

U.S. Government Commitments in Support of the “Columbia Basin Restoration Initiative” and in Partnership with the Six Sovereigns

Preface

In 2021, the Biden-Harris Administration began a process to work with regional sovereigns¹ and stakeholders to develop and implement plans to comprehensively restore Columbia River Basin salmon and other native fish populations to healthy and abundant levels, honor Federal commitments to Tribal Nations, deliver affordable and reliable clean power, and meet the many resilience needs of stakeholders across the region. The work was made possible by a pause in long-standing litigation, which has been extended since.

This document is the product of intense engagement with several of those parties—the Nez Perce Tribe, Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, the State of Oregon, and the State of Washington (the “Six Sovereigns”)—who are collectively advancing a Columbia Basin Restoration Initiative (CBRI). This document is intended to describe commitments developed in partnership with these sovereigns. The document also is consistent with the goals set forth in a recent Presidential Memorandum.

On September 27, 2023, President Biden issued a Presidential Memorandum declaring that “[i]t is time for a sustained national effort to restore healthy and abundant native fish populations in the [Columbia River] Basin,” and that “it is the policy of [the] Administration to work with the Congress and with Tribal Nations, States, local governments, and stakeholders to pursue effective, creative, and durable solutions, informed by Indigenous Knowledge, to restore healthy and abundant salmon, steelhead, and other native fish populations in the Basin; to secure a clean and resilient energy future for the region; to support local agriculture and its role in food security domestically and globally; and to invest in the communities that depend on the services provided by the Basin’s Federal dams to enhance resilience to changes to the operation of the CRS, including those necessary to address changing hydrological conditions due to climate change.”² Some actions are already underway to meet the goals in the Presidential Memorandum and other commitments made by the United States. This includes efforts such as testing the feasibility of reintroducing anadromous salmonids in blocked area habitats in the Upper Columbia River Basin above Chief Joseph Dam under a historic agreement between the United States government and the Confederated Tribes of the Colville Reservation, the Coeur d’Alene Tribe, and the Spokane Tribe of Indians to support and fund Tribally-led efforts to implement the Phase 2

¹ Regional sovereigns may include, as appropriate, the States of Oregon, Washington, Montana, and Idaho, as well as the Confederated Tribes of the Umatilla Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Nez Perce Tribe, Confederated Tribes and Bands of the Yakama Nation, Spokane Tribe of Indians, Coeur d’Alene Tribe, Confederated Tribes of the Colville Reservation, Kootenai Tribe of Idaho, Confederated Salish and Kootenai Tribe, Confederated Tribes of Siletz Indians, Shoshone-Bannock, Burns Paiute Tribe, Confederated Tribes of the Grand Ronde, Cowlitz Indian Tribe, Fort McDermitt Paiute and Shoshone Tribe, Kalispel Tribe of Indians, Shoshone-Paiute Tribes.

² Presidential Memorandum of Restoring Healthy and Abundant Salmon, Steelhead, and Other Native Fish Populations in the Columbia River Basin (Sept. 27, 2023), <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/09/27/memorandum-on-restoring-healthy-and-abundant-salmon-steelhead-and-other-native-fish-populations-in-the-columbia-river-basin/>.

Implementation Plan.

Sustained national effort requires durable partnership over time with all regional sovereigns and stakeholders. Though this document responds to the work of several regional sovereigns, these are not the only sovereigns in the Basin, and these commitments do not represent the exhaustive suite of actions that will be developed and carried out under the Presidential Memorandum. The effort described in this document is not intended to create a new forum that addresses or replaces existing regional forums and processes. The commitments described here do not undermine commitments the United States Government (USG) has made to other sovereigns in the region under existing agreements. The effort is intended to foster partnership on matters of shared interest among the USG and the Six Sovereigns, with the expectation that these efforts will grow, expand, and include other sovereigns and stakeholders. Accordingly, the USG is committed to continue pursuing partnership on matters of shared interests with other sovereigns in the region, whether those matters are included below or not. Moreover, when implementing the commitments below, the USG and Six Sovereigns are committed to including others and working in partnership.

Introduction

The Columbia River and its tributaries are the lifeblood of the Pacific Northwest, providing the region with an abundance of natural resources, water, power, recreation, and opportunity which have sustained cultures, livelihoods, commerce, and economic growth. An estimated 7.5 to 16 million adult salmon and steelhead once returned to the Columbia River Basin each year. In 1855, the United States entered treaties with the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe, in which these Tribes reserved, among other rights, the right to harvest fish at all usual and accustomed places. Salmon, steelhead, and other native fish are essential to the culture, economy, and ways of life of these Tribes, as they are for other Tribal Nations in the region and First Nations and other Indigenous Peoples in Canada.

Since the late 1800s, the Columbia River Basin ecosystem has changed at the expense of salmon, other native fish, and ecosystem function. Historically, sixteen different stocks of salmon and steelhead spawned above Bonneville Dam, as well as broadly distributed populations of bull trout, lamprey, sturgeon, and other aquatic species. Of the sixteen historic salmon and steelhead stocks, four are now extinct, and seven are listed under the Federal Endangered Species Act—including one reliant on a captive breeding program. Of the remaining five, only one approaches its historical numbers. Bull trout are also listed under the ESA and historic anadromous populations in the Columbia River are no longer present. The Kootenai River population of white sturgeon experienced significant decline with construction of Libby Dam and has been listed as endangered under the ESA since 1994. Pacific lamprey have also experienced a precipitous decline across the basin.

