls, and requires only one of these to conduct influent monitoring. EPA concludes that the sampling frequency and type of temperature monitoring balances the need for accurate and representative data while providing flexibility on the number of outfalls requiring continuous temperature monitoring.

EPA has updated the reference in Permit Part I.B.13(a) to reference Ecology's 2022 publication, *Continuous Temperature Monitoring of Freshwater Rivers and Streams* (22-03-216). This provides Ecology's most recent guidance on continuous temperature sampling.

**Comment 13.** There are nine similarly situated outfalls in both the left and right powerhouse and six in the Nat Washington Power Plant (NWPP). The permit currently identifies 5 outfalls at the left and right powerhouses and 5 outfalls at the NWPP, as similarly situated. Reclamation recommends the following substitutions to avoid the risk of potential under-sampling of the similarly situated outfalls at each of the powerhouses and to ensure that the more robust continuous temperature monitoring will be applied to the outfalls omitted from the draft permit.

The permittee must comply with the following requirements for temperature monitoring and follow Part I.B.11 for continuous temperature monitoring:

- a) The permittee must select three outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 004a, 004b, 004c, 004d, 004e, 004f, 004g, 004h, and 004i. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.
- b) The permittee must select three outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 008a, 008b, 008c, 008d, 008e, 008f, 008g, 008h, and 008i. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.
- c) The permittee must select two outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 011a, 011b, 011c, 011d, 011e, and 011f. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent (BOR p. 1-2)

**Response.** Per the permittee request, EPA has increased the number of representative outfalls requiring continuous temperature monitoring in Part I.B.10. Since the additional outfalls listed by the permittee above are identical to the outfalls already listed, EPA is including

them as options for representative monitoring as well, as follows (see bold):

a) The permittee must select **three** outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 004a, 004b, 004c, 004d, 004e, **004f, 004g, 004h and 004i**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.

b) The permittee must select **three** outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 008a, 008b, 008c, 008d, 008e, **008f, 008g, 008h, and 008i**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.

c) The permittee must select two outfalls from the following list for continuous temperature monitoring in influent and effluent: Outfalls 011a, 011b, 011c, 011d, 011e, **and 011f**. For the remaining outfalls, the permittee must collect temperature samples once per month in effluent.

**Comment 14.** In Section I.B.12., the facility-wide monthly average heat load given to Grand Coulee Dam,  $1.13E+10$  kcals/day, is incorrect and should be adjusted to  $1.66E+10$  kcals/day, in accordance with the updated WLA calculation submitted to EPA by the U.S. Army Corps of Engineers in December 2020.

These heat loads were recalculated by utilizing heat loads during maximum operational capacity, at the highest temperature period of the year. The updated WLA calculation was reissued in the 2021 Temperature Total Maximum Daily Load (TTMDL) and utilized for the lower 8 USACE facilities permits, while the original 2020 TTMDL WLA for Grand Coulee Dam and Chief Joseph Dam was included in the 2021 TTMDL reissue.

To reflect the most current information, Reclamation proposes updating the WLA to be consistent with the calculation methodology used to generate the WLA for the lower 8 USACE permits. The WLA recalculation data for Grand Coulee Dam is included as enclosure 1 to this document.

*The permittee must not exceed a facility-wide monthly average heat load of  $1.66E+10$  kcals/day from June 1 to October 31. (BOR p. 4)*

**Response.** EPA did not revise the WLA for Grand Coulee Dam in the 2021 Columbia and Lower Snake River Temperature TMDL. NPDES permits must incorporate WLAs into permits consistent with the assumptions and requirements of the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Therefore, pursuant to 40 CFR § 122.44(d)(1)(vii)(B), the heat load for Grand Coulee Dam in the 2021 Columbia and Lower Snake River Temperature TMDL was incorporated into this permit. Since the TMDL has not been modified to account for this new information submitted by the BOR, the WLA that is currently in the TMDL for Grand Coulee Dam is applied in this permit. If the TMDL is modified with a new WLA for Grand Coulee Dam, the heat limit in the permit can be modified in the future. No changes were made to the permit as a result of this comment.

## QAP, BMP and PCB Plans

**Comment 15.** In the *Schedule of Submissions*, the NPDES Permit provides that the Corps must submit: Quality Assurance Plans within 180 days of the effective permit dates; Best Management Practices Plans within 180 days of the effective permit dates; and PCB Management Plans within one year of the effective permit dates. YN-DNR supports the EPA's decision to require these important plans. However, the EPA's timelines for submission are excessive and will stall implementation of the plans. YN-DNR recommends that the EPA shorten the submission timelines before finalizing the NPDES Permits. (Yakama Nation p. 4)

**Response.** During the first year of the permit cycle, the Permittee will be responsible for developing a number of different plans, as referenced above. The permittee will also be developing and implementing a broad monitoring program and will be responsible for analyzing and reporting monitoring results. While EPA recognizes the importance of moving towards implementation of these permit conditions quickly, EPA also recognizes the importance of providing sufficient time for the Permittee to develop these plans thoughtfully and effectively. No changes were made to the permit as a result of this comment.

