Response to Comments

Ice Harbor Lock and Dam, WA0026816
Lower Monumental Lock and Dam, WA0026808
Little Goose Lock and Dam, WA0026786
Lower Granite Lock and Dam, WA0026794
September 30, 2021

Summary

On March 18, 2020, the U.S. Environmental Protection Agency Region 10 (EPA) issued public notice for the proposed issuances of National Pollutant Discharge Elimination System (NPDES) permits for Ice Harbor Lock and Dam (WA0026816), Lower Monumental Lock and Dam (WA0026808), Little Goose Lock and Dam (WA0026786), and Lower Granite Lock and Dam (WA0026794). The public comment period closed May 4, 2020.

On January 15, 2021, EPA issued a second public notice for the above facilities with proposed heat limits from the temperature total maximum daily load (TMDL) for the Columbia and lower Snake Rivers (Columbia River Temperature TMDL). EPA requested comments limited to the proposed heat limits. The second public comment period closed February 16, 2021.

EPA has summarized similar comments from different entities in this document when developing its responses. The full comments for the 2020 and 2021 fact sheets and draft permits can be viewed at https://www.epa.gov/npdes-permits/draft-permits-federal-hydroelectric-projects-lower-snake-river. EPA has separated this document into two sections: (1) comments received during the 2020 public comment period and (2) comments received during the 2021 public comment period.

EPA is continuing discussions with Oregon Department of Environmental Quality (ODEQ) over the CWA Section 401(a)(2) objection letter with regard to the four facilities that discharge to the Lower Columbia River. As such, EPA is not taking action on those permits at this time. This Response to Comments document only provides responses with regard to the four facilities listed above that discharge to the Lower Snake River.

During the first public comment period, EPA received comments from the following:

- American Public Power Association (APPA)
- Bureau of Reclamation (BOR)
- Bonneville Power Administration (BPA)
- Confederated Tribes and Bands of the Yakama Nation
- Edison Electric Institute (EEI)
- National Hydropower Association (NHA)
- Northwest RiverPartners (NRP)
- Paul Pickett
- PNGC Power
- Public Power Council (PPC)
- Public Utility District No. 1, Cowlitz County (Cowlitz PUD)
- Snake River Waterkeeper and Columbia Riverkeeper (SRW and CRK)

- U.S Army Corps of Engineers (USACE)
- Utility Water Act Group (UWAG)

During the second public comment period, EPA received comments from the following:

- Bonneville Power Association
- Columbia River Inter-Tribal Fish Commission
- Confederated Tribes and Bands of the Yakama Nation
- Confederated Tribes of the Umatilla Indian Reservation
- Marc Gauthier
- Northwest River Partners
- Public Power Council
- Jessica Spurr
- U.S. Army Corps of Engineers (USACE)
- Washington Department of Ecology (Ecology)

This document presents the comments received and provides corresponding response to those comments. As a result of comments received, the following revisions were made to the permit:

Changes in response to public comment:

- EPA has changed the Schedule of Submissions and corresponding sections due date in the permits from December 31 to February 28 for the Best Management Practices (BMP) Annual Report (Section II.B.), Environmentally Acceptable Lubricants (EAL) Annual Report (Section II.C.), polychlorinated biphenlys (PCB) Annual Report (Section II.D.), and cooling water intake structure (CWIS) Annual Report (Section II.E.).
- EPA has made the following changes (see bold) in Section I.B.4 of the permits: "The permittee must observe the surface of the receiving water in the vicinity of where the effluent enters the surface water **at a minimum of once per week.** The permittee must maintain a written log of the observation which includes the date, time, observer, and whether there is presence of a visible oil sheen, floating, suspended or submerged matter. **If the permittee observes a visible oil sheen at any time, they must record it in the log**. The log must be retained and made available to the EPA or Ecology."
- EPA has changed heat limits and the timeframe that apply (June to October) to be consistent with revised wasteload allocations (WLAs) in the 2021 Columbia River Temperature TMDL in Section I.B in the permits.
- EPA has changed the effluent limitations tables in all permits from "Measurement" to "Measurement/Calculation" for flow.
- EPA has added the following language in the effluent limitation tables in Section I.B. of the permits for oil and grease: "Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. Calculate the daily discharge as the total mass of the pollutant discharged over the day."
- EPA has added the following language in Section II.B.5 of the permits (see bold): "Reporting of BMP incidents. Prepare a written report to the EPA and Ecology after the incident has been successfully addressed, describes 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 Section III.H.**"

- EPA has changed language in Section II.D.1(a) of the permits from "A list describing all sources of PCBs" to "A general description of sources of PCBs."
- EPA has clarified language in Section II.D. of the permits (see bold):
    - A description of actions that will be taken during the remainder of the permit cycle to prevent, **track, and address** releases of PCBs from potential PCB sources listed in part 1a, which must include BMPs that will decrease the likelihood of PCB releases.
    - Progress to date in **implementing the PCB Plan**, evaluating the effectiveness of BMPs in preventing PCB releases.
    - **How new actions will be taken to optimize effectiveness** during the remainder of the permit cycle.
- EPA has added "including the most recent Fish Operations Plan and in-season Technical Management Team meetings" in Section II.E. of the permits.
- EPA has added language to the BMP Plan in Appendix B, "Inventory of Exposed Materials," of the permits to define "significant" as quantities over 55 gallons.
- EPA has removed the "Sampling Data" requirement from Appendix B of the BMP Plan in the permits.
- EPA has removed outfall 13 from the title page of the Little Goose Lock and Dam permit and deleted the effluent table for this outfall, because it is no longer discharging.
- EPA has removed the influent monitoring requirement in outfall 15 for COD in the Little Goose Lock and Dam, because effluent monitoring will provide sufficient information to characterize the discharge.
- EPA has removed outfall 13 from the title page of the Lower Granite Lock and Dam permit, because it was erroneously included in the draft permit.
- EPA has consolidated effluent tables in permits, where the limits and monitoring were identical.

Changes in Response to Ecology Final 401 Certifications

EPA has added all Ecology 401 certification conditions in Section II. A-F and the Schedule of Submissions of the permits.

Below are the 401 certification conditions related to the quality assurance plan (QAP), BMPs, EALs, PCBs, CWIS, temperature and total dissolved gases (TDG). EPA has added language to relevant sections regarding EPA and Ecology approval of QAP, BMP, EAL, CWIS, and WQAP reports and plans. For plans requiring EPA or Ecology approval, plans are considered approved if the agencies do not respond within 30 days after a plan has been submitted.

QAP – Related 401 Certification Permit Conditions

- EPA has modified Section II.A in the permits to add language from Ecology's 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**. 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**.

BMP – Related 401 Certification Permit Conditions

- EPA has modified Section II.B. in the permits to add language from Ecology's 401 certifications related to BMPs (see bold):
    - The permittee must submit a **BMP Plan to EPA for review and approval** 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_WA00XXXXX_BMP_05899, where YYYY_MM_DD is the date that the permittee submits **the BMP Plan**.
    - Under BMP Plan Modification in Section II.B in each of the permits, EPA has added the following language: "**The permittee must submit the revised BMP plan to EPA for review and approval.**"
    - **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.**

EAL – Related 401 Certification Permit Conditions

- EPA has modified Section II.C. in the permits to add language from Ecology's 401 certifications related to EALs (see bold): "The permittee must submit the first EAL Annual Report by February 28 **to EPA and Ecology for review and approval** following the first calendar year of permit coverage. The permittee must submit subsequent Annual Reports **to EPA for review and approval** by February 28, and annually thereafter. **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")."

PCB-Related 401 Certification Permit Conditions

- EPA has modified Section II.D. in the permits to add language from Ecology's 401 certifications related to PCBs (see bold):
    - The permittee must submit the PCB Management Plan (PMP) to EPA and Ecology within one year from the effective date of the permit **for review and approval.**
    - The PCB Annual Report must be submitted to **EPA for review and approval**. The permittee must prepare a PCB Annual Report by February 28 following the first calendar year of permit coverage, and annually thereafter. The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA00XXXXX_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 the EPA and Ecology upon request.

CWIS – Related 401 Certification Permit Conditions

- EPA has modified Section II.E. in the permits to add language from Ecology's 401 certification conditions related to the cooling water intake structure (CWIS) (see bold):
    - The permittee must prepare an initial CWIS Annual Report and submit it **to EPA and Ecology for review and approval** by February 28 following the first calendar year of permit coverage. **The first annual report must include information on all cooling water intake structures 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 annual reports to EPA for review and approval** by February 28, and annually thereafter.
    - **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.**
    - **Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.**

Temperature – Related 401 Certification Permit Conditions

- EPA has added the following language at Section II.F. in the permits from Ecology's 401 certification conditions related to temperature:
    - The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature TMDL (RCW 90.48.080 and WAC 173-201A-510(5)).
    - The permittee must consult with Ecology to develop a water quality attainment plan (WQAP) per the conditions below:
        - 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 water quality standards for temperature and associated designated uses, including but not limited to, conditions in fish bypass systems of the dam.
        - The permittee must provide the scope of the WQAP to Ecology for review one year after the permit effective date.
        - The permittee must provide the final WQAP to Ecology for approval within 2 years of the permit effective date.
        - The permittee must submit a progress report to Ecology for approval in within six years of the effective permit date. The permittee must submit a summary report to Ecology for approval within nine years of the permit effective date and prior to the end of the ten-year dam compliance period.

TDG – Related 401 Certification Permit Conditions

- EPA added the following language to Section II.F. in the permits from Ecology's 401 certifications related to TDG:

- The permittee must comply with total dissolved gas standards in WAC 173-201A-200(1)(f) and OAR 340-041-0031(1)(2) and the Columbia River TDG TMDL, or any future modification to the standards thereof.

Response to Comments from 2020 Public Notice

The following section includes comments from the March 18 – May 4, 2020 public notice of the permits. The comments are in the following categories: General Comments; 316(b) and CWIS; Permit Conditions – Monitoring, Effluent Limits, and Plans; 401 certification; Tribal Consultation; Environmental Justice; and ESA Consultation.

General Comments

Comment 1. Commenters support EPA's decision to regulate hydroelectric facilities under Section 402, which should result in significant and important reductions in toxic and conventional pollutants. The NPDES permitting scheme is the primary means by which discharges of pollutants are controlled. Toxic pollution threatens the health of people who eat local fish and jeopardizes the public's right to eat fish caught locally. Rising water temperatures also threaten the health of salmon and other aquatic life that rely on cool water for survival (SRW and CRK, p.2-9).

Response. Comment noted. EPA did not make changes to the permits in response to this comment.

Comment 2. Commenters call on EPA to proceed with issuing the eight Draft Permits in 2020 and hold public comment periods on the NPDES Permits for Grand Coulee and Chief Joseph dams (SRW and CRK, p. 10).

Response. EPA is issuing final NPDES permits for the four federal hydroelectric facilities on the Lower Snake River. EPA is working through the CWA Section 401(a)(2) process with Oregon Department of Environmental Quality. Until that process is complete, EPA cannot issue the four permits for the four hydroelectric facilities on the Lower Columbia River. The NPDES permits for Grand Coulee Dam and Chief Joseph Dam are outside the scope of this action. EPA did not make changes to the permits in response to this comment.

Comment 3. Hydroelectric facilities are an important part of the clean energy transition. Hydroelectric power continues to be important to this mix as a carbon-free renewable energy source that releases very few pollutants, accounting for 6.6 percent of total U.S. utility-scale electricity generation and 38 percent of total utility-scale renewable electricity generation (EEI, p. 3-4.) At a time when our country is fighting to contain a coronavirus that is seriously threatening human health and the economy, policymakers must be particularly cautious about the imposition of potentially costly new regulatory requirements. To the extent regulations are warranted, conditions imposed must be carefully calibrated to address risk and result in demonstrable benefits. As you know, our region's carbon-free federal hydropower supply sourced from the CRS [Columbia River System], is the engine of the Pacific Northwest's economic prosperity and environmental sustainability. We ask EPA to partner with us to enhance the security it provides (PNGC, p.; NRP, p. 1).

Response. Comment noted. EPA did not make changes to the permits in response to this comment.

Comment 4. The Corps recommends that EPA fix the hyperlink and extend review/comment period by 60 days to allow for review of any 'additional information' that EPA may have used in their evaluation (USACE, p. 17).

Response. The 2020 and 2021 Lower Snake River Fact Sheets for the facilities provides the basis for the

permit conditions. EPA does not believe an additional public comment period is necessary. EPA did not make changes to the permits in response to this comment.

Comment 5. What is the history of NPDES permits at dams on the Columbia River and why are these permits needed now (Yakama Nation, p. 6)?

Response. The 2020 Lower Snake River (p. 13) Fact Sheet provides a brief history of the permits. EPA is issuing NPDES permits to these facilities because these facilities discharge pollutants from dam operations to waters of the United States. See CWA Section 301 and 402. As a result of a lawsuit, the Corps submitted NPDES permit applications in 2015. EPA did not make changes to the permits in response to this comment.

Comment 6. The EPA'S letter only addressed the Facilities in the Zone 6 fishery and the Lower Snake River. However, Grand Coulee Dam has been mentioned in other correspondence. What is the status of the NPDES permit for Grand Coulee Dam (Yakama Nation, p. 6)?

Response. EPA has received NPDES permit applications for Grand Coulee Dam, Chief Joseph Dam, and Dworshak Dam. EPA is in the process of working on these permits. EPA did not make changes to the permits in response to this comment.

Comment 7. The Facilities have been operated for more than fifty years and are basically large industrial sites. Therefore, it would seem that EPA must complete a full screening of the chemicals present in the discharge water prior to selecting the chemicals to be regulated under the NPDES permits (Yakama Nation, p. 7).

Response. The Corps submitted NPDES permit applications and provided effluent data that was required on the NPDES application forms. EPA then used information from the NPDES permit applications and information about the operations to determine the pollutants of concern, consistent with guidelines from EPA's NPDES Permit Writer's Manual. These permits require monitoring which will inform the next permits. EPA did not make changes to the permits in response to this comment.

Comment 8. EPA should delay issuing this permit. The timing is poor, given that a temperature TMDL is being developed for the Snake and Columbia Rivers and a DEIS developed for Columbia River System Operations. The NPDES permit should be issued after the TMDL and DEIS are completed (Pickett, p. 1).

Response. The Columbia River Temperature TMDL and DEIS were completed prior to issuing these permits. EPA did not make changes to the permits in response to this comment.

316(b) and CWIS

General Comments (316(b) and CWIS)

Comment 9. CWA § 316(b) does not apply to hydroelectric facilities and should be removed from these draft NPDES permits (BPA, p. 8; Cowlitz PUD, p. 1; EEI, p. 5; NHA, p. 3-7; NRP, p. 2-3, USACE, p. 5; UWAG, p. 8). Congress and EPA never considered applying CWA § 316(b) to hydroelectric facilities, which divert small quantities of water for cooling purposes (APPA, p. 2-4; PNGC, p. 5). EPA's proposal to apply CWA § 316(b) to hydroelectric facilities is neither compelled by nor consistent with the CWA. CWA § 316(b) does not apply to categories of point sources for

which EPA has not established national standards under §§ 301 and 306 (UWAG, p. 7-20). EPA has never provided an opportunity to comment on the applicability of § 316(b) requirements to hydroelectric facilities. Hydroelectric facilities were not evaluated in prior § 316(b) rules (APPA, p. 4-5; UWAG, p. 13-14). EPA never collected the necessary information to apply § 316(b) to hydroelectric facilities. EPA has not considered whether the diversion structures at hydroelectric facilities should be treated as cooling water intake structures (UWAG, p. 14-21). EPA concludes that the Best Professional Judgment (BPJ) rule is a standard applicable to existing hydroelectric facility point sources. But, in EPA's proposal to promulgate the existing facility rules, including the BPJ rule, EPA explained that "hydro-electric plant withdrawals for electricity generation are not cooling water uses and are not addressed by today's proposal." Consistent with this understanding, EPA did not evaluate control technology feasibility for hydroelectric dams in the rulemaking process. The final existing facility rules accordingly found the potential impact of the rules on hydroelectric generation capacity to be "NA." Given the stated exclusion of hydroelectric facilities from the existing facility rules and absence of control technology analysis for this source category, the more reasonable interpretation is that the rules do not establish a "standard … applicable to" existing hydroelectric facilities (BOR, p. 1-2).