The Biden Administration recognizes the indisputable value and importance of salmon – and other native fish – to Columbia River Basin Tribes, as well as to the economy and overall ecological health of the region, throughout the Basin and from the Oregon coast to the Gulf of Alaska. In the face of climate change, urgent action is needed to restore their populations to healthy and abundant levels.

According to the 2022 report by the National Oceanic and Atmospheric Administration (NOAA), “Rebuilding Interior Columbia Basin Salmon and Steelhead,” the hydrosystem is a primary limiting factor in the recovery of ten of the sixteen salmon and steelhead stocks in the interior Columbia River Basin. For three others, the limiting factor is blocked historic habitat due to large dams that lack fish passage.

Tributary habitat is another important limiting factor for salmon and steelhead in much of the Basin, particularly for middle Columbia River stocks. NOAA found the risk of extinction for all NOAA ESA-listed stocks in the interior Basin to be moderate-to-high, and, considering the status of all limiting factors for the species, NOAA does not expect the current risk status of these listed stocks to improve in the short term without immediate attention.

To address the critical status of these fish – especially listed salmon and steelhead in the Snake River Basin – Senator Patty Murray and Governor Jay Inslee released [recommendations](#) on Columbia River salmon recovery in August 2022, after a year-long process compiling existing information and soliciting input from communities, Tribes, and stakeholders across the Northwest. With respect to the Lower Snake River (LSR) dams, they recommended that the dams’ services would need to be replaced or mitigated before any breach should occur. They further recommended that the Federal and state governments initiate a program to replace the services of the dams and develop additional information on the dams and the services they provide to enable Congress to consider dam breaching in the future. They also recommended immediate action to deploy the scale of clean energy infrastructure necessary to confront the climate crisis regardless of whether Congress authorizes the breaching of the Lower Snake River dams. They recognized, as does the Administration, that significant Federal investment is necessary to support this transition, which will require substantial Federal budget support.

We agree that business as usual – and the consequential disappearance of salmon and other native fish populations in the Columbia River Basin – is unacceptable. And while there is still time to save these fish, there is no time to waste. The NOAA report clarified the urgency of the situation, stating that, given the current status of salmon populations, “[t]he science robustly supports riverscape-scale process-based stream habitat restoration, dam removal (breaching), and ecosystem-based management, [and] overwhelmingly supports acting and acting now.”³

The science is clear, and now so too must be our path forward.

The USG also recognizes the urgency of recovering other native listed and non-listed aquatic species across the Columbia River Basin. While this Commitment document focuses on the needs of Pacific salmon and steelhead, the USG also plans to work with sovereigns and stakeholders under the direction of the Presidential Memorandum to increase restoration and recovery actions for other native species.

As stated in Exhibit 2 of the August 2022 litigation stay agreement, the Biden Administration is “committed to supporting development of a durable long-term strategy to restore salmon and other native fish populations to healthy and abundant levels, honoring Federal commitments to Tribal Nations, delivering affordable and reliable clean power, and meeting the many resilience needs of stakeholders across the region.” In carrying out this commitment, the Administration understands that no single action is a “silver bullet,” and progress will necessitate a comprehensive suite of management actions to make progress towards our goal of healthy and abundant fish populations in the Basin.

The NOAA Rebuilding Report, for example, sets out a suite of centerpiece actions “needed to provide the highest likelihood of reversing near-term productivity declines and rebuilding towards healthy and harvestable runs [of Columbia River Basin salmon and steelhead] in the face of climate change.”

Although the science is clear and the urgency real, there remain important social and economic factors to consider and address before the full suite of actions laid out by the NOAA report could move forward.

³ See NOAA, Rebuilding [Interior Columbia Basin Salmon and Steelhead Report](#), p. 24 (2022).

As highlighted throughout the Murray/Inslee recommendations, these social and economic considerations must be expedited and addressed on a timeline that meets this urgency, while also recognizing where congressional authorization is needed. In the meantime, interim actions can help minimize the potential for productivity declines and help achieve some population growth during periods of favorable environmental conditions.

It is apparent from the Columbia Basin Restoration Initiative (CBRI) that the Six Sovereigns share the Administration's understanding that a comprehensive and urgent approach is necessary to achieving our shared objectives, and the Administration thanks them for their work in developing this framework, consistent with the science undergirding the NOAA Rebuilding Report, to drive coordinated action. While this USG response does not constitute a decision by the USG to support legislation to authorize dam breaching, the USG continues to be committed to exploring restoration of the Lower Snake River, including dam breach, and views Governor Inslee and Senator Murray's recommendations as providing important guidance. To that end, the USG is prepared to deliver the commitments below, in partnership with the Six Sovereigns and other stakeholders in the region, to make headway on the objectives in the CBRI. As noted at the outset, the commitments here are not to the exclusion of other efforts needed to meet the President's direction to work to restore salmon and other native fish populations, including bull trout, lamprey, and sturgeon species, to healthy and abundant levels, to secure an affordable and reliable clean energy future for the region; to support local agriculture and its role in food security domestically and globally; and to invest in the communities that depend on the services provided by the Basin's Federal dams to enhance resilience to changes to the operation of the CRS, including those necessary to address changing hydrological conditions due to climate change. The USG is committed to working with all regional sovereigns and with stakeholders to implement the Presidential Memorandum and achieve these important goals.