**Comment 16.** EPA Cannot Abdicate its Regulatory Authority Over the EAL, BMP, and PCB Plans: The Final Permits must ensure that EPA retains authority over the Permittees' selection and use of Environmentally Acceptable Lubricants (EAL), Best Management Practices (BMP), and PCB management measures at the Dams. While the proposed EAL, BMP, and PCB plans would constitute technology-based effluent limits, the Draft Permits do not meet the Clean Water Act's standards for setting technology-based limits. Because the Draft Permits do not provide any review or approval mechanism for EPA after the Permittees submit the required plans, EPA is illegally abandoning its regulatory role with respect to the EAL, BMP, and PCB plans. Further, because these plans would constitute effluent limits, EPA must afford the public an opportunity to review and comment on the EAL, BMP, and PCB plans. Riverkeeper supports EPA's decision to require the Permittees to produce EAL, BMP, and PCB plans, but the Final Permits must provide for EPA's review and approval, and give Riverkeeper and the public the opportunity to comment on these plans as well. Unless it retains authority to review and modify the EAL, BMP, and PCB plans, EPA is authorizing an illegal self-regulatory scheme. (CRK p. 6)

**Response.** Pursuant to CWA Section 401(d) and 40 CFR § 124.55(a), EPA has incorporated conditions into the final permit based on Ecology's and the Colville Tribes' 401 Certifications related to review and approval related to the plans referenced above (See *Changes in Response to Ecology's and Colville Tribes' 401 Certifications* on Page 1 of this document). EPA also notes that these plans are meant to supplement and support the effluent limits applied in this permit, but the plans themselves do not constitute effluent limits. For instance, the purpose of the BMP Plan is to identify actions and practices that the facility should implement to ensure that the numeric effluent limits are achieved. These actions and

practices are not effluent limits or permit conditions; instead, they are actions and/or practices that will ensure that the facility meets the enforceable effluent limits in the permit. No changes have been made to the permit in response to this comment.

**Comment 17.** EPA Should Revise the Permit to Increase the Frequency of BMP, EAL, and PCB Plan Compliance Reporting. All NPDES permits must include monitoring and reporting requirements sufficient to ensure compliance with the permits' limitations. The Draft Permits require the Permittees to submit BMP, EAL, and PCB reports once per year. Annual reporting undercuts EPA's oversight and ability to prioritize inspections based permit violations. EPA's reporting requirement also undercuts the public's ability to understand pollution discharges from the facilities and review permit compliance in a timely manner. Citizen action is a "proven enforcement tool" that "Congress intended [to be used...] to both spur and supplement government enforcement actions." Commenters urge EPA to revise the Draft Permit to increase the EAL, BMP, and PCB reporting frequency to at least four times per year. (CRK p. 6)

**Response.** The permit establishes numeric effluent limits and requires frequent monitoring to ensure compliance with the limits. The facility is required to submit monthly DMRs which will identify whether the facility has had any effluent limit violations in a given month. Compliance with these limits are available at EPA's Enforcement and Compliance History Online website: <https://echo.epa.gov/> This provides the public real-time opportunities to ensure compliance with permit effluent limits.

The purpose of the BMP Plan is to identify actions and practices that the facility should implement to ensure that the numeric effluent limits are achieved; the BMP Plan does not document numeric effluent limit violations. In addition, the BMP Plan conditions in the permit are designed to prevent oil spills and take actions to identify and improve on reducing oil spills. The BMP Plan requires the facility to develop an Oil Accountability Plan, track its oil uses, and report to EPA and Ecology if there is an oil release that is not accounted for (Appendix B of the permit). The purpose of the EAL Plan is for the facility to assess where lubricants are used and require EALs, unless infeasible. The permit conditions for EAL Plans require BOR to shift all lubricants to biodegradable substances which will reduce the harmful impacts to aquatic species. Neither plan contains enforceable effluent limits.

Annual reporting is appropriate for these plans since the permittee must evaluate the effectiveness of plans and recommend improvements for the subsequent year's actions. Quarterly reporting is insufficient time to complete this evaluation. See also response to Comment 16.