Response. As explained in the March 2020 Fact Sheets, in determining the best technology available (BTA) to minimize adverse impacts on the environment using best professional judgment (BPJ), EPA Region 10 analyzed the existing controls that the hydroelectric facilities are already implementing to minimize impingement and entrainment of aquatic life. EPA Region 10 concluded that these *existing* measures constitute BTA. Therefore, the permits require the hydroelectric facilities to implement measures pursuant to CWA Section 316(b) that are *already being implemented* at the facilities. See Lower Snake River Fact Sheet at p. 51-54.

CWA Section 316(b) states that "[a]ny standard established pursuant to [CWA Sections 301 and 306] and applicable to a point source shall require that the location, design, construction, and capacity of [CWIS] reflect the best technology available for minimizing adverse environmental impact." 33 U.S.C. § 1326(b). Under the existing regulations, the permitting authority must implement CWA Section 316(b) by establishing BTA using BPJ for all existing facilities. 40 CFR § 125.90(b). The other substantive provisions of the 2014 existing facility rule, however, were not intended to apply to hydroelectric facilities.[1] See Lower Snake River Fact Sheet at p 51; see also EPA Memorandum from Andrew Sawyers, Director, OWM to Water Division Directors, Regions 1-10, re: Transmittal of Framework for Best Professional Judgment of Cooling Water Intake Structures at Hydroelectric Facilities, dated January 13, 2021 ("2021 CWIS memo").

The commentors state that the existing facility BPJ regulation (i.e., 40 CFR § 125.90(b)) cannot be applied to hydroelectric facilities because hydroelectric facilities were not specifically evaluated during the rulemaking process. The commentor concludes that, as a result, there are no "standards … applicable to" hydroelectric facilities and, thus, CWA Section 316(b) does not apply.

While EPA agrees that the substantive provisions of the 2014 existing facility rule (40 CFR §§ 125.94-125.98) do not apply to cooling water intake structures at hydroelectric facilities with NPDES permits,

[1] Commenters' discussion at pp. 5-6 points to many of the indications in the record for the 2014 rule that show that EPA never intended the substantive provisions of the rule at 40 C.F.R. § 125.95-99 to apply to hydroelectric facilities.

EPA does not agree that the BPJ provision of the regulation does not apply. The requirement to apply the BTA standard on a BPJ basis applies to all cooling water intake structures at NPDES facilities that are not otherwise covered by the substantive provisions of the rule. This conclusion is plain on the face of the existing facility rule; 40 CFR § 125.90(b) states that "[e]xisting facilities that are not subject to requirements under this or another subpart... must meet requirements under Section 316(b) of the CWA determined by the Director on a case-by-case, best professional judgment (BPJ) basis" and "existing facilities" generally include any "point source" that "is subject to regulation under the NPDES program" and "commenced construction as of . . . January 17, 2002." 40 CFR § 122.2 (definition of "facility") and 40 CFR § 125.92(k) (definition of "existing facility").

Moreover, this interpretation is supported by the legislative history surrounding the CWA Section 316(b) regulations. In 1977, when the first substantive Clean Water Act section 316(b) rule was invalidated in *Appalachian Power Co. v. Train*, 566 F.2d 451, 457-58 (4th Cir. 1977), EPA removed the substantive provisions of the rule; however, the BPJ regulation for existing facilities remained in effect. EPA then promulgated a similar BPJ provision in the 2001 Phase I rule for new facilities to address facilities not subject to the substantive provisions of that rule. 40 CFR § 125.80(c). A similar BPJ regulatory provision for existing facilities was promulgated as part of the predecessor 2004 Phase II Rule, *see* 69 Fed. Reg. 41576, 41683 (July 9. 2004). The proposal for the current existing facility rule included language requiring BPJ permitting language that is similar to that adopted in the final rule. 76 Fed. Reg. 22174, 22280 (April 20, 2011). Thus, while EPA agrees that the substantive provisions of the 2014 CWA Section 316(b) existing facilities rule do not apply to hydroelectric facilities, the legislative history surrounding the BPJ regulation shows that CWIS at existing hydroelectric facilities are subject to the BPJ regulation found at 40 CFR § 125.90(b).

Further, Courts have held that EPA has statutory authority under CWA Section 316(b) over all facilities with CWIS that require NPDES permits. In *Appalachian Power Co. v. Train*, 566 F.2d 451, 457-58 (4th Cir. 1977), the court rejected the argument that the scope of CWA Section 316(b) was limited to steam electric plants stating "there is nothing to indicate [that] the statute was to apply exclusively to [steam electric plants. The statutory language is not so limited...." *See also, Cronin v. Browner*, 90 F.Supp.2d 364, 383 (S.D.N.Y. 2000) ("section 316(b) encompasses all industries with facilities employing cooling water intake structures."); *Riverkeeper v. EPA*, 358 F.3d 174, 202 (2nd Cir. 2004) (upholding EPA "New Facilities" rule, court rejects petitioners' challenge to regulation on a BPJ basis for facilities below the threshold of the substantive provisions of the rule even where facilities were not otherwise subject to section 306 effluent guidelines (specifically, new source performance standards)); *see also, United States Steel v. Train*, 556 F.2d 822 (4th Cir. 1977). Nothing in CWA Section 316(b) indicates that its use of the word "standard" is limited to nationally applicable effluent limitations guidelines and standards ("ELGs" or "NSPS"). See *CWIS v. US EPA*, 905 F.3d 49, 59 (2nd Cir. 2018) (court upheld the 2014 CWA section 316(b) existing facility rule and discussed the use of the term "standard" in a broader general sense stating that "[a]n NPDES permit serves to transform generally applicable ... standards ... into the obligations ... of the individual discharger ...."). *Id.* Instead, as reflected in the legislative history of the various CWA Sction 316(b) rules, EPA has consistently interpreted the language of CWA Section 316(b) to be triggered where a NPDES permit is required. This is because NPDES permits must include specific permit conditions that implement CWA Section 301 and 306 standards applicable to a point source. *See e.g.,* the New Facility Rule at 65 Fed. Reg. 49,060 (Aug. 10, 2000) ("This proposed rule would apply to new facilities that use cooling water intake structures to withdraw water from waters of the U.S. and that have or require a National Pollutant Discharge Elimination System (NPDES) permit issued under section 402 of the CWA."); 66 Fed. Reg. 65,258 (the final rule "applies to a new facility that has or is required to

have a National Pollutant Discharge Elimination System (NPDES) permit.") (Dec. 18, 2001)[2]; see also 2021 CWIS memo.

Commentors state that 40 CFR § 125.90(b) does not apply to hydroelectric facilities because EPA did not provide notice that such facilities would be subject to the regulation. Commentors further state that hydroelectric facilities were not contemplated in previous versions of the regulation. As previously stated, EPA agrees that the record for the rule indicates that it did not intend for the substantive provisions of the 2014 rule to apply to hydroelectric facilities. However, EPA did not need to identify facilities subject to the BPJ permitting provision because that, of course, is the point of the BPJ provision: to apply the more general BTA standard to those facilities not otherwise subject to the specific substantive requirements of the 316(b) regulations. In addition, as previously discussed, that provision was a carry-over from long existing codified BPJ regulations applying the BTA standard to cooling water intake facilities of which hydroelectric facilities had ample notice. *See*, e.g., Phase II Rule, 67 Fed. Reg. 17122,17127-28 (April 9, 2002) (stating that "this proposed rule would apply to existing facilities" and, consistent with the definition cited above, describing such facilities broadly, in a way that would capture hydroelectric facilities).

Commenters further argue that EPA, in fact, took the position in the proposal to the 2014 rule that the rule would not apply to hydroelectric facilities, citing to the following from the preamble to the proposed rule. "…. [T]there are many other industrial uses of water not intended to be addressed by today's proposed rule. Emergency water withdrawals, such as fire control systems and nuclear safety systems, are not considered as part of a facility's design intake flow. Warming water at liquefied natural gas terminals, and hydro-electric plant withdrawals for electricity generation are not cooling water uses and are not addressed by today's proposal. 76 Fed. Reg. 22174, 22190 (April 20, 2011). This language merely means that flow through water at hydroelectric facilities used to turn electric turbines is not a *cooling* water use and thus it does not definitively exempt hydroelectric facilities from the statute. EPA does not view this passage as saying that EPA does not have statutory authority under CWA Section 316(b) to require controls established pursuant to BPJ. The statement in the quotation that the commentor included referring to "today's proposed rule" refers to the substantive provisions of the 2014 rule, not the longstanding BPJ requirement. Therefore, consistent with EPA's interpretations summarized above, EPA has established BPJ-based CWIS provisions in these permits. EPA did not make changes to the permits as a result of these comments.

[2] EPA recognizes that EPA took a different position in *In re Central Hudson Gas and Electric Corp., EPA Decision of the General Counsel, NPDES Permits* (July 29, 1977). In that opinion, EPA stated that "the reference in [CWA] 316(b) to Sections 301 and 306 clearly indicates that the application of restrictions under 316(b) is predicated only upon the promulgation of *generally applicable national effluent limitations and guidelines*, or, under Section 301(b)(1)(C), limitations necessary to meet water quality standards." *Id.* (emphasis added). However, this is not the Agency's current position. For example, the preambles to 2014 regulation as well as earlier proposed and final regulations identify 14 industries that are not subject to a specific ELG or NSPS as potentially subject to 316(b) requirements indicating that ELGs and/or NSPS are not required to trigger CWA section 316(b). *See*, e.g., "What Entities Are Potentially Regulated by This Action?", 66 Fed. Reg. 65,256, 65,257 (December 18, 2001); *see also* 76 Fed. Reg. 22174, 22175 (April 20, 2011); 79 Fed. Reg. 48,300, 48,301 (August 15, 2014) (The NAICS codes listed in the preamble to the proposed and final existing facilities rule include a number of industries not subject to effluent limitations guidelines or new source performance standards).

Comment 10. APPA supports EPA's determination that the 2014 Existing Facilities Rule does not apply to hydroelectric facilities (APPA, p. 2, 6; UWAG, p. 28-34).

Response. Section V.E. of the Fact Sheet for the Lower Snake River hydroelectric facilities describes EPA's determination that the 2014 Existing Facilities Rule (2014 Rule) does not apply. See also 2021 CWIS memo. As explained in response to Comment 9, however, pursuant to 40 CFR § 125.90(b), CWIS at hydroelectric facilities are subject to BPJ. EPA did not make changes to the permits in response to this comment.

Comment 11. Other federal and state regulations comprehensively regulate hydroelectric facilities and their environmental impacts, including the Federal Energy Regulatory Commission (FERC), (APPA, p. 3; EEI, p. 12-13; HPA, p. 7-9; PNGC, p. 2-3; UWAG, p. 21-28). Interpreting CWA § 316(b) to apply to hydroelectric generation facilities would be a significant overreach and expansion of EPA's regulatory jurisdiction and would duplicate other federal and state requirements specifically designed to address these environmental impacts (Cowlitz PUD, p. 1-2). Other statutes and federal requirements are in place to address impingement and entrainment on CWIS (APPA, p. 7-8, HPA p. 7-9, PPC, p. 2-3). EPA does not have jurisdiction over compliance with the ESA, and the NPDES permit should not include ESA requirements that have been previously consulted on with the Services (USACE, p. 5). The Proposed Permits introduce a framework that could have implication beyond federal hydroelectric facilities including non-federal hydroelectric projects. Applying the Proposed Permit's BPJ framework conditions more broadly could be duplicative of other federal and state requirements already in place (APPA, p. 7).

Response. As explained in Section V.E. of the Fact Sheet for the Lower Snake River hydroelectric facilities, EPA determined that CWA Section 316(b) applies to these permits. Therefore, pursuant to 40 CFR § 125.90(b), EPA must establish BTA through BPJ. Although other statutes and regulations apply to hydroelectric facilities and CWIS, 40 CFR § 122.49 sets forth a list of Federal laws that may apply to NPDES permits. When the laws are applicable, EPA must follow the applicable procedures. One such law that is listed is the Endangered Species Act. To the extent the permits contain provisions related to the CWIS that overlaps with other ESA consultation requirements, EPA ensured that the requirements did not conflict with other obligations. EPA did not make changes to the permits in response to this comment.

Comment 12. EPA's proposed addition of reporting requirements for hydroelectric facilities related to CWIS is duplicative and likely unnecessary (EEI, p. 13). EPA should eliminate any separate reporting requirement for CWIS (HPA, p. 12).

Response. The permits require facilities to develop a CWIS Annual Report that ensures that BTA are maintained. The CWIS Annual Report is not duplicative of other permit requirements. EPA believes these reporting requirements are important to ensure that BTA are operating as designed to comply with Section 316(b) of the CWA. Annual reporting is not overly burdensome. EPA did not make changes to the permits in response to this comment. See also response to Comment 9 explaining that EPA must use BPJ to determine BTA for NPDES permits where there is a CWIS at the permitted facility.

Comment 13. EPA should reconsider its approach to permitting the Dams' cooling water intake structures. As an over-arching matter, the Fact Sheets and Permits appear to conflate gates that allow water into the Dams' turbines with the ports or other structures that actually draw water out of the river to cool the powerplants' internal machinery. The former are probably not cooling water intake structures within the meaning of CWA Section 316(b); nevertheless, most of the permits'

requirements for cooling water intake structures appear to apply to the turbine intakes (if only to duplicate existing requirements derived from CRSO Biological Opinions). The actual ports or diversions that withdraw water from the river to cool mechanical processes within each dam are, contrary to EPA's "interpretation" of its Section 316(b) regulations, cooling water intake structures subject to the rule. The final NPDES permits should clarify the difference and apply the requirements of CWA Section 316(b) to the actual cooling water intakes to prevent the illegal entrainment and impingement of endangered salmonids and other fish (SRW and CRK, p. 19).

Response. See responses to Comment 9 and Comment 19. EPA did not make changes to the permits in response to this comment.

Comment 14. If EPA continues to assert that Section 316(b) applies to hydropower facilities, the Corps would like to note that these facilities already meet all four 316(b) factors, and therefore the NPDES permits and associated 401 Certifications should not contain 316(b) cooling water impingement and entrainment restrictions and conditions (USACE, p. 5).

Response. As explained in response to Comment 9, CWA Section 316(b) applies to hydroelectric facilities; however, the CWA Section 316(b) existing facilities rule does not apply to these facilities. To the extent that Corps has comments or concerns regarding the CWA Section 401 certifications, those should be directed to Ecology. In fact, the Corps is currently appealing Ecology's CWA Section 401 certifications, and one of the issues raised by the Corps concerns the CWA Section 316(b) conditions that are contained in the certifications. See responses to Comment 15 through Comment 23 regarding the four-factor test.