Lower Snake River Restoration

Responsive to CBRI Objectives 1(a), 1(b), 4, 5, & 6

- **Objective 1(a) and (b):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin Partnership Task Force (CBP) and Rebuilding reports; and (b) complete the actions and investments necessary to secure continuity of services associated with Lower Snake River (LSR) restoration prior to LSR dam breaching.”*
- **Objective 4:** *Invest in and support communities and economic sectors (e.g., energy, transportation, agriculture, and recreation) in a manner that is consistent with meeting decarbonization goals and mandates and integration of renewables, delivers “affordable and clean power”, improves resiliency and adaptability to climate change and supports “the many resilience needs of stakeholders across the region”, and “[honors] commitments to Tribal Nations”*
- **Objective 5:** *Secure necessary regulatory compliance, authorizations, and appropriations for implementation of the strategy with an urgency reflecting the needs of the fish.*
- **Objective 6:** *Ensure that the strategy proposed in Objective 1 and associated Federal actions “honor Federal Commitments to Tribal Nations” and address past and ongoing inequities related to the Federal hydrosystem to reflect and uphold Federal Treaty and trust responsibilities to Columbia Basin Tribes.*

USG Commitments

- **Tribal Energy Sovereignty – Pacific Northwest Tribal Energy Program.** The Department of Energy (DOE) and U.S. Department of Agriculture (USDA) will provide targeted technical assistance, planning, and funding to the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe (together, the “LRTT’s”), to develop and deploy clean, renewable, socially-just energy resources (to include distributed energy resources (including efficiency and demand response, other generation, storage, and transmission resources)) in the region. DOE will work with LRTTs individually and collectively to support quantified goals for energy project development, presumed to be at least 1,000- 3,000 MW of clean energy resources, and to determine the role LRTTs want to take with regard to various projects (e.g., individual or collective ownership, leasing, power procurement, etc.). DOE will work with LRTTs to develop a written agreement documenting and guiding this process. This new, clean Tribally-sponsored energy will be planned as “replacement” power for the lower Snake River dams if Congress authorizes the breach of those dams. This Pacific Northwest (PNW) Tribal Energy Program will run in parallel with ongoing DOE assistance and resources related to tribally supported projects that are under development outside of the PNW Tribal Energy Program and nothing in this USG commitment is intended to be exclusive to PNW Tribal Energy Program projects or limit the allocation of resources to tribally-supported projects that are not identified by a Tribe as part of the PNW Tribal Energy Program. See *Appendix A for more information on this proposal and respective DOE and USDA contributions.*

 - **Tribal Engagement & Implementation Support.** The USG is committed to supporting Columbia Basin Tribes in regional energy planning and energy project review processes in the Pacific Northwest, and to advance the development of a renewable, clean, and socially just energy portfolio in the region. By February 1, 2024, DOE, USDA, and the Department of the Interior (DOI) will identify additional Federal resources (e.g., from the DOE LEAP program)⁴ that could support the LRTT’s and other Columbia Basin Tribes’ capacity regarding clean energy resource development, energy project management, and ability to engage in regional energy planning and energy project review processes, including without limitation the capacity of the Tribes’ natural and cultural resource staff to engage in such planning.
- **Accounting for “replacement” power.** In coordination with the Six Sovereigns, the USG and DOE will develop a means of “accounting” for the region’s development of resources available to serve as “replacement” energy services for the lower Snake River dams, based on the particular services needed in the event Congress authorizes dam breach.⁵ This accounting mechanism will be developed no later than February 1, 2024. This accounting mechanism will track and count all regional resources that can contribute to replacement of the dams’ energy services developed or under development as of the date of these commitments and beyond.⁶

⁴ Noting that various programs, including C-LEAP, are subject to competitive funding procedures and nothing in this agreement over-rides those standards and procedures.

⁵ In the event that Bonneville considers acquisition of these or any other resources, such acquisition of resources will be governed by applicable statutory requirements. See *e.g.*, 16 U.S.C. § 839d *et seq.*

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The Regional Energy Needs Planning Process described in Appendix A, specifically its scenarios for regional clean energy development that include replacement power in the event Congress authorizes breach of the LSR dams, will identify portfolios of potential replacement resources (as well as new energy resource options, e.g., storage, efficiency, or transmission, that could enable greater grid management flexibility to manage the hydropower system for greater fish benefit, as well as reliability, affordability, decarbonization and other regional goals during the interim period before breach is authorized). The “accounting” approach would provide the public regular updates on the region’s development of clean energy resources, including the type of resources needed to replace the specific energy services of the LSR dams, as compared to the portfolios identified in the energy analysis.