To clarify the reporting of BMP incidents, EPA has changed Permit Part II.B.5 to the following (see bold): "Reporting of BMP incidents. Prepare a written report to EPA and Ecology after the incident has been successfully addressed, describing the circumstances leading to the incident, corrective actions taken, and recommended changes to operation and maintenance practices and procedures to prevent incident recurrence. **The report must be**

**submitted according to Part III.H.”**

To clarify components of the oil accountability in the BMP Plan, EPA has changed Appendix B.3 to the following: “The BMP Plan will describe the quantity and type of all oil products used on-site and how they are monitored and tracked using guidelines from the facility’s Oil Accountability Plan. If the Oil Accountability Plan covers all elements of this permit requirement, the BMP Plan may reference the Oil Accountability Plan. Records are to be kept on-site and available for inspection by EPA, the Colville Tribes or Ecology. Oil gauges should be used that provide appropriate level of markings to ensure operators and maintenance personnel can easily identify an unusual condition. The permittee must notify EPA and Ecology if there is an unaccounted oil release into the environment consistent with the facility’s Oil Accountability Plan.”

*401 Certification*

**Comment 18.** There are limitations to the conditions that may be imposed through EPA’s draft NPDES permit. As recognized by EPA in its Fact Sheet for the draft NPDES permit for Grand Coulee Dam (EPA Fact Sheet) and consistent with Clean Water Act (CWA) case law, this draft NPDES permit does not address water flowing through the facility’s spillway 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).

As discussed above, Grand Coulee Dam is a multi-purpose dam. Therefore, any conditions imposed by the draft NPDES permit and Washington Department of Ecology’s (Ecology) 401 certification should not interfere with the Reclamation’s ability to operate this facility 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). Commenters also request a second comment period on the draft NPDES permit for Grand Coulee Dam if the Washington Department of Ecology’s CWA Section 401 certification of the permit in any way alters the proposed permit terms, or if EPA itself elects to changes the terms of the proposed permit. (BPA p. 2-3; BOR p. 5)

**Response.** CWA Section 401(d) states that “[a]ny certification ... shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure [compliance] with any applicable effluent limitations and other limitations [set forth in one of the enumerated CWA sections] and with any other appropriate requirement of State law ... and shall become a condition [of the permit].” 33 U.S.C. § 1341(d); *see also* 40 CFR § 124.55(a) (“no final permit shall be issued ... Unless the final permit incorporates the requirements [i.e., conditions] specified in the certification under § 124.53(e).”). In addition, 40 CFR § 124.53(e) requires that a state certification include conditions which are necessary to assure compliance with the applicable provisions of CWA Sections 208(e), 301, 302, 306, and 307 and with appropriate requirements of State law. For any certification condition that is more stringent than the conditions in the NPDES permit, the State must include the CWA or State law reference(s) upon which the condition is based. 40 CFR § 124.53(e)(2). The

federal permitting authority does not have discretion to alter or reject conditions included in a state 401 certification. *See City of Tacoma, Wash. v. FERC*, 460 F.3d 53, 67 (D.C. Cir. 2006); *Am. Rivers v. FERC*, 129 F.3d 99, 107 (2d Cir. 1997) (“FERC may not alter or reject conditions imposed by the states through 401 certificates.”). Since CWA Section 401(d) requires EPA to include conditions from a 401 certification, providing an additional public comment period on the incorporation of the conditions into the permit serves no purpose. *See Lake Carriers Assn. v. EPA*, 652 F.3d 1, 10 (DC Cir. 2011). Instead, if an entity disagrees with a condition in a CWA Section 401 certification, that entity’s recourse is to follow the state appeal process for the 401 certification.

Here, Ecology’s and the Colville Tribes’ 401 certifications contain conditions that EPA must incorporate as permit conditions pursuant to CWA section 401(d). The commentor generally states that the conditions cannot interfere with BOR’s ability to operate the dams. To the extent that one of the conditions does interfere with the operation of the dam, the commentor had the ability to appeal that condition in the state/tribal appeals process. Neither of these certifications were challenged and the conditions in the certifications are final. Therefore, EPA incorporated the conditions of the certifications into the permit pursuant to Section 401(d) of the CWA.

**Comment 19.** Where a federally permitted activity has the potential to discharge into navigable waters, Section 401 of the Clean Water Act provides that the state or tribe where the discharge originates must certify the federal permit. These certifications may include provisions necessary to ensure the permitted activity will comply with water quality standards and other appropriate requirements. Each of these provisions "shall become a condition" on the federal permit. States can therefore condition their certifications such that federally permitted activities do not cause adverse temperature impacts to water quality.

Per the Fact Sheet, the NPDES Permit triggered the state of Washington's ("State") and the Confederated Tribes of the Colville Reservation's ("Colville") Section 401 authority. The State has initiated the Section 401 certification process for the NPDES Permit.