Four-Factor Test (316(b) and CWIS)

Comment 15. EPA staff have come up with a four-factor test and application of "Best Professional Judgment" to determine compliance with 316(b). While this four-factor test is an understandable attempt to create a middle-ground and alternate compliance path, as applied, it over-extends EPA's authority and results in inappropriate conditions being placed on the dams (PPC, p. 3). Commentors recommended several changes to the proposed BPJ framework, including clarification (PNGC, p. 5; UWAG, p. 34-36) regarding how certain aspects of the proposed four-factor analysis would be applied and recommends the elimination of facility-wide BPJ conditions that exceed EPA's § 316(b) authority (APPA, p. 2-3). Bonneville and PPC recommend that EPA clarify that the four factors above represent a progressive test, that if one of these factors is satisfied in the order specified, then the permit writer need not evaluate the other factors (BPA, p. 9, PPC, p. 3, UWAG, p. 36-37). BTA should be satisfied if any of the four factors are met (HPA, p.10, PPC, p. 3). Should EPA propose to add significant new requirements to hydroelectric facilities to address impingement and entrainment under Section 316(b), the Agency must do a national rulemaking. (EEI, p. 10-11, 13; PNGC, p. 6).

Response. As explained in the 2020 Fact Sheet, EPA used a four-factor test as a framework to applying BPJ to determine best technology available (BTA). The elements of the framework used technical information from the 2014 Existing Facilities Rule (Factors 1 and 2) and configurations unique to hydroelectric facilities (Factors 3 and 4) as considerations in evaluating operations or technologies that could minimize entrainment and impingement of organisms. The Fact Sheet described how meeting at least one of the factors would be sufficient for BTA to address impingement and entrainment. See Lower Snake River Fact Sheet at p. 52-54.

EPA determined that Factor 4, existing technologies at the facility, would best address impingement and entrainment due to ongoing efforts to maintain and improve fish survival from work related to threatened and endangered species in the Lower Columbia and Snake Rivers as well as extensive past, ongoing, and future studies to evaluate the effectiveness of actions to improve fish passage and survival at these facilities.

The four-factor test in the Fact Sheet provides an appropriate and reasonable basis for determining BTA and the selection of BTA using Factor 4 will result in minimizing entrainment and impingement of organisms at these facilities. EPA's 2021 CWIS memo provides national guidance on the four-factor test for determining BTA at hydroelectric facilities. The 2021 CWIS memo does not mandate a permit writer to follow the four-factor test; it merely provides recommendations on how to determine BTA. Regardless of the four-factor test, the permits must establish BTA based on BPJ. Comments pertaining to the 2021 CWIS memo are outside the scope of this action.[3] EPA did not make changes to the permits in response to this comment.

Comment 16. EPA proposes to consider how efficient a facility produces electricity by comparing megawatts produced to the quantity of cooling water used. It is unclear how Factor 1 is evaluated (HPA, p. 10). Based on this factor alone, permit writers should be able to conclude that § 316(b) BTA requirements have been satisfied. EPA should clarify what kind of analysis or support permit writers would need to use to rely on this factor. APPA recommends that EPA clarify that, if this factor is satisfied, the permit writer need not evaluate the other factors (APPA, p. 10; UWAG, p. 37).

Response. EPA's 2020 Fact Sheet explains that Factor 4 was used to determine BTA through BPJ for these permits. See Lower Snake River Fact Sheet at p. 53. This comment relates to a factor that was not used to develop permit conditions. Therefore, this comment is outside the scope of the permits. See 2021 CWIS Memo for more information regarding Factor 1. EPA did not make changes to the permits in response to this comment.

Comment 17. The second factor proposes to consider [is sic]"proportional flow." APPA and HPA support EPA's use of the New Facility Rule's "proportional flow requirements" and agrees that the cooling water withdrawn at hydroelectric facilities will almost always be below 5% (in most cases, less than 1%) of the water passed through the dam for generating purposes. Another consideration may be the low volume of cooling water used as compared to the overall flow of the river (HPA, p. 11). However, EPA's use of proportional flow requirements does not only address entrainment, it also addresses impingement, another relevant issue. The underlying record that EPA has established for impingement through its § 316(b) rules assumes mobility. Once organisms are committed to moving through the facility, mobility would not matter. Therefore, EPA should clarify that the proportional flow factor may be used to address both impingement and entrainment (APPA, p. 10-11; UWAG, p. 38-39).

Response. See response to Comment 16. EPA did not make changes to the permits in response to this comment.

Comment 18. APPA and HPA agree that the location of the intake structure in the penstock or scroll case can demonstrate that the facility meets BTA for § 316(b). Hydroelectric facilities vary

[3] It should be noted that EPA Region 10 did not rely upon the 2021 CWIS memo which was issued after the public comment period on these permits.

significantly in terms of design and configuration, especially when it comes to the pipes and structures that divert water for purposes of cooling (HPA, p. 11). UWAG agrees that the location of the intake structure (e.g., in the draft tube, penstock, or scroll case) can demonstrate that the facility meets BTA for § 316(b). As EPA notes, where the CWIS is within the dam, there is a lower density of organisms as compared to an intake in the waterbody, thereby minimizing impacts from the operation of the turbine. As the draft Fact Sheets note, this factor would not be applicable for hydroelectric facilities with intakes on the face of the dam or in the waterbody. Those facilities can meet BTA by demonstrating that they meet one or more of the other factors or that the location of the intake is situated such that the presence of fish susceptible to entrainment or impingement is low. For example, the intake may be located away from suitable spawning or nursery habitat, or the fish species likely present would not be susceptible to entrainment or impingement due to their size, swim speed, natural behaviors, etc. Clarification by EPA on addressing this factor for intakes not situated in the draft tube, penstock, or scroll case would be helpful (UWAG, p. 40). Permit writers should be able to conclude that § 316(b) BTA requirements have been satisfied based where the intake is located within the dam, on this factor alone (APPA, p. 11).

Response. See response to Comment 16. EPA did not make changes to the permits in response to this comment.

Comment 19. The fourth factor considers technologies at the facility. This factor should make clear that the technology being assessed – and regulated by EPA – is the CWIS. Reevaluation of other technologies at the facility such as fish passage structures or turbine velocities is not within the purview of EPA. EPA's § 316(b) authority is limited to the location, design, construction, and capacity of cooling water intake structures (UWAG, p. 40-43). Another option for Factor 4 would be a determination that the configuration of the hydropower facility, including any measures employed as a result of consultation with the FWS or NMFS, could be deemed to satisfy the BTA requirement. But this determination should be made with the recognition that EPA has no jurisdiction over these components – it is simply a determination that the configuration is such that no additional requirements are needed at the CWIS (HPA, p. 11-12). EPA relied on Factor 4, the technologies at the facility, in its BPJ evaluation for BTA. Existing technologies at these facilities include measures to deter fish from intakes, encourage fish to travel through fish passage structures or over spillways, and decrease velocities through turbines to minimize impingement and entrainment of aquatic life at cooling water intakes. The technologies which EPA relies on in the application of Factor 4 are technologies or attributes for the whole facility, and not the intake, and therefore goes beyond the scope of EPA's § 316(b) authority. Incorporating guidelines around the use of technology and operations of the turbines goes beyond the scope of EPA's § 316(b) authority and could negatively impact the operations and adaptive management of the dams for their multiple authorized purposes (Cowlitz PUD, p. 2). While these technologies may help indicate that a facility already meets BTA (because any adverse impacts are minimized by virtue of those non-CWIS technologies), those technologies should not be incorporated as enforceable conditions of an NPDES permit. APPA urges EPA to limit the factors of its BPJ test to factors specific to the cooling water intake and to remove permit conditions that would impose operations or technology requirements for the whole facility (APPA, p. 11-12). It is unclear why EPA chose to use factor four for these draft NPDES permits to make their determination that technologies at the facility, in its best professional judgement (BPJ) evaluation for best technology available (BTA), satisfy 316(b) requirements when these facilities also meet factors one, two, and three (BPA, p. 9).

Response. As explained in the 2020 Fact Sheet and further clarified in the 2021 CWIS memo, permit writers using Factor 4 (technologies at the facility) in their BPJ evaluation of BTA may consider the design of the facility as well as operational practices which minimize impingement and entrainment of organisms. See Lower Snake River Fact Sheet at p. 53. The 2021 CWIS memo further describes that existing controls and practices at hydroelectric facilities may be sufficient to satisfy the BTA requirements. EPA described in the Fact Sheet the use of Factor 4 in the BTA determinations for these permits with supporting information of existing technologies and actions at the facilities to meet fish survival targets. Factor 4 is appropriate for these facilities given the significant actions the facilities are taking to address fish survival and the number of threatened and endangered species in the Lower Snake River. As explained in response to Comment 9, CWA Section 316(b) and 40 CFR § 125.90(b) requires the permitting authority to establish BPJ conditions for BTA for NPDES permits issued to dams with CWIS. EPA did not make changes to the permits in response to this comment.

Comment 20. The specificity of the Proposed Permit conditions under Factor 4 could also limit adaptative management practices (PNGC, p. 3-4, PPC, p. 5; UWAG, p. 43-44). We encourage EPA to avoid conditions for NPDES permit approvals that would go beyond direct measurements of NPDES required outcomes. Conditional approvals may be unduly burdensome or may fail to envision technological advancements (NRP, p. 5). The Proposed Permit conditions extract specific requirements from Fish Operating Plans and Fish Passage Plans and make those enforceable NPDES conditions, but those plans change frequently as facilities learn what measures are successful and feasible. Moreover, the permit conditions do not provide enough flexibility for the facilities to adjust their operations as needed. For example, requirements to operate turbines at +/- 1% peak efficiency flows could be problematic depending on maintenance or necessary upgrades at a given facility. While technologies may help support a BTA determination the technologies should not be incorporated into an enforceable 5-year NPDES permit (APPA, p. 12; BPA, p. 10-11). PPC believes that EPA's inclusion of technologies and practices beyond the CWIS, such as turbine efficiency and fish passage structures, to satisfy 316(b) requirements, is inappropriate. As such, Section II(E)(2)(a-e) should be removed from the final permits (PPC, p.2). The reference to the details of the annual Fish Passage Plan, including the Fish Operations Plan, should be removed from the permits, as they are overreaching and constraining to a system that is adaptively managed through the Biological Opinions. (BPA, p. 8, 13).

Response. Section 316(b) of the Clean Water Act requires that the permitting authority conduct a BTA determination using BPJ. See response to Comment 9. The permits contain conditions to implement BTA at the facilities; however, the permits also contain a condition that allows for adjustment to BTA if there are changes in the Fish Passage Plan. For instance, in the permit for the Ice Harbor Lock and Dam, Section II.E.2(c) states for turbine efficiency that the permittee must "Operate turbines within +/- 1% peak efficiency, or as specified in the most recent Fish Passage Plan." Thus, the permits allow for flexibility to adaptively manage technologies to maximize fish survival while still meeting the requirements under CWA Section 316(b). EPA did not make changes to the permits in response to this comment. See also response to Comment 24.

Comment 21. To the extent, the proposed four factor framework is a model for other states or EPA regions, the final permits should acknowledge the fish protection measures and operational requirements for the eight Corps facilities at issue here are specific to plans that were designed based on the attributes of the facilities, their locations on the Lower Columbia and Lower Snake Rivers, and the salmonid and other fish species in the area, among other things (UWAG, p. 44-45). APPA

recommends EPA clarify in the final fact sheet that the facilities at issue have technologies and requirements that are specific to their location, waterbodies, and the relevant species in the area. EPA should acknowledge that many facilities in other parts of the country may not have such technologies or operations requirements. Where hydroelectric facilities do not have such conditions or attributes for the facility as a whole (e.g., operation of turbines at +/- 1% peak efficiency flows), EPA does not have authority under the CWA to require facilities to implement such facility-wide technologies or requirements (APPA, p. 12).

Response. A BPJ analysis for BTA is, by its nature, a facility-specific analysis. See also 2021 CWIS memo. EPA acknowledges that the BTA analyses conducted for these facilities were specific to the conditions, locations, waterbodies and aquatic life located in the specific waterbodies. To the extent that a BTA analysis needs to be conducted for other hydroelectric facilities, the analysis would be specific to those facilities as explained in the 2021 CWIS memo. EPA did not make changes to the permits in response to this comment.

Comment 22. APPA and UWAG are concerned that the open-ended nature of the BPJ framework could lead permit writers to seek development of new information or costly studies (e.g., impingement and entrainment studies) to inform the application of these four factors. The data and calculations to satisfy Factors 1- 3 should be relatively straightforward. APPA is concerned about what information applicants would be required to provide for Factor 4 (APPA, p. 13; UWAG, p. 45-46).

Response. These comments relate to the general framework of the four-factor test. The comments do not provide any specificity as to the application of the factors to the specific permits at issue. In addition, comments regarding the BPJ framework are outside the scope of this action. EPA did not make changes to the permits in response to this comment.

Comment 23. In the absence of such a source category control technology analysis, the Bureau of Reclamation urges EPA to add two factors to its BPJ framework for existing hydroelectric facilities. The first, threshold factor should consider the extent to which a hydroelectric facility cooling water intake structure causes adverse environmental impacts, the focus of section 316(b). Second, EPA should add a fifth, umbrella factor to allow consideration in the BPJ determination of facility specific conditions potentially excluded from the four factors EPA enumerates in the draft permits (BOR, p. 2).

Response. This comment relates to the general framework and does not concern the factor used to determine BTA for the current permits. See 2021 CWIS memo. Comments regarding the general framework are outside the scope of this action. EPA did not make changes to the permits in response to this comment.

Permit-Specific Conditions for CWIS (316(b) and CWIS)

Comment 24. Bonneville suggests that **Section II.E. Cooling Water Intake Structure Requirements to Minimize Adverse Impacts from Impingement and Entrainment**, subsection (2), should read "EPA has determined that the ~~following~~ existing requirements as specified in the most recent Fish Passage Plan, including the Fish Operations Plan, are sufficient to satisfy the BTA requirement to minimize entrainment and to minimize impingement mortality" (BPA, p. 10; USACE, p. 5,6). PNGC requests that CWIS BTA requirements to prevent impingement and entrainment be aligned with ESA compliance as governed by the NOAA CRS biological opinion (PNGC, p.5). Please add a description

of the Columbia River System, Regional Forum workgroups, e.g., weekly Technical Management Team meetings, to properly characterize the Corps' responsibilities during in-season operations (USACE, p. 5).

Response. As explained in the Fact Sheet for these permits, the CWIS BTA requirements are aligned with the NOAA CRS biological opinion. See Lower Snake River Fact Sheet at pages 53-54. EPA has made the following change to Section II.E. of the permits: "including the most recent Fish Operations Plan and in-season Technical Management Team meetings."

Comment 25. Several corrections are needed to the hydropower operations fish survival tables, Table 18, in both the Lower Columbia and Lower Snake River Fact Sheets. Bonneville fish biologists reviewed Table 18 in the Lower Snake River Fact Sheet (page 54) provided by EPA on the draft NPDES permits. The tables show the correct juvenile survival range except for the following facilities that Bonneville requests EPA correct:

Ice Harbor: no fish survival data was reported for Ice Harbor. Fish survival is estimated to be 95-99% for 2006 & 2007.

Lower Granite: no fish survival data was reported for Lower Granite. Fish survival is estimated to be 92-99% for 2006 & 2018.

It appears EPA limited their fish survival estimates to three groups: steelhead, yearling and sub- yearling Chinook. All recommended changes and corrections cover these three groups (BPA, p. 11-12; USACE p. 11-12, 17).

Response. EPA Region 10 does not revise fact sheets issued with draft permits after the public comment period. Instead, EPA Region 10 corrects information and provides any additional explanation in the response to comments document. EPA acknowledges the fish survival rates for the Lower Snake River facilities that the commentor has provided. This comment, however, concerns the Lower Snake River Fact Sheet; therefore, EPA did not make changes to the permits in response to this comment.