- **Assistance to Support Tribally-Owned Clean Energy Projects through USDA’s energy programs, such as the Powering Affordable Clean Energy (PACE) Program and at Least 10 Tribal Projects through USDA’s Rural Energy for America Program (REAP).** Yakama has applied for USDA’s PACE partially forgivable loan program for utility scale clean energy generation, and the USDA Rural Utilities Service (RUS) will continue to work with them through the process. USDA will also work with tribes to access funding for clean energy development through the RUS core program. Additionally, USDA will work to provide technical assistance to tribes to apply to the REAP program and will work with Columbia River Basin tribes to identify, develop and fund at least 10 REAP clean energy projects. REAP offers grants and guaranteed loans to agricultural producers and small businesses, including Tribes and Tribal businesses, in rural areas. REAP funds can be used for Tribally-owned renewable energy systems or energy-efficient infrastructure upgrades and provide grants for up to 50 percent of the total project costs for Tribes. Grants for clean energy and energy efficiency projects can be anywhere from \$1,500 to \$1 million in size.
- **Energy Analysis.** DOE will provide the necessary funding to the Pacific Northwest National Laboratory (PNNL) and potentially other DOE Labs to complete the Regional Energy Needs Planning Process, as outlined in Appendix A. This analysis will identify the best ways to meet the region’s resource adequacy needs and decarbonization goals, and support meeting Washington and Oregon’s power sector statutory requirements as well as state and LRTT energy strategies, while also accounting for any long-term actions necessary to ensure abundant and healthy salmon populations throughout the Basin, including breach of the Lower Snake River dams.
- **Transportation Upgrades.** The Department of Transportation (DOT) will prioritize work with sovereigns in the region to address rail, road, and culvert upgrades necessary for improving transportation infrastructure while also protecting and rebuilding salmon and steelhead populations. DOT Assistant Secretary for Tribal Affairs, Arlando Teller and the White House will hold an initial summit with regional sovereigns (including the Six Sovereigns) in early 2024 to scope, plan, and design projects that would meet DOT program requirements. This will include DOT providing information about opportunities for Federal funding, including grant and loan requirements for transportation and culvert removal projects. DOT will provide ongoing guidance and specific technical assistance to help identify the right grant and loan programs to fund these projects. For example, the new DOT [Rural and Tribal Assistance Pilot Program](#) will provide grants – up to \$360,000 each – for early project development-phase activities such as hiring staff, feasibility studies, or environmental review; the \$3.4 million funding opportunity began to accept [applications](#) on a first-come, first-served basis beginning on August 14, 2023.

- **Transportation Analysis.** The U.S. Army Corps of Engineers (the Corps), using its authority through the Planning Assistance to States and Tribes Program, will provide up to \$750,000 to partner with a non-Federal cost-share sponsor (potentially the State of Washington) to analyze what other transportation infrastructure, including rail, could provide regional benefits and also replace services should Congress authorize dam breach. This funding will further existing work at the State of Washington and will include stakeholder engagement from DOT and other relevant agencies as well as the Six Sovereigns' input.
- **Recreation and Public Access Analysis.** The Corps will allocate through its Planning Assistance to States and Tribes authority up to \$2 million⁵ to develop a blueprint for investments in replacement and enhancement of recreation along the LSR that would offset the loss of recreation opportunities associated with the drawdown of reservoirs if Congress were to authorize LSR dam breach. The Corps will work with the State of Washington and other entities as appropriate as cost-share sponsors. The blueprint will be informed by the DOI Tribal Circumstances analysis, and by consultation with the LRTTs, to ensure protection of cultural resources.
- **Water Supply Analysis.** BOR working with USDA will provide \$4.2 million to fund a water supply replacement study, in coordination with ongoing analyses by the State of Washington. This study will address the irrigation, municipal, and industrial withdrawals associated with the potential breach of the four LSR dams, if authorized by Congress.
- **Tribal Circumstances Analysis.** DOI will, in consultation and cooperation with Columbia River Basin Tribes, review the 1999 Tribal Circumstances Report (as amended in 2019) and the Tribal Perspective Reports submitted in 2019, together with information acquired in consultation with the Columbia River Basin Tribes in March 2022, to compile and complete an analysis of the historic, cumulative, and ongoing impacts the Federal dams on the Columbia River, including the lower Snake River dams, have on Columbia River Basin Tribes. This analysis will also inform any environmental compliance documents discussed below.
- **Study Timelines and Results.** The U.S. Government (USG) will complete the aforementioned outreach and analyses by late-2024, in cooperation with the Six Sovereigns and non-Federal sponsors, except that the Tribal Circumstances Analysis will be completed by DOI by June 1, 2024 and both the Transportation Analysis and the Recreation and Public Access Analysis timeline will be coordinated with the cost-share sponsor, with the goal of completing as much of the analysis as possible within 12 months of execution of a cost-share agreement. The USG, in cooperation with the Six Sovereigns, will provide the information obtained from the analyses above, and any recommendations that may result from those analyses, to Congress to inform budget and non-reimbursable appropriations requests. The information obtained from the analyses above will also inform environmental compliance documents and the Corps will use this information where relevant as well as other pre-existing analyses to expedite any Feasibility Study.⁷

⁷ The USG commits to reviewing time and cost-efficient opportunities to use information and analysis from prior LSR reports, including but not limited to the 2002 (Corps) Final Lower Snake River Juvenile Salmon Migration Feasibility Report / Environmental Impact Statement.

Reintroduction of Salmon in the Upper Columbia River Basin

Responsive to CBRI Objective 1(a)

- **Objective 1(a):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin Partnership Task Force (CBP) and Rebuilding reports.*

USG Commitments

- **Phase 2 Implementation Plan (P2IP).** On September 21, the USG entered into an agreement with the proponent sovereigns to support the implementation of the P2IP. This agreement included \$200 million from BPA over 20 years and a commitment from the rest of the USG to work with the Upper Basin Tribes as necessary and appropriate to ensure full funding – currently estimated at \$300 million – of the P2IP if additional investment is needed.
- **Enloe Dam Removal.** NOAA provided \$2.3 million in FY 2023 for Enloe Dam removal analysis. NOAA will continue to seek opportunities to align its competitive grant programs with Columbia Basin fish recovery needs providing fish passage into the Upper Columbia River Basin. This project continues to be a priority. The USG will work with the Confederated Tribes of the Colville Reservation as the lead for the removal and other regional sovereigns as appropriate to find resources to ensure the completion of the alternative analysis and the accompanying sediment management plan, both within ongoing non-Federal feasibility analysis.