The EPA must incorporate any State or Colville Section 401 water quality conditions into the NPDES Permit. The EPA should encourage the State and the Colville to coordinate with each other to ensure that their respective conditions do not conflict with one another or create confusion. Finally, given that the conditions will attach to the NPDES Permits, the EPA should re-release drafts of the NPDES Permits for feedback from YN-DNR and the public once the State and the Colville complete their Section 401 certifications. Otherwise, YN-DNR and other commenters can only provide feedback on an incomplete version of the NPDES permits (Yakama Nation p. 5; CRK p. p. 7).

**Response.** EPA has included all of the conditions in Ecology’s and the Colville Tribes’ 401 certifications into the final permit. See response to Comment 20 with regard to EPA holding a second public comment period. No changes were made to the permit as a result of this comment.

**Comment 20.** Reclamation requests a second comment period on the draft NPDES permit for Grand Coulee Dam if the Washington Department of Ecology's CWA Section 401 certification of the permit in any way alters the proposed permit terms, or if EPA itself elects to changes the terms of the proposed permit. (BOR p. 5)

**Response.** See response to Comment 18. No changes were made to the permit as a result of this comment.

*Tribal Consultation and Engagement*

**Comment 21.** YN-DNR appreciates the Environmental Protection Agency's ("EPA") November 4, 2021 letter regarding an opportunity for consultation on the NPDES Permits. However, as discussed below, the ongoing Section 401 certification and Endangered Species Act ("ESA") consultation processes could affect the provisions in the NPDES Permits. This creates uncertainty and frustrates the ability of YN-DNR technical staff to adequately brief the Yakama Nation Tribal Council regarding the consultation opportunity. Accordingly, we request a technical meeting with the EPA to discuss the permits and the implications of the ongoing Section 401 and ESA processes. Such a meeting would assist with the Yakama Nation Tribal Council's determination on whether to initiate consultation with the EPA. The NPDES Permits have the potential to affect Treaty-reserved fisheries resources. YN-DNR accordingly has a significant interest in ensuring that the EPA acts in a manner that is consistent with applicable law and adequately protective of water quality and fish populations.

Currently, the Fact Sheets' environmental justice section is lacking a meaningful analysis of how the Facilities and the NPDES Permits impact the Yakama Nation, our members, and our Treaty-reserved rights. It is critical that the EPA properly incorporate the Yakama Nation's perspectives regarding such impacts into the NPDES Permits. Further engagement between the EPA and YN-DNR will facilitate that effort. (Yakama Nation p. 2)

**Response.** Meaningful consultation is part of EPA's government-to-government commitment to meeting treaty obligations. EPA has met with staff and management from Yakama Nation during the development of the Lower Columbia and Lower Snake dam NPDES permits. EPA reached out to the Tribe on multiple occasions to set up a technical meeting and continues to be available for a technical meeting to discuss environmental justice, and the implications of the Section 401 and ESA processes. This ongoing engagement with tribal entities, including Yakama Nation, is critical to addressing environmental justice issues obligated under Executive Order 12898.

EPA shared the 401 certifications with Yakama Nation and other entities upon receipt, but since EPA does not have discretion around the inclusion of 401 conditions, engagement or further public comment on these conditions will not result in differences to the permit and will not be meaningful (See response to comment 31). See response to comment 21 regarding ESA consultation coordination with Yakama Nation.

EPA is available to discuss environmental justice (EJ) issues with Yakama Nation as mentioned above. Executive Order 12898 discusses addressing environmental justice in federal actions. EPA's Region 10 environmental justice program seeks to integrate principles of environmental justice in the Agency's core work, including for the NPDES permits program. EPA uses a set of indices (EJ Screen) to determine whether the surrounding community constitutes an environmental justice community. These indices include a variety of factors related to race, income, education, and age, among other factors. EPA is interested in discussing EJ concerns regarding this permit and future permits. However, in regard to the Fact Sheet language around EJ in this permit, EPA does not revise fact sheets after the public comment period, and therefore will not be adding to or revising EJ language in the Fact Sheet. No changes were made to the permit as a result of this comment.

**Comment 22.** YN-DNR understands that the EPA will engage in ESA with NOAA Fisheries and the U.S. Fish & Wildlife Service regarding the potential effects of the NPDES Permits on listed species. We request that the EPA involve YN-DNR in this process so that our staff can provide input and expertise on potential effects to listed salmon populations. Furthermore, if ESA consultation might result in changes to the NPDES Permits, the EPA should re-release drafts of the NPDES Permits for feedback from YN-DNR and the public once consultation is complete. Otherwise, YN-DNR and other commenters can only provide feedback on an incomplete version of the NPDES permits. (Yakama Nation p. 5)

**Response.** No changes were made to the permit as part of ESA consultation. EPA reached out to the Yakama Nation multiple times to offer a technical meeting and remains available for such a meeting. No changes were made to the permit as a result of this comment.