Comment 26. Table 18 of the fact sheet mentions "Turbine routes: operate turbines at +/- 1% peak efficiency flows, operate turbines in priority order to maximize fish passage." Table 18 should also mention that the Corps has installed one fish friendly turbine (FFT) at Ice Harbor Dam, with a second FFT in progress (USACE, p. 15-16).

Response. EPA agrees that Table 18 should also include information that the Corps installed one fish friendly turbine (FFT) at Ice Harbor Dam with a second FFT in progress. As previously stated, EPA Region 10 does not revise fact sheets after the public comment period. Instead, EPA Region 10 corrects information and provides any additional explanation in the response to comments document. EPA did not make changes to the permits in response to this comment.

Permit Conditions – Monitoring, Effluent Limits, and Plans

General Comments (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 27. The draft NPDES monitoring, reporting and analysis requirements are burdensome, should be excluded from the final permits (PPC, p. 2-4), and should be reduced to apply only to a representative number of discharge points. We suggest that the sample frequency for the draft permits

be adjusted to quarterly sampling instead of monthly, as monthly effluent monitoring may pose an unnecessary burden to the hydroelectric operator with little benefits yielded (Cowlitz PUD, p. 2). Weekly sampling requirements are redundant and not necessary given the low risk and high cost of weekly sampling. If any sampling is required, quarterly sampling would be adequate and preferred (USACE, p. 2). We also ask that EPA adhere to reasonable and practicable requirements for implementation (PNGC, p. 3-4). Specifically, we request that EPA not require additional costly monitoring conditions (NRP, p. 4). Bonneville requests that all outfalls 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, oil and grease, polycyclic biphenyls (PCB), total suspended solids (TSS) and biological oxygen demand (BOD) and chemical oxygen demand (COD) be re-evaluated for utility, practicability, and cost effectiveness. Bonneville requests that EPA coordinate directly with the Corps to identify representative monitoring and sampling locations and monitoring frequency that results in data utility, practicability and cost effectiveness. The monitoring, analysis and reporting costs associated with these draft NPDES permits are estimated to be up to approximately $3 million in the first year of implementation and $400,000 to $600,000 per year after, including up to six full time employees for the lower Columbia and Snake River projects for the duration of the permits if the monitoring requirements remain as is. Adding these estimated costs across the four lower Snake and four lower Columbia River facilities will create a significant financial impact to Bonneville and the region's ratepayers (BPA, p. 3-7).

Response. EPA recognizes that effluent monitoring at these facilities can be costly due to the large number of outfalls with numeric limits that require compliance monitoring and the need to monitor other pollutants such as PCBs to assess whether numeric effluent limits are needed in future permits. In addition, because these are the first permits being issued for these facilities, 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 these permits, while also determining what is necessary to ensure that sufficient data are collected to determine compliance and to characterize effluent for future permits. EPA also coordinated with the Corps in developing the permit monitoring requirements.

These permits require monitoring for three purposes: 1) compliance with numeric effluent limits for pH, oil and grease, and heat; 2) better characterization of temperature and PCBs; and 3) characterization of BOD, COD, and TSS at a small number of outfalls.

All outfalls with numeric effluent limits require monitoring to determine compliance with limits. *See* 40 CFR § 122.41(j). The permits require weekly grab samples for the first year, and monthly grab samples thereafter if there are no exceedances or detections in the first year. EPA believes this is a reasonable approach to ensure compliance while also allowing for less frequent monitoring in the future if monitoring shows compliance with the limits in the first year.

Since available temperature data are limited to approximately one sample for each outfall at each facility, the permits also require temperature monitoring to assess compliance with the heat limits and to better characterize temperature at these outfalls. While EPA expects that the temperature impacts are likely small from these facilities, characterizing temperature at these facilities 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 at each facility and ESA-listed species are vulnerable to high temperatures. The permits require a minimum of monthly sampling of temperature at each outfall or

continuous temperature monitoring. For outfalls that require continuous monitoring, the permits allow for representative sampling with similar outfalls (i.e., outfalls that discharge the same type of effluent), since the amount of heat released and the resulting effluent temperatures from these outfalls are expected to be similar. For instance, the Ice Harbor Lock and Dam permit allows the facility to select three out of nine outfalls for cooling water discharges from main turbine units for continuous monitoring as opposed to reporting continuous monitoring at all nine outfalls. EPA believes 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. This temperature monitoring is necessary given the site-specific conditions at these facilities and receiving waters.

The permits also require PCB monitoring at facilities to ensure that PCBs are not discharged at levels that will require a PCB numeric limit in the next permit cycle. The permits require a monitoring frequency (4 times in two years) that balances the ability to characterize possible PCB discharges from the facility while being cognizant of the costs and resources necessary to complete monitoring. This information will provide the permit writer sufficient data to evaluate whether PCB limits and/or monitoring are needed in the next permit. Similarly, a small number of outfalls require monthly TSS, BOD, and COD monitoring because of high concentrations in the permit application. Additional data are needed to better understand whether these are aberrant or whether they show a systemic issue that would require numeric limits in future permits. EPA believes these are reasonable requirements necessary to inform the next permit.

EPA did not make changes to the permits in response to this comment.

Comment 28. Annual reports identified in the Table of Contents and throughout the permit are identified with a due date of 31 December. To provide for adequate time to complete annual reports for Best Management Practices ("BMP"), Environmentally Acceptable Lubricant ("EAL"), Cooling Water Intake Structure ("CWIS"), PCBs, etc., all annual reports should be due on 28 February (USACE, p. 2, 16).

Response. EPA agrees to change the due date from December 31 to February 28 to allow time to compile the previous year's data. EPA has changed the Schedule of Submissions and corresponding sections due date from December 31 to February 28 for the BMP Annual Report (Section II.B.), EAL Annual Report (Section II.C.), PCB Annual Report (Section II.D.), and CWIS Annual Report (Section II.E.).

Comment 29. Figure 7 (and other maps throughout) is of poor resolution and is unreadable. Please reproduce the maps and figures in the permit at a higher level of resolution to ensure readability. Consider other picture file types that scale better or covert more clearly to PDF (USACE, p. 17).

Response. As previously stated, EPA Region 10 does not revise fact sheets after the close of the public comment period. EPA does not believe that reproduction of Figure 7 or the maps throughout the fact sheet is necessary to provide comments on the conditions in the permits nor did the commentor provide a specific example or reason as to why the figure and maps was necessary to submit comments. EPA did not make changes to the permits in response to this comment.

Flow (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 30. The draft NPDES permits require a monthly measurement of discharge flow. Measuring the discharge of each outfall is not feasible. The Corps recommends changing the language to "calculate" flow. The flow will be calculated using the best available information, including design

flows, and based on how long that outfall operated (USACE, p. 3).

Response. Given the configuration of particular outfalls and the intermittent nature of many of the discharges, EPA agrees that flow calculations can be an accurate way to report monthly discharge flows. EPA has changed the effluent limitations tables in all permits from "Measurement" to "Measurement/Calculation" for flow.

Oil and Grease (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 31. Oil and grease: Oil and grease discharges are the most likely and potentially significant effluent discharges from the dams, and while there should be monitoring of these, the requirements of the draft NPDES permit are excessive. These dams are run-of-river, and their impacts from discharges are similar across their spans, so requiring monitoring and reporting for every outfall would cause undue burden and cost. The necessary information can be collected from a subgroup of each dam's outfalls (PPC, p. 4).

Response. See response to Comment 27 for a discussion of the factors EPA took into consideration in developing the monitoring provisions in the permits. *See also* 40 CFR 122.41(j) (representative sampling must be included in the permits). EPA did not make changes to the permits in response to these comments.

Comment 32. For oil and grease, the 5 mg/L effluent limit is stringent given that the effluent limit in the draft general permit for hydroelectric generating facilities in Idaho was 10 mg/L. Bonneville recommends the effluent limit be increased to 10 mg/L to be consistent with the draft general NPDES permit in Idaho. Bonneville also requests that the oil and grease effluent limit criteria be clarified as an average of the day. This aligns with other regional practices, as seen in the draft general NPDES permit in Idaho, and will reduce the monitoring and reporting burden placed on the Corps. Bonneville recommends reducing the weekly or monthly grab sample monitoring for oil and grease to quarterly monitoring in these draft NPDES permits because monitoring to date by the Corps has not resulted in effluent limits exceeding the proposed 5 mg/L threshold assuming 5 mg/L is the average (referred to as maximum) daily discharge of samples taken. Bonneville requests that EPA coordinate directly with the Corps to identify representative monitoring and sampling locations and monitoring frequency (BPA, p. 7).

Response. The 2020 Lower Snake River Fact Sheet (p. 44) describes the basis for the oil and grease effluent limits. The oil and grease effluent limits are an interpretation of Washington's narrative standards for toxic concentrations and aesthetic values. Since the facilities discharge in Washington, EPA used an interpretation of the water quality standards from a permit developed by the Washington Department of Ecology (Ecology) where Ecology interpreted achievement of the narrative standard as a daily maximum concentration of 5 mg/L. It is appropriate for EPA-issued permits that discharge in Washington waters to use Ecology's interpretation of its own state water quality standards. In addition, representative sampling is not appropriate for outfalls where the purpose is to identify individual leaks that may be occurring at each outfall. Representative sampling for continuous temperature monitoring, in contrast, is appropriate since the purpose is to generally characterize temperatures in cooling water effluent. See response to Comment 27. EPA did not make changes to the permits in response to these comments.

Comment 33. Current hydrocarbon monitors (at least from 2012 timeframe, approximately) are only reliable down to 10ppm. Measuring at the level included will require laboratory analyses. The basis for this effluent level is anecdotal at best, being based on existing permits intended to establish (administrative) controls and the MDL (minimum detectable limit). The basis does not cite concentrations that produce a sheen, which is the specific requirement. The Corps requests that the limitation be increased to 15 mg/L (USACE, p. 13-14).

Response. The basis for the numeric oil and grease effluent limit is described in the 2020 Lower Snake River Fact Sheet (p. 44). See response to Comment 32. EPA did not make changes to the permits in response to this comment.

Comment 34. Permits and 2020 Lower Snake River Fact Sheet: The Fact Sheet references several Washington State permits that establish a dry dock discharge level of 5 mg/l daily maximum for oil and grease to protect water quality. That daily maximum is described in WA0031411 as "Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, calculate the daily discharge as the total mass of the pollutant discharged over the day." The permit limits for oil and grease should be modified to include this language (USACE, p. 8, 11, 14).

Response. EPA agrees and has added the following language in the effluent limitation tables in Section I.B. of the permits for oil and grease: "Maximum daily effluent limit is the highest allowable daily discharge. The daily discharge is the average discharge of a pollutant measured during a calendar day. Calculate the daily discharge as the total mass of the pollutant discharged over the day."

Comment 35. The Corps requests that language concerning oil spills be tied to permitted outfalls only. The requirement in the NPDES permits should be to only report sheens from outfalls that are permitted by that specific permit. Other spills are reported in compliance with CWA Section 311 (USACE, p. 9).

Response. Section I.A. of the permits states that "the permittee is authorized to discharge pollutants from the outfalls specified herein...This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams and operations that have been clearly identified in the permit application process." Thus, the permits make it clear that they only authorize discharges from the outfalls.

The NPDES permit applications requested coverage for discharges from outfalls and for the following oil to water interfaces: greased bushings, lubricated wire rope, and in-water equipment. Sheens related to any of the above fall under NPDES authorization and must be reported to comply with the permits. EPA did not make changes to the permits in response to this comment.

Comment 36. EPA must specify reporting frequency for visual observations. EPA fails to specify the required frequency for observing discharges subject to effluent limitations under Section I.B.4. Under 40 C.F.R. § 122.48, NPDES permits must specify monitoring methods, intervals, and frequency. *See also* 40 C.F.R. 122.44(i) (SRW and CRK, p. 17). No frequency of visual observation of outfalls is provided in the permit. The Corps recommends observations at the same frequency as grab samples of outfalls be included as a permit requirement (USACE, p. 2).

Response. EPA has made the following changes (see bold) in Section I.B.4 of the permits: "The permittee must observe the surface of the receiving water in the vicinity of where the effluent enters the

surface water **at a minimum of once per week.** The permittee must maintain a written log of the observation which includes the date, time, observer, and whether there is presence of a visible oil sheen, floating, suspended or submerged matter. **If the permittee observes a visible oil sheen at any time, they must record it in the log**. The log must be retained and made available to the EPA or Ecology."

pH (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 37. pH: Bonneville and PPC requests reconsideration of including pH as a required monitored parameter in the draft NPDES permits (PPC, p. 4). Hydropower dams, including these facilities, generally do not have the means to modify the pH of a waterbody and are merely passing the influent water through their discharge. As an example, the NPDES Fact Sheet for the Lower Columbia dams notes that there were no pH values outside the desired range at the Bonneville Project, John Day Project, and McNary Lock and Dam (PPC, p. 4). In addition, according to the EPA Fact Sheets, section II(D) Impaired Waters / TMDLs section, which accompanied the draft NPDES permits, it appears there are no water quality-limited streams for pH listed on Oregon's and Washington's 303(d) lists. Thus, it is unclear why EPA would suggest monitoring this parameter. If EPA retains pH as a monitored parameter, then Bonneville recommends reducing the grab sample monitoring for pH to quarterly monitoring because these facilities do not have the means to modify the pH of a waterbody and are merely passing the influent water through the outfall. (BPA, p.5).

Response. The 2020 Lower Snake River Fact Sheet (p. 42-43) for these facilities explains that pH can be an indicator for problems with operations and maintenance if large amounts of chemicals or other pollutants are released. Therefore, pH is a pollutant of concern, and the permits include numeric water quality-based effluent limits based on Washington water quality standards. Monthly pH monitoring is a reasonable frequency to characterize the effluent in the first permit cycle. See response to Comment 30. EPA did not make changes to the permits in response to this comment.

Comment 38. Permits and 2020 Lower Columbia River Fact Sheet: The site specific criteria in Oregon is 7 to 8.5 standard units. No processes that modify pH are in place at the hydropower facilities, and there are only anecdotal reports that at times the specific portions of the Columbia River may exceed these limits. Recommend that language be added to the permit as follows: between 7-8.5, if this is exceeded, pH must be within .5 standard units of influent (USACE, p. 8, 14).

Response. See response to Comment 37. Although this comment is specific to the Lower Columbia River permits which are not part of this permitting action, EPA is responding to this comment in this document because it relates generally to the pH limits in the Lower Snake River permits. Washington's water quality standards at WAC 173-201A-200(g) does not allow for pH to be within 0.5 standard units if exceeded. EPA Region 10 does not revise fact sheets after the public comment period. Instead, the Response to Comments document provides any clarifications that need to be made to correct statements in the Fact Sheet. EPA did not make changes to the permits in response to this comment.

Temperature (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 39. EPA should clarify that temperature and PCB requirements are specific to the facilities and environmental conditions at issue and should not be used as a model for other hydroelectric facilities' NPDES permits (USACE, p. 46-48).

Response. All NPDES permits must account for facility-specific operations and receiving waters when developing limits and conditions. Although EPA Region 10 does not amend its fact sheets, EPA

acknowledges that the permit conditions for temperature and PCB are specific to these NPDES permits. EPA did not make changes to the permits in response to this comment.