Mid-Columbia River Salmon and Steelhead Improvements

Responsive to CBRI Objective 1(a)

- **Objective 1(a):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin Partnership Task Force (CBP) and Rebuilding reports.*

USG Commitments

- **Mid-Columbia Restoration Plan.** The Six Sovereigns and the USG will work together (with other sovereigns as appropriate) to develop recommended actions to rebuild mid-Columbia salmon and steelhead stocks as described in the Rebuilding Interior Columbia Salmon and Steelhead report, including, but not limited to, appropriately managing predation and protecting and restoring instream flows, water quality, and fish passage and habitat improvements in Oregon and Washington in low- to mid-elevation tributary and mainstem habitats.⁸ NOAA will coordinate with the appropriate USG agencies/departments and the relevant regional sovereigns (including the Six Sovereigns) to develop, by June 30, 2024, an agreed upon 10-year suite of mid- Columbia actions in Oregon and Washington for implementation beginning FY 2026, understanding that these actions will likely require at least doubling current levels of

⁸ This reflects the habitat components of the NOAA Rebuilding Report’s Mid-C centerpiece action recommendations, but does encompass the universe of actions necessary for rebuilding.

mitigation and restoration funding.⁹ To support this agreed upon suite of actions, the USG will identify available funding across agencies and departments, as well as other sources; and consistent with the September 27, 2023 Presidential Memo will evaluate new appropriations needs, and, as appropriate, potential future Congressional legislation necessary for implementation. BPA's obligation to fund any Fish and Wildlife projects identified in this Mid-Columbia Restoration Plan will be subject to the limitations outlined in the "BPA Fish and Wildlife General Funding" and "Increased Funding in Support of Basin-Wide Restoration" commitment sections, below.

- **Mid-C Subset of Near-Term Priority Actions.** The Six Sovereigns have identified and provided to the USG a short-list of high-priority mid-Columbia habitat actions, implementable in the near term. The USG, using a whole-of-government approach, will identify opportunities to provide funding to implement these projects beginning in FY 2024-2025.
- **Cold Water Refuge Projects.** The Environmental Protection Agency (EPA) and the Corps will work with the Six Sovereigns to identify and seek funding, as appropriate, to study and complete 3 to 5 projects to enhance or protect existing cold water refuge or provide additional cold water refuge in the Columbia Basin in Oregon and Washington. At least two of the five projects will be accomplished in Oregon. Special emphasis will be made toward reducing both warm waters and predation in tributary mouths. At least 2 of 5 projects will be focused on Mid-Columbia (Zone 6 and its tributaries) salmon and steelhead populations. Projects will be identified by June 30, 2024 for implementation beginning in FY 2024-2025.

Other Native Fish

Responsive to CBRI Objective 1(a) and 2

- **Objective 2:** *Ensure that all native species, regardless of listing status, are considered in the comprehensive strategy in a way that improves ecosystem function in the Columbia River and its tributaries.*

USG Commitments

- **Pacific Lamprey Mitigation.** The Corps has expressed a capability of an additional \$5 million in non-reimbursable funding for FY 2025 to support Pacific lamprey, and will continue to work with state and tribal fish managers to identify and seek appropriations, as appropriate, for funding needs moving beyond FY 2025, including needs expressed by the fish managers for a regional supplementation/augmentation plan, and for modernizing and funding passage structures at artificial barriers and obstructions, as associated with Corps facilities. The Corps received \$20 million in FY 2020 to make Pacific lamprey passage improvements consistent with commitments described within the 2018 Columbia Basin Fish Accords extension. The Corps has been working closely with the Tribes to ensure funding is allocated to the highest priority Pacific lamprey projects and expect the available funds to be expended by the end of FY 2024.

⁹ The Six Sovereigns have provided the USG with documentation that indicates that a 10-year suite of mid-Columbia mitigation actions would likely cost upwards of \$200M/year in additional funding over the next ten years.

BPA will continue the current level of funding to support passage for Pacific lamprey FWS will provide \$785,000 in FY 2024 to support Pacific lamprey conservation. FWS funding will be used for projects including passage implementation in the Yakima Basin and Upper Columbia Basin, monitoring of translocation efforts, and assessment of Pacific lamprey distribution in the Snake River Basin.