Comment 40. The permits call for continuous temperature monitoring. This inclusion was made in light of forthcoming TMDL temperature limits for the Snake River and the impact of river temperature on protected salmonid populations. Temperature monitoring is already addressed in other processes and should not be included as a requirement under the NPDES permits. These facilities' cooling water discharges have minimal impacts to river temperature and additional monitoring of these discharges for temperature is not appropriate (PPC, p. 4; USACE, p. 13, 15). If potential temperature effects are minimal (see Table 10 in the Fact Sheet), there is no need for such robust temperature monitoring and reports. Given the conclusions reached by EPA, there is very little justification for requiring such robust (in-depth) water temperature monitoring and reporting. Table 10 shows no increase of effluent from background influent at three of the four lower Snake River dams and only a minor increase at Little Goose. EPA makes, at most, a case for limited monitoring and data collection (i.e., limited data set). The fact that "temperature is important in the Snake River" does not justify robust and expensive monitoring given the best available information and conclusions provided in this section. EPA acknowledges *de minimis* temperature influences from cooling water uses on overall river temperatures, yet requires a continuous representative sample point per outfall type. Please remove or edit this provision accordingly (USACE, p. 13, 15). If temperature monitoring remains a requirement in the permits, the Corps requests to perform six months of temperature monitoring to determine if ongoing temperature monitoring is justified or can be discontinued (USACE, p. 3).

Response. The permits include heat load effluent limits and require temperature monitoring to assess compliance with the heat limits throughout the permit cycle. Temperature monitoring also will better characterize effluent temperature at outfalls, which is not conducted at the facilities. EPA did not make changes to the permits in response to this comment. See also response to Comment 30.

Comment 41. EPA must revise the permit to include temperature effluent limits for cooling water discharges. EPA must address the reasonable potential analysis for temperature. EPA must incorporate temperature effluent limits for discharges into impaired waters (SRW and CRK, p. 12-14).

Response. On May 20, 2020, EPA issued the Columbia River Temperature TMDL which assigned heat WLAs to the facilities related to their point source discharges. 40 CFR § 122.44(d)(1)(vii)(B) requires that NPDES permits include effluent limits consistent with the assumptions and requirements of a WLA in a TMDL. EPA proposed heat limits in January 2021 consistent with the Columbia River Temperature TMDL. EPA has included heat limits in the permits that are consistent with the revised WLAs in the final Columbia River Temperature TMDL. See Section I.B. in each permit.

Comment 42. EPA should regulate heat pollution added to the Columbia and Snake rivers by the dams' impoundment of large, shallow reservoirs. Commenters urge EPA to evaluate and include effluent limits and permit conditions that address *all* of the heat pollution that the Dams add to the rivers (SRW and CRK, p. 15).

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 permits include heat load limits

consistent with WLAs to point sources in the Columbia River Temperature TMDL per 40 CFR § 122.44(d).

Ecology's CWA Section 401 certifications include conditions that require the permittees to comply with the LAs to the dam impoundments in the Columbia River Temperature TMDL and to develop temperature plans that comply with the LAs. As a result of Ecology's conditions, EPA has included the following language in the permits related to LAs:

- The permittee must implement temperature control strategies and meet the load allocations in the Columbia and Lower Snake Rivers Temperature TMDL (RCW 90.48.080 and WAC 173-201A-510(5)).
- The permittee must consult with Ecology to develop a water quality attainment plan (WQAP) per the conditions below:
    - 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 water quality standards for temperature and associated designated uses, including but not limited to, conditions in fish bypass systems of the dam.
    - The permittee must provide the scope of the WQAP to Ecology for review one year after the permit effective date.
    - The permittee must provide the final WQAP to Ecology for approval within two years of the permit effective date.
    - The permittee must submit a progress report to Ecology for approval in within six years of the effective permit date. The permittee must submit a summary report to Ecology for approval within nine years of the permit effective date and prior to the end of the ten-year dam compliance period.
    - The permittee must submit WQAP reports to Ecology to the following address, unless agreed upon by Ecology:

Senior Water Quality Engineer
Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

Comment 43. How does having a Columbia River temperature TMDL not yet issued impact the draft NPDES permits? What is the EPA strategy for incorporating the temperature TMDL and adjusting if the TMDL is not issued by May 18, 2020? (Yakama Nation, p. 7) How can the draft NPDES permit and Section 401 certification processes take place when the TMDL has not been issued and it is not clear if EPA will meet the deadline of May 18, 2020? Once issued, the Columbia River temperature TMDL and associated implementation plans must become conditions of the NPDES permits. The EPA should delay final issuance of the NPDES permits until the Section 401 certification and TMDL process is completed and the Yakama Nation is given an opportunity to provide meaningful oversight (Yakama Nation, p. 5). The NPDES permit is not in compliance with Washington's Water Quality Standards (WAC-201A). The discharges of cooling water as described in the fact sheet are over criteria 20 degrees C in some cases (Ice Harbor and Bonneville).

Response. EPA issued the Columbia River Temperature TMDL in May 2020 after the first public comment period for the permits, and at the same time, requested public comment on the TMDL. In January 2021, EPA went out for a limited second public comment period on the permits to propose heat limits consistent with the WLAs in the 2020 TMDL. In addition, EPA proposed an alternative option for

the heat limits that would be consistent with proposed WLAs from the 2020 TMDL public comment period. EPA then reissued the Columbia River Temperature TMDL on August 13, 2021 with the revised WLAs. EPA's permits include heat limits and LA permit conditions from the 401 certifications that are consistent with the reissued 2021 Columbia River Temperature TMDL. *See* 40 CFR § 122.44(d)(1)(vii)(B). See responses to Comment 41 and Comment 42. EPA did not make changes to the permits in response to this comment.

Comment 44. The NPDES permits must address temperatures at the Facilities and meet state water quality standards for temperature, including preventing unreasonable degradation of surface water quality upstream and downstream of each dam. The NPDES permits must include any conditions necessary to meet applicable state, tribal, and federal water quality standards. The NPDES permits should include suggested modifications to facilitate mitigating impacts including: modification of fish ladders, drawing down of selected reservoirs, increasing summer flows for temperature and migration, modifying flows for habitat, and ultimately transitioning away from dependency on hydropower and obstruction of the Columbia River. The Corps must submit a water quality attainment plan (WQAP) detailing potential strategies, including dam removal, to comply with temperature standards and migration and habitat needs. The WQAP and all other plans should be provided to Yakama Nation for review and input so that their Treaty Resources are protected (Yakama Nation, p. 9).

Response. The permits address temperature by including heat limits consistent with the Columbia River Temperature TMDL, requiring temperature monitoring, and including 401 certification conditions related to the LAs in the Columbia River Temperature TMDL. See responses to Comment 41 and Comment 42. EPA did not make changes to the permits in response to this comment.

Comment 45. The Snake and Columbia Rivers at points of discharge are impaired for temperature, but they compare the discharge to the impaired waters of the River. This approach is incorrect. The permit assumes full mixing and does not provide a mixing zone. The cooling water should at least be meeting the criterion of 20 degrees daily maximum at the point of discharge, and not be increasing the temperatures by more than 0.3 at any time (Pickett, p. 1).

Response. The WLAs in the Columbia River Temperature TMDL ensure that all point sources are not heating temperatures by more than 0.3°C. The permit heat limits are consistent with the TMDL WLAs. 40 CFR § 122.44(d)(1)(vii)(B); see also responses to Comment 41 and Comment 42. EPA did not make changes to the permits in response to this comment.

TSS, BOD and COD (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 46. **TSS, BOD, and COD**: Bonneville recommends removing the TSS, BOD and COD requirements from the draft NPDES permits for Ice Harbor, Little Goose and Lower Monumental dams. These facilities do not add to or concentrate TSS, BOD and COD. Additionally, these water quality parameters are not influenced by activities at the dams and reflect pass through influent water quality (BPA, p. 8). To align with the material impacts of the dams and to avoid being unduly burdensome, the final NPDES permits should not include monitoring for TSS, BOD, and COD (PPC, p. 4).

Response. EPA worked with the Corps to evaluate whether these data were inaccurate. Ultimately, EPA determined that additional data were necessary for the next permit cycle, since there was no clear

explanation for the higher-than-expected concentrations at these outfalls. The permits require quarterly grab samples at four outfalls, which does not present an undue burden. If data collected during this permit cycle shows that effluent concentrations do not cause water quality violations, the monitoring requirements will be removed in the next permit. EPA did not make changes to the permits in response to this comment.

Comment 47. Please clarify which heat pump EPA believes is discharging COD. EPA does not adequately justify this quarterly monitoring requirement associated with the unspecified heat pump, which is not expected to add or concentrate organic material (USACE, p. 13).

Response. The 2020 Lower Snake River Fact Sheet incorrectly describes COD monitoring requirements at a heat pump at Lower Monumental Lock and Dam in Section II.D. of the fact sheet; however, there were no permit conditions in the Lower Monumental Lock and Dam permit associated with this statement. Of the four facilities, COD monitoring is required at two outfalls at Little Goose Lock and Dam: the navigation lock fill valve sump (Outfall 13) and navigation lock drainage sump (Outfall 15). Page 43 of the 2020 Lower Snake River Fact Sheet describes the basis of COD monitoring requirements for these outfalls since COD effluent concentrations were high, and sumps may accumulate organic material. The permit for the Little Goose Lock and Dam requires COD monitoring for these outfalls to evaluate whether COD limits are necessary in future permits. EPA did not make changes to the permits in response to this comment.

QAP, BMP, and PCB Plans (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 48. The date that sampling must begin is not specifically identified in the permit. The requirement to conduct sampling should commence once the Quality Assurance Plan (QAP) is completed. Sampling prior to that may result in samples that will not meet quality assurance guidelines (USACE, p. 3).

Response. The effective date of the permits is April 1, 2022, which allows the permittee approximately 6 months from issuance date to prepare for sampling and QAP development. Though the permits do not require the QAP to be submitted until 180 days after the effective date of the permits, the permittee may choose to complete this prior to reporting sampling. This is a reasonable period of time from which to begin sampling. EPA did not make changes to the permits in response to this comment.

Comment 49. The Corps requests that plan development is within 12 months from receiving authorization to discharge from EPA (USACE, p. 16).

Response. See response to Comment 48. EPA did not make changes to the permits in response to this comment.

Comment 50. In the EPA "Guidance Manual for Developing Best Management Practices (BMPs)" it states that while Section 304(e) of the CWA restricts the application of BMPs to ancillary sources and certain chemicals, 40 C.F.R. § 122.44(k) authorizes the use of BMPs to abate the discharge of pollutants when: (1) they are developed in accordance with Section 304(e) of the CWA; (2) numeric limitations are infeasible; or (3) the practices are necessary to achieve limitations/standards or meet the intent of the CWA. Because the dams are not industrial manufacturers or treat any process waste, and the intent of the permit is to regulate the discharges associated with operation of equipment at a hydropower plant, the Corps of Engineers requests the removal of the BMP requirement because it is

unnecessary. The project specific Spill Prevention Control and Countermeasure (SPCC) Plans more adequately address the concern for housekeeping, site run off, inspections, security, training, and loading/unloading, and projects have a site-specific Oil Accountability Program. In addition, the projects maintain a robust dangerous/hazardous waste program in compliance with Washington Department of Ecology and/or Oregon Department of Environmental Quality's RCRA regulations and are typically considered Small Quantity Generators. The requirements in Appendix B are redundant and overreaching for a facility that is an end user of a small amount of products (USACE, p. 4).

Response. To the extent that BMPs overlap with SPCC or RCRA, the facilities can incorporate those BMPs into the BMP Plan. Appendix B in the permits includes the following language: "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 or Ecology." EPA did not make changes to the permits in response to this comment.

Comment 51. The Corps does not believe any BMPs associated with Oil Accountability are warranted due to work practices that are already in place and EPA's failure to establish a connection between oil products and the permitted discharges/outfalls. For example, the Oil Accountability, Tracking, and Reporting requirements in Appendix B.3 is redundant with Section 311 SPCC Plans. This appears to be an attempt to regulate the facility as a whole under CWA Section 402. Any language that attempts to regulate the facility as a whole should be removed from the permit (USACE, p. 7).

Response. BMPs and the BMP Plan are warranted to ensure that the Corps implements practices that will meet oil and grease limits as well as other permit conditions. See responses to Comment 50 and Comment 58. EPA did not make changes to the permits in response to this comment.

Comment 52. The Corps does not believe any BMPs are warranted due to work practices that are already in place but the term "significant" in the inventory of exposed materials (App B 5) should be defined as quantities over 55 gallons (USACE, p. 7, 14).

Response. EPA has added the language to the BMP Plan in Appendix B to define "significant" as quantities over 55 gallons. See also response to Comment 51.

Comment 53. The Corps does not believe any BMPs are warranted due to work practices that are already in place and the existing data that was already submitted as part of the application process. Additionally, this data is already included in monthly discharge monitoring reports. The Corps requests removal of sampling data in the Best Management Plan because it is redundant and unnecessary (USACE, p. 7).

Response. EPA agrees that effluent data is already included in monthly discharge monitoring reports and has removed this requirement from the BMP Plan. However, pursuant to CWA Section 401(d), EPA has included requirements in the permit that sampling data be reported in the BMP Annual Reports as a result of conditions in the 401 certifications. See also responses to Comment 51 and Comment 75.

Comment 54. The Corps does not believe any BMPs are warranted due to work practices that are already in place but if the section is not removed in its entirety, please remove requirement "9" from Appendix B, Best Management Practices and the requirement in Best Management Practices Plan (Section II.B). This provision is an ESA compliance issue that is consulted on between the Services

and the Action Agencies. EPA does not have a role, and the NPDES permit should not include requirements that have been previously consulted on. This provision fails to identify a connection between the maintenance procedures and the permitted discharges/outfalls. This section is entirely duplicative with existing ESA consultation processes and products, and EPA should not attempt to enforce Biological Opinion requirements via CWA NPDES permits (USACE, p. 7-8).

Response. See responses to Comment 11 and Comment 51. EPA did not make changes to the permits in response to this comment.

Comment 55. Appendix B.10 - The Corps does not believe any BMPs are warranted due to work practices that are already in place, and requests removal of this provision. The BMP plan appears to be an attempt to regulate the facility as a whole under Section 402 and not just the permitted discharges -- i.e., no required nexus with the permitted discharge (USACE, p. 8).

Response. Appendix B.10 of the BMP Plan refers to flood/highwater discharges in the permits. It is unclear why the Corps believes that the BMP Plan is attempting to regulate the facility as a whole versus the permitted outfalls. As explained in response to Comment 58, the purpose of the BMP Plan is to ensure that the permittee implements practices at the facilities so that there will not be an exceedance of the oil and grease numeric effluent limit. See also response to Comment 51. EPA did not make changes to the permits in response to this comment.

Comment 56. Corps does not believe any BMPs are warranted due to work practices that are already in place, but BMP incidents (II.B.5) should fall into the category of "other non-compliance reporting" (III.H) and be reported with monitoring reports for Part III.B. This will limit the number of required report submittals, lowering the cost of compliance, without impacting discharge (USACE, p. 3-4).

Response. With respect to whether BMPs are warranted, see response to Comment 51. With regard to non-compliance reporting, EPA agrees and has changed Section II.B.5 of the permits with the following language (see bold):

- **Reporting of BMP incidents**. Prepare a written report to the EPA and Ecology after the incident has been successfully addressed, describes 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 Section III.H.**

Comment 57. EPA must review and approve BMP Plans and provide for public notice and comment on the plans. Commenters urge EPA to revise the Draft Permits to include new terms specifying EPA's review and approval role, as well as the opportunity for public notice and comment (SRW and CRK, p. 18).

Response. The permits require the permittee to develop BMPs including components described in Appendix B. The BMP plans are the means to achieve that requirement and do not constitute an effluent limit. Ecology's 401 certifications contained conditions that require EPA and Ecology to review and approve the BMP plans. Pursuant to CWA Section 401(d) and 40 CFR § 124.55(a), EPA has included these conditions into the permits. 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). Therefore, EPA is not providing public comment on permit conditions related to 401 certification

conditions. See also response to Comment 75.

EPA has modified Section II.B. in the permits to add language from 401 certification conditions related to BMPs (see bold):

- The permittee must submit a **BMP Plan to the EPA for review and approval** 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_WA0026778_BMP_05899, where YYYY_MM_DD is the date that the permittee submits the **BMP Plan**."

Under BMP Plan Modification in Section II.B. in each of the permits, EPA has added the following language: "**The permittee must submit the revised BMP plan to EPA for review and approval.**"

EPA also added the following language at Section II.B. in the permits from 401 certification conditions related to BMPs:

- 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 (Section 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.
- If EPA does not respond within 30 days after the BMP Plan or amended BMP Plan has been submitted for EPA approval, the plan is considered approved by EPA.

Comment 58. EPA must revise the permit to increase the frequency of BMP and EAL Plan compliance reporting. The Draft Permits requires that the Corps submit BMP and EAL Plan Reports once per year. Annual reporting undercuts the agency's oversight of permit compliance and ability to prioritize inspections based on current BMP Plan compliance. EPA's reporting requirement also undercuts the public's ability to understand pollution discharges from the facilities and review permit compliance. Commenters urge EPA to revise the Draft Permit to increase BMP Plan Report frequency to at least four times per year (*i.e.*, quarterly reporting). In addition, EPA should revise the Draft Permits to require specific reporting measures to detect oil spills and leaks. Many of the discharges cannot be sampled, including those from the wicket gates and the turbine hubs via blade packing. However, the Corps can conduct internal mass balance reports to determine if, and how much, oil is lost from the system (SRW and CRK, p. 18).

Response. The permits establish numeric oil and grease effluent limits and require monthly monitoring to ensure compliance with the limit. 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. In addition, the BMP Plan conditions in the permits 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 is there is an oil release that is not accounted for (Appendices B of the permits). 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 the Corps to shift all lubricants to biodegradable substances which will reduce the harmful impacts to aquatic species. Neither plan contains enforceable effluent limits.

Annual reporting does not undercut oversight of permit compliance because the facility needs to meet the oil and grease numeric limits as well as the requirement to use EALs unless technically infeasible. The plans set forth practices to meet those limits and subsequent annual reports allow facilities to optimize their BMPs and transition to EALs. 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. EPA did not make changes to the permits in response to this comment.

Comment 59. EPA's treatment of EALs in the Draft Permit marks a notable departure from EPA's treatment of EALs in the NPDES Vessel General Permit for Discharges Incidental to Normal Operation of a Vessel (VGP). Under the VGP, EPA requires that permittees use EALs where technologically feasible to reduce pollution to waters of the U.S. The VGP includes a series of EAL-related requirements and categorizes those terms as "technology-based effluent limitations and related requirements."

EPA never explains why the Draft Permits fail to address EALs in a manner similar to the VGP. Like vessels regulated under the VGP, hydroelectric facilities interface with the aquatic environment and are known sources of oil pollution. Moreover, hydroelectric facilities in the Pacific Northwest—including the facilities regulated under the Draft Permits—and around the world are utilizing EALs to reduce toxic pollution in aquatic ecosystems. EPA must revise the Draft Permits to include robust terms, similar to the VGP, that require—unless technologically infeasible—the use of EALs at hydroelectric facilities as a technology-based effluent limitation.

EPA must revise the draft permit to include technology-based effluent limits that incorporate the use of Environmentally Acceptable Lubricants. EPA must revise the Draft Permits to: (1) explicitly require the use of environmentally acceptable lubricants (EALs) as a technology-based effluent, and (2) ensure EPA oversight of EAL selection and use at the hydroelectric facilities (SRW and CRK, p. 10).

Response. As explained in the Fact Sheet, the CWA requires that the effluent limits for a particular pollutant be the more stringent of either technology-based effluent limits or water quality-based effluent limits. Technology-based effluent limits are set according to the level of treatment that is achievable using available technology. EPA establishes technology-based effluent limits through effluent limitation guidelines (ELGs). In the absence of ELGs for a particular category of discharge, the permitting authority must use best professional judgment (BPJ) to determine technology-based effluent limits. *See* CWA Section 402(a)(1). Here, there are no ELGs for oil and grease at hydroelectric facilities. Further, any BPJ-based effluent limits would be less stringent than the numeric water quality-based effluent limit that has been established for oil and grease to meet the Washington's narrative water quality standard for deleterious materials and aesthetics. In addition, the VGP established BPJ-based technology based effluent limits that are appropriate for vessel discharges. Here, EPA has established an oil and grease numeric effluent limit along with BPJ-based EAL-specific conditions which constitute the appropriate technology-based effluent limit for this specific discharge.

As discussed in the 2020 Lower Snake River Fact Sheet (p. 49-50) and Chapter 9 of EPA's NPDES Permit Writers' Manual (EPA, 2010), Special Conditions are appropriate in permits where additional monitoring and special studies are needed. Here, pursuant to Section 402(a)(1) of the CWA, EPA is using its BPJ to require the Corps to develop and implement the EAL Plan and Annual Reports. The commentors have not explained why these permit conditions do not constitute BPJ based technology based effluent limits. EPA did not make changes to the permits in response to this comment.

Comment 60. Commenters support EPA's decision to include an EAL Plan in the Draft Permits. However, EPA must revise the Draft Permits to ensure the agency is not authorizing an illegal self-regulatory scheme. EPA does not include any approval or disapproval mechanism for EAL Plans. First, EPA's decision to abandon its regulatory role vis-à-vis the EAL Plans runs afoul of the CWA. EPA must review and approve plans; if it neglects this duty, the agency creates an impermissible self-regulatory scheme. Special Condition II.C. fails to include any review and approval procedure by EPA. Second, EPA must afford the public an opportunity to review and comment on the draft EAL Plans. The EAL Plans constitute "effluent limitations," which the public has a statutory right to review and offer comment upon. Commenters urge EPA to revise the Draft Permits to include new terms specifying EPA's review and approval role, as well as the opportunity for public notice and comment (SRW and CRK, p. 11-12).

Response. The permits require the permittee to select EALs for all oil-to-water interfaces unless technically infeasible. The EAL Plan is the means to achieve that requirement and does not constitute an effluent limit.

401 certification conditions require that EPA and Ecology review and approve EAL plans. Pursuant to CWA Section 401(d) and 40 CFR 124.55(a), EPA has included these conditions into the permits. 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). Therefore, EPA is not providing public comment on permit conditions related to 401 certification conditions, since EPA must include conditions regardless of comments from the public. EPA has modified Section II.C. in the permits to add language from 401 certifications related to EALs (see bold):

- The permittee must submit the first EAL Annual Report by February 28 **to EPA and Ecology for review and approval** following the first calendar year of permit coverage, and annually thereafter. **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.
- If EPA does not respond within 30 days after a plan has been submitted for EPA approval, the plan is considered approved by EPA. If Ecology does not respond within 30 days after the first EAL Annual Report has been submitted for Ecology approval, the plan is considered approved by Ecology.

Comment 61. The Yakama Nation is encouraged to see the permit does not allow for PCB discharges of any kind. However, the Columbia River itself already contains PCBs and therefore the Facilities will discharge water with PCBs in it. How does the EPA intend to reconcile this (Yakama Nation, p. 7)?

Response. NPDES permits do not regulate water that is passed through hydroelectric facilities. Instead, NPDES permits regulate pollutants that have been added by a facility's operations. *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). To ensure that the facility does not discharge PCBs, the permits require a PCB Management Plan and PCB Annual Reports. See also responses to Comment 27 and Comment 62. EPA did not make changes to the permits in response to this comment.

Comment 62. PCBs: Bonneville recommends that the requirement to develop a PCB Management Plan be removed from each of these draft NPDES permits because historic sampling has not identified PCBs in discharges from these facilities. PCBs are a contaminant already regulated under the Toxic Substances Control Act (TSCA). Including this requirement is an over-reach of the CWA, expensive and overly burdensome given the duplicative nature of this requirement under TSCA. Additionally, Bonneville requests EPA to clarify Section 1.B.6 of the permits 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. 7-8). The PCB monitoring, plan, and annual report should be removed from the permits. Prior sampling of permitted discharges have not identified any PCBs, and there is no reason to believe the permitted discharges/outfalls may include PCBs in the future. The PCB monitoring, plan, and annual report requirements are not justified, unnecessary, and overly burdensome, especially given the permits specifically prohibit the discharge of PCBs (USACE, p. 4, 15).

Response. The 2020 Lower Snake River Fact Sheet (p. 50-51) describes the basis for PCB monitoring as well as the basis for the PCB discharge prohibition. Section 1.B.6 of the permits prohibit the discharge of PCBs, and the PCB Management Plan, which includes monitoring, planning, and actions, as a means to ensure compliance with the prohibition of PCBs. EPA considers PCB concentrations below the detection limit to be in compliance with the provision. In addition, the Lower Snake River is impaired for PCBs, so data to confirm that PCBs are not being released by the facilities at unacceptable levels is necessary information to collect for future permits. The Fact Sheet explains the site-specific circumstances of the receiving waters and the facilities that require the PCB-related permit conditions.

EPA received 401 certification conditions related to PCBs from Ecology. Pursuant to CWA Section 401(d) and 40 CFR 124.55(a), EPA has included these conditions into the permits. 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). Therefore, EPA is not providing public comment on permit conditions related to 401 certification conditions, since EPA must include conditions regardless of comments from the public. In order to address Ecology's conditions, EPA added the following language (see bold) to Section II.D of the permits:

- The permittee must submit the PMP to EPA and Ecology within one year from the effective date of the permit **for review and approval.**
- The PCB Annual Report must be submitted to **EPA for review and approval.** The permittee must submit the report as an electronic attachment to the DMR. The file name of the electronic attachment must be as follows: YYYY_MM_DD_WA0026778_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 the EPA, Ecology and/or DEQ upon request.

- **If EPA does not respond within 30 days after a plan has been submitted for EPA approval, the plan is considered approved by EPA. If Ecology does not respond within 30 days after the PMP has been submitted for Ecology approval, the plan is considered approved by Ecology.**

Comment 63. The reference to PCBs in Section I.F. of the Fact Sheet should be removed, as Table 9 (p.22) does not list PCBs as an effluent component. Section I.E does state, "Some transformers may have legacy polychlorinated biphenyls (PCBs), which can be released with cooling water," but that appears to be speculation, which does not justify the PCB monitoring, Plan and Report requirement (USACE, p. 13).

Response. As explained in the Fact Sheet, EPA included the PCB Management Plan condition in the permits because the Lower Snake River is listed as impaired for PCB, and there is a need for additional information concerning the facilities to ensure that they are not contributing to the impairment and are meeting the prohibition of PCB discharges in the permits. EPA Region 10 does not revise fact sheets after the public comment period; however, the response to comments document provides any further clarification needed as a result of public comments. EPA did not make changes to the permits in response to this comment.

Comment 64. The PCB Management Plan and reporting requirements are overly broad and unjustified, especially given that the permit specifically prohibits the discharge of PCBs. The permit Fact Sheets do not identify any historic sampling that found discharges of PCBs from the identified outfalls, and there is no indication that permitted discharges/outfalls may include PCBs in the future. 33 U.S.C. § 1314(e) [Section 304(e)] does authorize EPA to promulgate regulations to establish BMPs at the facility to prevent runoff, spillage, or leaks of toxic substances (e.g., PCBs) located at a facility, but there must be some indication such toxic substances "may contribute significant amounts of such pollutants to navigable waters." In other words, there must be some reasonable likelihood the PCBs will become part of the permitted discharges.

Similarly, 40 C.F.R. § 122.44(k) allows the establishment of BMPs to "control or abate the discharge of pollutants." However, there should be some likelihood the PCBs will become part of the permitted discharges to justify the expense, resources, and effort needed to comply with such PCB requirements. Sampling and identification of PCB-containing equipment has historically been conducted at the facilities as required by the TSCA. The PCB requirements go well beyond the TSCA and are unnecessary given the lack of PCBs in any of the samples submitted to EPA during the application process. The PCB monitoring, plan, and annual reporting requirements are not justified, overly burdensome, and should be removed from the permits. The Corps also has a yearly requirement to report any PCBs disposed of or stored at the facilities. If EPA includes any PCB monitoring or reporting requirements in the permits, the requirement to include a list describing all sources of PCBs on the premises previously removed, replaced, remediated. or reclassified should be removed as unnecessary and overly burdensome, as these materials have already been removed and cannot result in a discharge relevant to the permit. The same is true for the requirement to describe actions that have been established prior to the issuance of this permit to prevent and/or track releases of PCBs from potential PCB sources. There is also no need to sample paint and caulking, especially since it is not a potential source of PCBs in relation to the facilities' outfalls (USACE, p. 4, 13).

Response. See response to Comment 62. EPA has changed the permit conditions to include a general description of sources of PCBs which have previously been removed, replaced, remediated or reclassified.

As explained in the Fact Sheet, the Columbia River is listed as impaired for PCBs. The information that will be provided in the PCB Management Plan is important to better understand whether the facilities discharge PCBs for future permit issuances. EPA has changed Section II.D.1(a) from "A list describing all sources of PCBs" to "A general description of sources of PCBs." EPA also clarified the following language in Section II.D.:

- A description of actions that will be taken during the remainder of the permit cycle to prevent, **track, and address** releases of PCBs from potential PCB sources listed in part 1a, which must include BMPs that will decrease the likelihood of PCB releases.
- Progress to date in **implementing the PCB Plan**, evaluating the effectiveness of BMPs in preventing PCB releases.
- **How new actions will be taken to optimize effectiveness** during the remainder of the permit cycle.

Miscellaneous Comments (Permit Conditions – Monitoring, Effluent Limits and Plans)

Comment 65. The NPDES permits seem to only focus on concrete structures of the Facilities. General facility-wide stormwater discharges from hydroelectric generating operations appear to be largely unpermitted/unregulated at this point and these draft permits only cover specific sub-areas or operations (ex. oil-water separators). How will facility-wide stormwater be covered in these permits? Industrial activities and hazardous material usage, storage, and disposal have historically taken place at the Facilities. For example, there is contaminated stormwater that has impacted sediments at the Bradford Island site which is part of the Bonneville Dam complex; however, these pollutant discharges have not been monitored, adequately controlled, or permitted. Furthermore, the contamination at Bradford Island was only discovered through cleanup activity. There is high probability for contaminated stormwater at the other Facilities. A much larger look at facility-wide stormwater pollutant discharges at the Facilities must be conducted and included in this effort (Yakama Nation, p. 7).

Response. The permits address the discharges for which the Corps applied for coverage. If the Corps determines there are regulated stormwater discharges at the facilities that require permit coverage, the Corps may apply for coverage under EPA's industrial stormwater general permit or the Corps may request that these additional discharges be added to the NPDES permit. EPA did not make changes to the permits in response to this comment.

Comment 66. At a minimum, the draft NPDES permits must include conditions to cover oil spills (large and small), facility-wide storm water contamination, temperature, entrainment, and migration issues. Additionally, to be protective of water quality standards and Treaty-reserved resources, the following items need to be covered in the draft NPDES permits: Water behind dams; Water being spilled over dams; Water used only for hydroelectric generating purposes; and Water used only for navigation purposes (Yakama Nation, p. 8).

Response. Regarding oil spills, see responses to Comment 35 and Comment 58. Regarding stormwater contamination, see response to Comment 65. Regarding temperature, see response to Comment 43. Regarding entrainment, see response to Comment 19. In response to the scope of what is covered in NPDES permits, see responses to Comment 61 and Comment 75. Note that Ecology's 401 certification requires a condition for the permittees to develop a water quality attainment plan to address temperature

behind the dams and attain the total dissolved gases water quality criteria. Pursuant to CWA Section 401(d), EPA has included these conditions in the permits. See response to Comment 42. EPA did not make changes to the permits in response to this comment.