- **White Sturgeon Mitigation.** BPA will continue the current level of funding to support white sturgeon recovery efforts through FY 25 to implement NPCC Regional White Sturgeon Framework recommendations and the White Sturgeon Hatchery Master Plan, and provide support for monitoring and evaluation needs.
- **Bull Trout.** The FWS commits to providing \$700,000 in FY 2024 in support of bull trout recovery in the Columbia River Basin. Funding will be used for projects including population monitoring and assessment, genetic analysis of native salmonids in Idaho and western Montana, and technical assistance to Tribes and other partners on bull trout recovery. The Corps will provide \$87 million in funding for a design build contract for the Albeni Falls fish passage project to benefit bull trout and westslope cutthroat trout. The Corps will seek additional funding for implementation through the budget process.
- **Native Resident Fish & Shellfish.** The USG recognizes that the key elements of the CBRI, consistent with the Rebuilding Report, are important to restore native fish and the ecosystems supporting them. The FWS commits to working with USGS, regional sovereigns, and other partners to develop monitoring plans and restoration actions that would allow for better understanding of native resident fish (e.g., sculpin) and other native species' distribution and recovery needs, including the Western Ridged Mussel, which is currently petitioned for listing under the ESA. For example, in the Mid-Columbia, FWS is working with sovereigns to fund, design, and implement the Wallula Floodplain Restoration Project for the lower Walla Walla River benefitting both resident and anadromous species. The USG will work with the Six Sovereigns, Idaho and other regional sovereigns and stakeholders as appropriate to update plans, funding needs, and priorities necessary to restore native resident fish and shellfish in concert with the efforts to rebuild salmon runs. Funding will be identified for native resident fish and shellfish in the development of appropriations requests and budgets that support implementing the CBRI.

Improved Ecosystem Function

Responsive to CBRI Objective 1(a)

- **Objective 1(a):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin Partnership Task Force (CBP) and Rebuilding reports.*

USG Commitments

- **Improved Ecosystem Function Commitments.** The USG commits to rebuild salmon and steelhead runs to improve ecosystem function by restoring marine nutrient transport into interior habitats and providing prey for other native fish and for marine mammals, and by restoring watershed functions that provide essential ecosystem services enhancing resilience to climate change and associated heat, drought, fire, water scarcity and invasive species. River

restoration work in the Basin will help deliver this ecosystem function improvement. Examples include, but are not limited to:

- **Enloe Dam Removal.** See NOAA commitment above for “Enloe Dam Removal.”
- **Culvert Design or Replacement on Federal Lands in Oregon and Washington.** The Bureau of Land Management (BLM) provided \$1.2 million in FY 2022 and FY 2023 for the design or replacement of 17 culverts and other projects to restore and protect stream habitat in Washington and Oregon.
- **Culvert Removals in WA.** DOT has the ability to offer opportunities for competitive discretionary grants that recognize fish passage as an important component of the grant. These include FHWA’s Culvert Aquatic Organism Passage Program, Bridge Investment Program, Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program, and Wildlife Crossings Pilot Program.
- **Fish passage improvements.** For FY 2024, FWS plans to adjust criteria in the Notice of Funding Opportunity (NOFO) to give additional weight to project proposals that leverage other BIL investments and significantly contribute to watershed-scale restoration efforts. In addition, FWS will add selection factors in the NOFO that will facilitate FWS directing funding towards projects in priority geographic areas identified by DOI (e.g., Columbia River Basin; Klamath; Appalachia; Yukon, Kuskokwim, and Norton Sound region).
- **Cold Water Refuge.** EPA’s 2021 Cold Water Refuge Plan identifies various actions to protect cool tributaries and reduce temperatures in specific tributaries to enhance their function as a cold-water refuge. For example, a priority action in many watersheds is to restore stream riparian areas and geomorphology to cool streams and improve salmon habitat, especially on agricultural lands. These stream restoration projects can be implemented through grant funding and Federal, state, Tribal, and local partnerships. Costs could run to as much as \$50 million over 10 years. FWS recognized the need for additional cold water refuge assessments within the Columbia and Snake River basins in the 2020 FWS Biological Opinion and will work with sovereigns and other Federal agencies to identify methods and funding mechanisms to develop the assessments and implementation plans. The USG will work with states and Tribes to agree on a timeline and further refine cost estimates for these projects. In addition to funding from the USG, EPA will partner with the states to assist them in understanding how to leverage EPA Clean Water Act (e.g., State Revolving Fund and Section 319) funding for these same projects. EPA will work to identify thermal pollution, both point source and non- point source, and larger sources of warm water will be investigated and remedied to protect cold water sources and cold water habitat in the mainstem and tributaries to the Columbia River in Oregon and Washington.
- **Ecosystem Restoration Projects.** The Corps has expressed a capability of over \$20 million in non-reimbursable funding over the next 2 years for several new ecosystem projects throughout the Basin.¹⁰ The Corps will engage and work with regional sovereigns (including

¹⁰ Some of these projects will be in partnership with Tribes, and others are still being scoped. Projects include, but are not limited to: Columbia River Zone 6 Delta Assessment; Owyhee River Restoration;

the Six Sovereigns) to identify and prioritize these projects.

- **Ocean and Estuary Actions.** Columbia River basin salmon and steelhead spend a significant portion of their life-cycle in the ocean, and as such the ocean is a critically important habitat influencing their abundance and productivity. The increasing role of deteriorating ocean or freshwater conditions from climate change on the health of salmon and steelhead stocks does not diminish the importance or necessity of taking meaningful actions in areas society has more direct influence over. In fact, the importance and necessity of meaningful actions is heightened, not diminished because of the impacts of climate change.

While ongoing ocean research and monitoring is critically important to address the underlying uncertainties and knowledge gaps that currently exist in salmon ocean and estuarine ecology and should continue or be expanded, immediate improvements to the freshwater environment are imperative to avoid further declines, improve climate resilience, and begin salmon and steelhead rebuilding immediately.

NOAA will continue to prioritize ongoing work to develop decision support tools to track ocean productivity in a stock specific manner and to develop indicators that provide valuation for nearshore, estuary, and tributary habitat that can be used for restoration planning and prioritization.