Comment 67. Please strike IV.B.1 and IV.B.2. The United States is excluded from the definition of "person" under the CWA. 33 U.S.C. § 1362(5); See also *United States Dep't of Energy v. Ohio*, 503 U.S. 607 (1992) (USACE, p. 7).

Response. These sections are generally included in all NPDES permits pursuant to 40 CFR § 122.41 which sets forth provisions that are required to be in all NPDES permits. However, EPA acknowledges that the Clean Water Act does not authorize EPA to assess penalties against federal facilities. EPA resolves alleged CWA violations at federal facilities through Federal Facility Compliance Agreements. EPA did not make changes to the permits in response to this comment.

Comment 68. Foam, floating, suspended, or submerged matter near outfalls generally consists of material already in the river such as pollen, algae, and woody-material that is being passed through the facility (and therefore exempt from the permit). Please provide clarification that material that has passed through the facility is not subject to consideration in this permit nor is a violation of the permit. Clarify the term "trace" (USACE, p. 8).

Response. The permits prohibit the discharge of the materials above. Discharges do not include material that has been passed through the facility. The permittee has discretion to determine what constitutes foam that is above trace amounts. "Trace" is defined as "a minute and often barely detectable amount of indication" (Merriam-Webster). EPA did not make changes to the permits in response to this comment.

Comment 69. Lower Monumental Lock and Dam: The Corps disagrees with the requirement to monitor the identified outfalls weekly for pH and Oil and Grease as this would be overly burdensome. Lower Monumental maintains a robust Oil Accountability Program for strict control of the inventory of oil and inspections of all oil- filled equipment. There are numerous times throughout the year when there will be no discharge from a unit, non-contact cooling water discharge, or the discharge will be sporadic. Weekly sampling would be problematic if the unit were to run on the weekends with only one operator on shift for three days (USACE, p. 9-10).

Response. See response to Comments 27. EPA did not make changes to the permits in response to this comment.

Comment 70. Lower Monumental Lock and Dam: For outfall 004 Emergency Diesel Generator, weekly sampling is not practical and will add wear and tear to equipment and increase operating costs. The generator is only used when the dam trips off line, which is very infrequent. There is a preventative maintenance work order to start and run the generator once a month. The small amount of run time will not contribute to reliable data concerning temperature load for the river system during the short run times (USACE, p. 10).

Response. The permit only requires sampling and reporting when the outfall is discharging. When the outfall is not discharging, the Corps should report a "NODI" (no discharge) code for the outfall. EPA did not make changes to the permits in response to this comment.

Comment 71. Little Goose Lock and Dam: The Navigation Lock Fill Valve Sump, outfall #13, is no

longer a wet sump and has zero discharges. The Corps requests this outfall be removed from the permit.

Response. Since outfall 13 no longer discharges, EPA has removed outfall 13 from the title page of the Little Goose Lock and Dam permit and has deleted the effluent table for this outfall in the permit.

Comment 72. Little Goose Lock and Dam: It is not possible to monitor influent at outfall #15 for COD because of the configuration of the navigation lock drainage sump. The Corps requests that this be removed from the permit.

Response. EPA included COD influent and effluent monitoring at outfall 15 to determine whether the high COD concentration was already present prior to entering the navigation lock drainage sump. However, since monitoring influent is not possible at outfall 15, effluent monitoring at outfall 15 will also provide sufficient information to characterize COD concentrations in outfall 15. This information will be used to determine whether the high COD concentration in the permit application is representative of the effluent, and whether COD limits will be needed in the next permit cycle. EPA has removed the influent monitoring requirement in outfall 15 for COD in the Little Goose Lock and Dam.

Comment 73. Lower Granite Lock and Dam: The Corps requests to delete outfall #13 on page #1 as it is an error (USACE, p. 10).

Response. EPA agrees and has removed outfall 13 from the title page of the Lower Granite Lock and Dam permit.

Comment 74. Background information, 2020 Lower Snake River Fact Sheet: The Fact Sheet information is out of date. The Corps requests that the facility Contact be changed to Brian Vorheis (OPM) at Ice Harbor Lock and Dam, (509) 543-3256. The Corps requests that the facility Contact be changed to Jeannette Wilson (OPM) at Lower Monumental Lock and Dam, (509) 282-7251. The Corps requests that the facility Contact be changed to Norman Bloom (OPM), (509) 399-2233 ext. 251 at Little Goose Lock and Dam. The Corps requests that the facility Contact be changed to Timothy Roberts (OPM), (541) 219-2251 at Lower Granite Lock and Dam (USACE, p. 10-12).

Response. EPA Region 10 does not revise fact sheets after the public comment period. Instead, the Response to Comments document sets forth any corrections that need to be made. EPA acknowledges the updated contact information for the facilities. EPA did not make changes to the permits in response to this comment.

401 Certification

Comment 75. There are limitations to the conditions that may be imposed through EPA's draft NPDES permits. The NPDES permits should be limited to the material impacts of pollutant effluent discharges that result from dam operations and could conflict with other agreements and obligations. (PPC, p. 2-5). Neither the NPDES permits nor the associated 401 certifications should infringe upon this longstanding adaptive management process. Any conditions imposed by the draft NPDES permits and Washington Department of Ecology's (Ecology) 401 certifications should not interfere with the Corps' ability to operate these facilities for the multiple purposes authorized by Congress (USACE, p. 2). *See National Wildlife Federation v. U.S. Army Corps of Engineers*, 384 F.3d 1163 (9th Cir. 2004). Further, the language of the Clean Water Act (CWA) explicitly recognizes that the

provisions of the CWA cannot be construed to affect the Corps' ability to maintain navigation. *See* 33 USC 1371(a); *In re Operation of Missouri River System Litigation*, 418 F.3d 915 (8th Cir. 2005) (BPA, p. 3, 13, USACE, p. 2).

Response. As explained in the Fact Sheet, EPA imposed the conditions in the permits pursuant to the Clean Water Act and its implementing regulations at 40 CFR Part 122. 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 certification conditions include the required CWA or state law references; therefore, EPA must incorporate the conditions specified in Ecology's certification in order to issue these permits.

The commentors state that conditions imposed in the NPDES permits and in Ecology's 401 certifications should not interfere with the Corps' ability to operate the dams citing to *National Wildlife Federation v. U.S. Army Corps of Engineers*, 384 F.3d 1163 (9th Cir. 2004). The commentors, however, have not identified specific permit provisions that interfere with the Corps' ability to operate the dams and/or conflict with other agreements and obligations. To the extent that the commentors are referring to conditions that are set forth in Ecology's CWA Section 401 certifications, those comments are more appropriately raised during Ecology's public comment period on Ecology's intent to certify the permits. Moreover, the validity of the conditions in the certifications are currently on appeal in the Washington Pollution Control Hearings Board (PCHB). To the extent the certifications are modified as a result of the PCHB appeals, EPA will address those certification modifications pursuant to 40 CFR § 124.55(b). EPA did not make changes to the permits in response to this comment.

Comment 76. NPDES certification should be limited to the scope of EPA's request envisioned under the NPDES intent—that is to say limited to potential pollutant discharges, such as the release of substances like oil used to lubricate equipment or effluent water used to cool equipment within the dam. We note, per two different federal court decisions that water that passes through turbines or over spillways (i.e., "non-effluent water") is excluded from NPDES permitting requirements (NRP, p. 3-4). We further suggest it is unnecessary to do so, because the dams on the lower Snake and lower Columbia rivers have not caused harmful in-river temperatures (NRP, p. 5).

Response. With regard to whether EPA has discretion to include conditions that are set forth in Ecology's certification, see response to Comment 75. It is unclear whether this comment concerns a particular condition in the CWA Section 401 certifications issued by Ecology or whether it concerns conditions in the draft permits. To the extent this comment concerns a condition in the CWA Section 401 certification, the comment is more appropriately raised during Ecology's public comment period on its intent to certify the NPDES permits. There is a State law process for issuance and appeal of Ecology's certification(s). To the extent this comment concerns a draft permit condition, none of the conditions in the draft permits deal with the water that passes over the dams via the spillways. See also response to Comment 75 regarding comments on NPDES certification under Section 401 of the Clean Water Act.

Comment 77. The Corps requests a second comment period on the draft permits if any changes are made as a result of the Washington Department of Ecology's issuance of the Section 401 Certifications (USACE, p. 12, 16).

Response. See Response to Comment 75. EPA will not be holding an additional public comment period on the 401 certification conditions that were included in the permit as a result of CWA Section 401(d). *See Lake Carriers Assn. v. EPA*, 652 F.3d 1, 10 (DC Cir. 2011). EPA has added all the 401 certification conditions to the permits in Section II.A-F and the Schedule of Submissions.

Comment 78. The EPA must ensure coordination with and between Ecology's and ODEQ's Section 401 certification processes. The Yakama Nation's understanding is that ODEQ and Ecology will issue separate Section 401 certifications for the NPDES permits on the Facilities. In 2018, ODEQ delivered a precautionary objection to the original draft NPDES permit due to the timeline and separation of the process from Ecology. In 2020, the separation of process seems to be continuing. This is an inadequate and confusing approach that will result in disjointed and separate permit conditions, monitoring, mitigation measures, and reporting. (Yakama Nation, p. 4-5).

Response. EPA is under no statutory obligation to ensure coordination between Ecology's and ODEQ's Section 401 processes**.** The processes that the commentor refers to are two separate processes under Clean Water Act Section 401. First, CWA Section 401(a)(1) requires the permitting authority to obtain certification from the jurisdiction to which permits discharge, unless the jurisdiction chooses to waive certification. Pursuant to this statutory requirement, EPA requested CWA Section 401 certifications of the permits from Ecology because the permits authorize discharges to Washington waters. Second, pursuant to CWA Section 401(a)(2), EPA provided ODEQ with notice that EPA determined that the permitted discharges for the Lower Columbia River federal dams "may affect" Oregon water quality. This is a separate process from the CWA Section 401(a)(1) certification process. Further, with regard to these particular permits, the CWA Section 401(a)(2) process and the subsequent objection sent by Oregon only relates to the Lower Columbia River federal dams which are not part of this current permitting action. EPA did not make changes to the permits in response to this comment.

Comment 79. The EPA must comply with any Section 401 certification conditions to ensure that NPDES permits are consistent with state water quality standards. With respect to the Facilities, the states may invoke Section 401 authority to condition the NPDES permits to ensure protection of water quality and designated beneficial uses. This includes meeting water quality standards for temperature in the reservoirs, spill over the dams, total dissolved gas, and salmon migration. If Ecology issues Section 401 certifications here, the EPA must incorporate any conditions into the NPDES permits, including temperature standards and other criteria necessary to protect salmon, pacific lamprey, sturgeon, Southern Resident areas, and other species from the combined impacts of

dam operations and climate change (Yakama Nation, 4-5).

Response. See response to Comment 75.

Tribal Consultation

Comment 80. The Fact Sheet does not indicate the schedule associated with EPA's tribal consultation or what the implications are to the permit or permit conditions. EPA should provide rationale for not including other basin tribes. EPA should coordinate any conditions resulting from such consultation (if any) with the Corps before adding them to the draft permits (USACE, p. 12).

Response. EPA engaged with Columbia River Basin tribes who expressed interest in the NPDES permits as part of EPA's government-to-government relationship with tribes for any federal actions that may impact a Tribe's interest. This follows EPA's 2011 Policy on Consultation and Coordination with Indian Tribes. Any changes to permits that are significant and discretionary require public notice. No significant changes to permits occurred through tribal consultation on these permits. EPA did not make changes to the permits in response to this comment.

Comment 81. The EPA must conduct a meaningful consultation with the Yakama Nation, including a staff-level technical meeting, prior to making a determination on the NPDES permits for the Facilities (Yakama Nation, p.4).

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 permits, including most recently, meetings and other communications from June through August 2021. EPA and Yakama Nation have agreed to continue discussions after the permits are issued. EPA did not make changes to the permits in response to this comment.

Comment 82. Each draft NPDES permit covers numerous outfalls at each of the Facilities. The following overarching issues and concerns apply to all eight of the draft NPDES permits and associated actions:

-No opportunity for the Yakama Nation to review and comment on the multiple best management and monitoring plans that will be attached to permits.

-No opportunity for the Yakama Nation to review mitigation plans, particularly related to mitigation measures for temperature.

-No opportunity for the Yakama Nation to review and comment on the multiple implementation plans that will be attached to permits.

-No opportunity for the Yakama Nation to review and comment on the EPA's evaluation of Section 401 Water Quality Certifications.

-No opportunity for the Yakama Nation to review and comment on Columbia River temperature TMDL.

-No opportunity for the Yakama Nation to review and comment on ESA Section 7 documents.

-No opportunity for the Yakama Nation to engage in meaningful government-to- government

consultation.

(Yakama Nation, p. 7-8)

Response. See response to Comment 81.

Environmental Justice

Comment 83. The environmental justice section of the fact sheet does not identify the "Census block group" or why/how the discharges would affect the group? The Corps recommends that the entire Environmental Justice section be deleted (USACE, p. 16).

Response. 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. As previously stated, EPA does not revise fact sheets after the public comment period. EPA did not make changes to the permits in response to this comment.

ESA consultation

Comment 84. Please define what "working with" the Services on ESA consultation means. The Corps requests a second comment period on the draft NPDES permits if any changes are made as a result of EPA's ESA consultation with the Services (USACE, p. 16)

Response. EPA is required to seek ESA consultation when EPA determines that EPA-issued NPDES permits are not likely to adversely affect or are likely to adversely affect threatened and endangered species. On June 24, 2021, EPA received concurrence from the United States Fish and Wildlife Services (USFWS) on EPA's determination that the permits were not likely to adversely affect threatened and endangered species under USFWS jurisdiction. On September 10, 2021, EPA received a Biological Opinion from the National Marine Fisheries Service (NMFS) that includes a reasonable and prudent measure (RPM) for EPA to send NMFS any reports or plans related to BMPs. The RPM does not require any changes to the permit conditions. Therefore, another public comment period is not necessary.

Comment 85. Species found only in lower Columbia River should be removed from the lower Snake River Fact Sheet (e.g., Pacific eulachon/smelt) (USACE, p. 17).

Response. EPA notes that there are some species that are found in the Lower Columbia River that are not found in the Lower Snake River. As previously stated, EPA Region 10 does not revise fact sheets after the public comment period. EPA did not make changes to the permits in response to this comment.

Comment 86. The EPA must perform a comprehensive evaluation of impacts to Native Nations and Treaty-reserved resources prior to making a determination on the NPDES permits for the Facilities (Yakama Nation, p. 4).

Response. EPA's Biological Evaluation assessed impacts to threatened and endangered species as part of the NPDES permitting actions, impacts to critical habitat, and essential fish habitat. EPA provided this information to Yakama Nation prior to issuing these permits. EPA has kept Tribes in the Columbia River

Basin informed about the permits during their development and requested tribal consultation on the permits. EPA did not make changes to the permits in response to this comment.

Comment 87. How does having ESA consultation not yet completed impact the draft NPDES permits? EPA should make a concerted effort to include the Yakama Nation in a transparent and coordinated effort so that we can provide input and expertise on ESA Section 7 documents and consultation with the Services. The EPA should delay final issuance of the NPDES permits until the ESA consultation process is completed and the Yakama Nation is given an opportunity to provide meaningful oversight (Yakama Nation, p. 6).

Response. EPA completed ESA consultation prior to issuing the permits. EPA is committed to working with Yakama Nation as the permits are being implemented. See responses to Comment 81 and Comment 86. EPA did not make changes to the permits in response to this comment.

Response to Comments from 2021 Public Notice

The following section includes comments from the January 15 – February 16, 2021 public notice of heat limits in permits. The comments are in the following categories: Temperature (2021 Public Comment); 401 Certification (2021 Public Comment); and Comments Outside Scope of 2021 Public Comment.

Temperature (2021 Public Comment)

Comment 88. The proposed revised heat load effluent limits from the U.S. Army Corps of Engineers should be incorporated into the final NPDES permits (NWRP 2021, p. 3; PPC 2021, p. 2). Bonneville appreciates EPA's coordination and collaboration on the development of the revised proposed Waste Load Allocations (WLAs) identified in each draft NPDES permit. The U.S. Army Corps of Engineers (Corps) proposed these revised facility-wide heat loads, which reflect the design flows and maximum temperatures, as WLAs to be applied in a revised Total Maximum Daily Load (TMDL) and subsequently in the final NPDES permits. Bonneville requests the WLAs in Table 2 of the 2021 "Fact Sheet for Proposal of Heat Load Effluent Limits in Lower Snake River Hydroelectric Generating Facilities" and the "Fact Sheet for Proposal of Heat Load Effluent Limits in Lower Columbia River Hydroelectric Generating Facilities" be incorporated into the final NPDES permits (BPA 2021, p. 2).

Response. The permits include heat limits consistent with WLAs from the revised 2021 Columbia River Temperature TMDL. See 40 CFR 122.44(d)(1)(vii)(B). EPA did not make changes to the permits in response to this comment.

Comment 89. Non-cooling water outfalls in the permits are included in waste load allocations. The Corps agrees with EPA's decision not to include these outfalls in the facility average monthly heat load. The permits' I.B. Tables and I.B. 12 paragraphs (except McNary, which is I.B.9) incorrectly address the exclusion of these outfalls from the facility average monthly heat load. Please see the Corps' comments to the Fact Sheets below (Comments 8 and 10), which request incorporation of the Corps' proposed revised heat load effluent limits into the permits. If EPA would like to discuss how the calculation should be modified, the Corps' is willing to do so (USACE, p. 2-3).

Response. See response to Comment 88 88. EPA did not make changes to the permits in response to this comment.

Comment 90. 2021 Lower Snake River Fact sheet: The proposed revised heat load effluent limits from the Corps should be incorporated into the final NPDES permits. The Corps requests the Waste Load Allocations (WLAs) in Table 2 as presented in the 2021 "Fact Sheet for Proposal of Heat Load Effluent Limits in Lower Columbia River Hydroelectric Generating Facilities" be incorporated into the final NPDES permits. If EPA wants to address I.B.12 heat load effluent limit consistency for all outfalls and how the calculation should be modified, the Corps is willing to do so. The Corps appreciates EPA's coordination and collaboration on the development of the revised proposed WLAs identified in each draft NPDES permit. The Corps proposed these revised facility-wide heat loads, which reflect the design flows and maximum temperatures, as WLAs to be applied in a revised TMDL and subsequently in the final NPDES permits (USACE 2021, p. 4-6).

Response. See response to Comment 88. EPA did not make changes to the permits in response to this comment.

Comment 91. EPA has requested comments on the proposed heat load effluent limits based on both the May 2020 TMDL WLAs and U.S. Army Corps of Engineers (Corps) WLAs alternatives. Information provided by EPA indicates that the Corps WLAs are higher than the May 2020 WLAs for all dams except The Dalles. These differences are attributed to the Corps using adjusted August temperatures and estimates of the influence of facility operations. The temperature, outfall design flow data, and the estimation method that the Corps used in their calculations was not made available to reviewers. While current data may be limited, WLAs calculations should be made on information that is transparent to EPA, state regulators and co-managers. The permitted WLAs should be reexamined and revised if necessary when permit monitoring requirements are met (CRITFC 2021, p. 2).

Response. See response to Comment 88. EPA did not make changes to the permits in response to this comment.

Comment 92. EPA's proposed NPDES permits require that the "permittee must comply with the effluent limits in the tables at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions". For thermal releases, a facility-wide monthly average sets this limit. Yet the permit also requires continuous temperature monitoring of select outfalls after the first six months of the effective date of the permit. It is not clear why meeting thermal heat load only at an averaged monthly level is used to set the permit's heat load effluent limit. Averaged monthly targets are not precise enough to understand when heat load effluents compromise the intended goal of limiting thermal releases. Management of acute thermal impacts to river resources is as important as the avoidance of chronic impacts. We recommend that the permitted facilities achieve daily compliance with heat load effluent limits as is required for other pollutant releases (CRITFC 2021, p. 2; CTUIR 2021, p. 3). The draft NPDES Permits provide for monthly compliance calculations with respect to the wasteload allocations. While this timeframe may be standard in other contexts, it is not sufficiently protective for fish. The EPA should revise the draft NPDES Permits to require daily compliance calculations. Ideally, the Corps or EPA would then share the data collected with the Yakama Nation and stakeholders (Yakama Nation 2021, p. 3).

Response. The heat limits are set as average monthly limits consistent with guidelines from the 2021 Columbia River Temperature TMDL on how permit writers should translate the WLAs. These WLAs and the TMDL are set at levels to protect aquatic life uses. The TMDL states that "The assumptions of the modeling assessment can be considered in determining how to translate the TMDL wasteload allocations into permit limits. In the model, a point source is input as a continuous heat load, and this is analogous to a source discharging continuously at its monthly average permit limit. Collectively, if all the sources discharge this load on average, the goal of the TMDL for point sources will be achieved." Therefore, the permits include heat limits as average monthly loads per 40 CFR 122.44(d) that permits must be consistent with the assumptions and requirements of a TMDL. The permit requires representative continuous monitoring and an annual temperature report that summarizes the temperature monitoring. This will help to better characterize effluent temperatures for the next permit cycle. EPA did not make changes to the permits in response to this comment.

Comment 93. The Discharge Monitoring Reports (DMR) and Temperature Data Report which are required to include the monthly instantaneous maximum, the maximum daily average, and 7-day average daily maximum (7-DADM) temperatures measured in each outfall along with daily flow data should be made available to all regional co-managers (CRITFC 2021, p. 2).

Response. The DMRs are temperature data reports that can be obtained by contacting Ecology and EPA.

EPA did not make changes to the permits in response to this comment.

Comment 94. Appendix B in EPA's TMDL provides an important compilation of data on temperature conditions throughout the river system for 2011-2016 and provides a useful comparison to existing standards. It is apparent from Appendix B's full-year graphics, that temperature criteria exceedances begin as early as June at multiple locations. We recommend that the NPDES heat load limits be extended from a July to October frame to June to October. Including June heat load data would allow regional co-managers to better determine the earliest onset of temperature exceedances such as those observed in high temperature/low flow years like 2015 (CRITFC 2021, p. 2; CTUIR 2021, p. 3). EPA should revise the draft NPDES Permits to require the Corps to begin monitoring in June rather than July (Yakama Nation, p. 3-4).

Response. EPA has changed the effluent limits tables in the permits to clarify that heat limits apply from June 1 to October 31 consistent with the timeframe in the 2021 Columbia River Temperature TMDL.

Comment 95. The Fact Sheet for the draft NPDES Permits ("Fact Sheet") notes that the maximum temperatures used in the TMDL did not consider temperature measurements from August, which is the warmest month of the year. This is a significant oversight. The Fact Sheet proceeds to explain the Corps estimated August temperatures, which informed the agency's newly proposed wasteload allocations. The Yakama Nation requests further information on the estimations performed by the Corps to develop its proposed wasteload allocations beyond the short narrative provided in the Fact Sheet (Yakama Nation 2021, p. 3).

Response. EPA has provided more information on the revised WLAs from the Corps to Yakama Nation. EPA did not make changes to the permits in response to this comment.

401 Certification (2021 Public Comment)

Comment 96. These proposed changes to the draft NPDES permits trigger new Clean Water Act (CWA) Section 401 Certifications (401 Certifications) (PPC 2021, p. 2). EPA must request new certifications from the Washington Department of Ecology (WDOE) prior to issuing the final NPDES permits. (BPA 2021, p. 2-3; USACE 2021, p. 4-6; NWRP 2021, p. 3)).

Response. EPA received final 401 certifications from Ecology on May 7, 2020. EPA did not request a second 401 certification, because Ecology's final 401 certification included a condition stating that "EPA must include a re-opener clause, if necessary, in the final permit to incorporate TMDL wasteload allocations (RCW 90.48.080)." The Columbia River Temperature TMDL was issued in May 2020. The heat limits in the January 2021 public notice of permits addressed the condition in Ecology's certification. Therefore, since EPA incorporated the TMDL WLAs, EPA addressed Ecology's certification condition and, as a result, EPA did not need to request a new 401 certification from Ecology. In addition, in a January 25, 2021 email, Ecology stated that EPA did not need to request a new certification for the addition of heat limits. EPA did not make changes to the permits in response to this comment.

Comment 97. Both sets of WLAs fall within the scope of Ecology's 401 certifications conditions necessary to prevent exceedances of water quality criteria. The allocations proposed by the Corps appear to represent a total increase of roughly 10% or less for the eight facilities combined in Washington State. Much of the change appears to result from attempts to better quantify summer water temperatures, and account for all generating facilities and design discharge rates. The Corps has

proposed larger WLA adjustments for its facilities on the Columbia River in Oregon, for similar reasons. Others have also requested WLA adjustments, including Public Utility Districts with facilities on the mid-Columbia. We understand the above requests and that others could be accommodated while maintaining a reserve allocation for point sources, all within the existing point source allocation (0.1°C) without impacting TMDL Load Allocations (LAs). Provided that is the case, it appears either choice by EPA would be consistent with EPA's approach to developing WLA's for point source discharges in the Columbia and Lower Snake Rivers Temperature TMDL (Ecology 2021, p. 1).

Response. Comment noted. EPA did not make changes to the permits in response to this comment.

Comments Outside Scope of 2021 Public Comment

Comment 98. Monitoring, analysis and reporting requirements are redundant given the low risk and high cost of weekly and continuous sampling. A representative sampling approach should be utilized instead. In addition to the public comments in this letter, Bonneville's previous May 2020 public comments submitted to EPA on these draft NPDES permits remain a concern (BPA 2021, p. 3-5). We ask that EPA adhere to reasonable and cost-effective requirements for implementation. Specifically, we request that EPA not require duplicative, over-burdensome monitoring conditions (NWRP 2021, p. 2). EPA should work with the Corps to identify the most appropriate representative sampling approach for monitoring, analysis, and reporting of effluent (PPC 2021, p. 2).

Response. These comments are not in the scope of the second public notice but have been addressed in the first section of this response to comments document related to the first public notice period. See response to Comment 27.

Comment 99. In addition to the public comments in this letter, the Corps' 4 May 2020 public comments submitted to EPA on these draft NPDES permits remain a concern. The Corps appreciates all the hard work EPA has put into drafting and proposing changes to these draft NPDES permits that were originally issued for public comment in March 2020. The Corps' 4 May 2020 public comments stand. We anticipate that the final NPDES permits will address our concerns (USACE 2021, p. 2).

Response. Comment noted. Comments from the first public notice are addressed in the first section of this response to comments document related to the first public notice period. EPA did not make changes to the permits in response to this comment.

Comment 100. The Corps requests the following: annual reports be due on 28 February, EPA use a representative sampling approach that reduces the frequency and location of weekly, monthly, and continuous monitoring as described in both the Corps' and Bonneville's May 2020 public comment letters, and at least 6 months between permit issuance and permit effectiveness to meet the requirements for detecting and calculating heat load. (USACE 2021, p. 2).

Response. These comments are not in the scope of the second public notice but have been addressed in the first section of this response to comments document related to the first public notice period.

Comment 101. The Corps requests that EPA consider the concerns that we have identified on the existing 401 water quality certification through our previous comment letter to WDOE and the appeal filed with the Pollution Control Hearing Board and either decline to incorporate the relevant

conditions, deem them waived, or some combination of these options. The requirements contained in the final NPDES permits, including any conditions in the 401 water quality certifications that may be incorporated into the final permits, should be focused on regulating the discharges from the discrete point sources described in the Corps' NPDES permit applications, as opposed to the facilities as a whole. Additionally, the conditions in the final NPDES permits, or associated 401 Certifications, should not impair the Corps' ability to effectively operate and maintain the dams for the multiple congressionally-authorized purposes. Further, the language of the Clean Water Act (CWA) explicitly recognizes that the provisions of the CWA cannot be construed to affect the Corps' ability to maintain navigation. *See* 33 U.S.C. § 1371(a); *In re Operation of Missouri River System Litigation*, 418 F.3d 915 (8th Cir. 2005) (USACE 2021, p. 5-7).

Response. These comments are not in the scope of the second public notice but have been addressed in the first section of this response to comments document related to the first public notice period.

Comment 102. As required by 33 U.S.C. sec 1341(d), EPA must include a new special condition in each permits to ensure that all flows associated with the dams comply with state requirements for attainment of water quality standards. Each permit should also include a statement that the permittee must comply with Ecology's Section 401 certification, and include the certification as an appendix (Ecology 2021, p. 2). Clean Water Act section 401 requires that any federal permit resulting in a discharge into the waters of a state will be certified as assuring compliance with that state's water quality standards.NPDES permits are subject to state 401 certifications and the federal agency is required to include conditions therefrom into its permit. Accordingly, EPA should be implementing all conditions from Washington Ecology's May 2020 401 certification, including conditions related to load allocations addressed in the temperature TMDL. That EPA has not included all these conditions is contrary to law, whether interpreted under the previous CWA section 401 regulations or the September 2020 rule (CRITFC 2021, p.2). The permits would benefit from incorporating all of the terms and conditions found in Washington's Clean Water Act Section 401 Certifications for the projects. EPA should include **all** of the temperature-related conditions of Washington's CWA Section 401 Certifications in the NPDES permits. One such condition in Washington's Certifications—to incorporate the waste load allocations (WLAs) from the Lower Columbia and Snake Rivers Temperature TMDL—should be incorporated in the NPDES permits for the federal dams. The permits should also require compliance with all the load allocations—including the **temperature** load allocations for the reservoirs in EPA's TMDL (CTUIR 2021, p. 3). The Yakama Nation is generally supportive of the EPA's decision to incorporate wasteload allocations from the Lower Columbia and Snake Rivers Temperature Total Maximum Daily Load ("TMDL") into the draft NPDES Permits, as required by the Certifications. However, the EPA has failed to incorporate all of the conditions from the Certifications. For example, it is not apparent that the draft NPDES Permits require the Corps to "implement temperature control strategies" or "consult with Ecology to develop a water quality attainment plan [that includes] a detailed strategy for achieving Washington's water quality standards for temperature..." The Certifications expressly require the Corps to take these actions, but the draft NPDES permits make no clear mention of them. Section 401 requires that each of the Certification provisions "shall become a condition" on the draft NPDES Permits. Therefore, the EPA cannot simply ignore Ecology's directives in the Certification. The EPA must further revise the draft NPDES Permits to incorporate the Certification conditions wholesale (Yakama Nation 2021, p. 3).

Response. These comments are not in the scope of the second public notice but have been addressed in the first section of this response to comments document related to the first public notice period.

Comment 103. EPA received comments solely on the temperature TMDL for the Lower Columbia and Snake Rivers (Gauthier 2021; Spurr 2021).

Response. These comments are not in the scope of the NPDES permits but similar comments are addressed in EPA's response to comments document issued with the 2021 Columbia River Temperature TMDL. EPA did not make changes to the permits in response to this comment.