NOAA also commits to collaborate with existing sovereign fish managers and regional entities conducting fisheries research in marine environments and by September 30, 2024:

- Identify specific actions that can be taken in freshwater, estuarine, and marine habitats to improve fish condition and marine survival or otherwise mitigate marine habitat impacts; e.g., controlling predation and enhancing prey availability.
- Identify mechanisms and tools for life-cycle modeling, monitoring, and adaptive management efforts to better integrate new information on ocean conditions and marine fish survival as it becomes available through ongoing or expanded ocean research efforts to help inform adaptive management of ongoing implementation of these USG Commitments in response to the CBRI.

Ocean monitoring and research to address uncertainties in the marine phase of the salmon life cycle are important and should continue concurrently with urgently needed improvements in the freshwater environment to arrest further declines and commence salmon and steelhead rebuilding immediately.

Interim Fish Operations

Responsive to CBRI Objectives 1(a) & 3

- **Objective 1(a):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin*

Hangman Creek Channel / Floodplain Restoration; Sweetwater Creek Restoration; Meadow Creek, Idaho Restoration Study; Barber Pool, Idaho Restoration Study; Nursery Reach, Washington Study; Hood River Confluence Ecosystem Restoration Study; Deer Gulch, Idaho Restoration Study.

Partnership Task Force (CBP) and Rebuilding reports.

- **Objective 3:** *Ensure interim fish measures are adequate to minimize additional generational decline of fish populations.*

USG Commitments

- **Commitment to Resolve Fish Operations.** The USG has engaged collaboratively with the Six Sovereigns regarding the Interim Fish Operations, using the Interim Fish Operations identified in the CBRI as the basis for discussions, to develop agreed-upon interim hydro system operations commitments.
 - The USG and the Six Sovereigns developed an action plan (see Appendix B for details) for implementing interim fish operations beginning in 2024 and beyond.¹¹
 - It is intended that these agreed-upon, durable operations will commence upon finalization of a long-term resolution of interim operations and would remain in place for a period of 10 years or until decisions are made and implemented regarding whether to breach the LSR dams in a timeline that meets the needs of the fish. If this decision is deferred beyond a reasonable timeline, then additional CRS operations for the fish will likely be needed.
- **Implementation of Durable Operations, as well as Monitoring and Adaptive Management.** The USG is committed to developing and using a Sovereign-driven process to focus on maintaining and adaptively implementing (managing) the durable set of operations agreed to that govern at the lower Snake River and lower Columbia River dams prior to potential breach of the lower Snake River dams. The USG is committed to refine the Regional Forum processes (e.g., Technical Management Team Regional Implementation Oversight Group, etc.) by September 30, 2024 to ensure that the implementation of the agreed-to operations and any adaptive management adjustments:
 - Minimize degraded fish operations resulting from scheduled and unscheduled maintenance/outages;
 - Equally consider fish operations relative to other authorized project purposes when making in-season adaptive management decisions; and
 - Follow a fish and wildlife manager developed framework for mainstem research, monitoring, and evaluation; addressing both reach-specific and life-cycle metrics for anadromous and resident aquatic species.
- **Backlog in Salmon Projects.** The Corps will provide at least \$50 million in funding to the Columbia River Fish O&M and construction funding in FY 2024 to begin addressing and prioritize the [backlog of projects identified](#) by the Columbia River Inter-Tribal Fish Commission (CRITFC) at Columbia and Snake River facilities for fish passage and survival.¹² These funds will be used, in consultation with the Six Sovereigns and Idaho to address backlog projects both at

¹¹ Changes to operations were only made for the lower Columbia River and lower Snake River projects in this agreement; other CRS project operations are not modified by this agreement.

¹² <https://critfc.org/documents/critfc-overview-of-columbia-river-usace-fish-budget-needs>

LSR dams and in the mainstem Columbia River. The USG and the Six Sovereigns agree to work collaboratively on identifying high priority needs and potential funding sources for the Corps' O&M and CRFM budgets for FY 2025 and beyond to address the backlog of infrastructure needs that constrain fish operations. Examples of high priority projects that are currently and/or likely to soon be impacting fish passage operations include: McNary adult fish ladder repair and maintenance, McNary spillway crane and hoist replacement, and spillway repair and maintenance at Lower Monumental, John Day, The Dalles, and Bonneville dams.

Modernization of Energy & Other Economic Sectors for Resiliency

Responsive to CBRI Objective 4

- **Objective 4:** *Invest in and support communities and economic sectors (e.g., energy, transportation, agriculture, and recreation) in a manner that is consistent with meeting decarbonization goals and mandates and integration of renewables, delivers “affordable and clean power”, improves resiliency and adaptability to climate change and supports “the many resilience needs of stakeholders across the region”, and “[honors] commitments to Tribal Nations.”*

USG Commitments

- **Fish and Economic Sector investments.** The USG will ensure actions that benefit fish and watershed health are coupled with investments to secure affordable and reliable decarbonized energy, efficient commodity transport and adequate water supply. Please see items identified in “*Lower Snake River Restoration*” section for specifics.
- **Reduce Local and Regional Burdens.** The USG will include investments complementary to this shifting energy landscape, as well as modernization of other economic sectors, and help reduce associated local and regional economic burdens. Please see items identified in “*Lower Snake River Restoration*” section for specifics.
- **Siting Consultations with Tribal Nations.** The USG will address siting considerations to help address long-standing Tribal inequities and help minimize ecological harm.
 - **Siting for Clean Energy Resources.** DOE, DOI, and USDA are committed to meaningfully engaging with Tribes on clean energy planning and siting to support the sustainable build out of transmission and clean energy resources in the region, including the projects that stand to be developed through the PNW Tribal Energy Program Proposal (*see Appendix A*).
- **CWA Permit Implementation.** Federal agencies (e.g., Corps and BOR, as permittees), where possible, will collaborate with the relevant states, Tribes, and EPA to assess/develop required temperature-focused water quality attainment plans per the state and Tribe’s Clean Water Act Section 401 certifications reflected in EPA’s National Pollutant Discharge Elimination System (NPDES) permits for Federal dams. This will facilitate more effective and efficient review of these water quality attainment plans. For example, a potential near-term action under evaluation to improve conditions for migrating salmon is installing systems to cool the fish ladders at the Federal dams. Other potential actions that the agencies can evaluate include CRS operational changes to reduce warm summer temperatures, especially during times of predicted excessively warm temperatures.

- **CWA Modeling for 401 Certifications.** The Corps will use its modeling, as needed, to simulate certain potential water quality impacts in order to provide that information to the relevant states and Tribes, and to EPA as it complies with its existing 401 water quality certifications.

Authorizations, Studies, & Timelines

Responsive to CBRI Objectives 5 & 6

- **Objective 5:** *Secure necessary regulatory compliance, authorizations, and appropriations for implementation of the strategy with an urgency reflecting the needs of the fish.*
- **Objective 6:** *Ensure that the strategy proposed in Objective 1 and associated Federal actions “honor Federal Commitments to Tribal Nations” and address past and ongoing inequities related to the Federal hydrosystem to reflect and uphold Federal treaty and trust responsibilities to Columbia Basin Tribes.*

USG Commitments

- **P2IP Regulatory Compliance.** The USG has begun required environmental compliance work and hired a contractor to support reintroduction of salmon in the Upper Columbia.
- **Authorizations and Appropriations.** Information produced through the USG analyses and the recently released Presidential Memorandum will inform budget and appropriations requests, as well as inform any required authorizations.
- **Feasibility Analysis.** See p.8, above.
- **Environmental Analysis Compliance.** The USG commits to working with the Six Sovereigns on potential changes in response to the CBRI such as interim project operations identified in Appendix B, more aggressive advancement of mid- Columbia River habitat restoration, and fish passage. The USG anticipates that supplemental or additional environmental compliance will be required to evaluate and implement some or all of these changes. If so, review and revisions to the current biological opinion and/or additional ESA consultations will likely be required. These supplemental environmental review processes will inform and be informed by the analyses identified above related to the consideration of LSR dam breach. The Federal Government will review existing environmental compliance documents and any additional information provided by the States, Tribes, and other stakeholders and initiate any additional environmental compliance its review determines to be necessary during the fall of 2024. The USG commits to use the 1999 Tribal Circumstances Report (as amended in 2019) and the other Tribal Perspective reports submitted in 2019 and the NOAA Rebuilding Report to inform the need for and content of any supplemental or additional environmental analysis. To the extent feasible, the Federal Government will complete any environmental compliance documents that it determines are necessary within 18 months of initiating them. Nothing in this paragraph alters the USG’s discretion or obligation to engage with other Tribal Nations and regional sovereigns as appropriate.

Additional Basin-Wide Funding Commitments

Responsive to CBRI Objective 1(a)

- **Objective 1(a):** *“Develop and advance an urgent, comprehensive strategy to (a) restore salmon and steelhead to “healthy and abundant levels” consistent with NOAA’s Columbia Basin Partnership Task Force (CBP) and Rebuilding reports.*

USG Commitments:

- **Backlog in Salmon Hatchery Infrastructure Projects.** Treaty and non-treaty, commercial, subsistence and recreational fish harvest for most stocks in the Columbia Basin is fueled primarily by Federal hatcheries - as mitigation for actions in the basin affecting fish, including development of the dams on the Columbia River Hatchery function and maintenance are thus an essential component and responsibility of the USG in operation of the dams. Currently, the CRS has a billion dollar+ backlog in deferred hatchery maintenance (see FN 19 in CBRI). To partially address this backlog, NOAA, as [previously announced](#), will commit \$60 million for high priority Mitchell Act facility needs identified by Tribes and states in the Basin. NOAA is currently engaged in tribal consultations to determine how to also allocate an additional \$240M in IRA hatchery funding to tribes with Federally reserved or adjudicated fishing rights for Pacific Salmon and steelhead. NOAA will allocate this additional funding keeping in mind the fisheries those hatcheries serve.
- **Columbia River Basin Restoration Act Program.** EPA will provide, through 2026, approximately \$85 million toward grants for projects to assess and reduce toxics across the Basin. This includes the recent awards of eight multi-year grants with tribes for nearly \$17 million. These resources will support science and monitoring as well as longer term state, Tribal, and NGO program development. Though the focus of the project is to reduce toxics, EPA expects and regularly sees co-benefits to healthier and more climate resilient habitat.
- **BPA Fish and Wildlife General Funding.** BPA has already planned, through its Fish and Wildlife program, to add at least an additional \$20 million in combined Capital and Expense funding in FY 2024 and FY 2025 for fish and wildlife efforts throughout the Basin on top of commitments laid out above. In addition:
 - \$200M over 10 years in additional capital funding will be made available by Bonneville to the U.S. Fish and Wildlife Service (FWS) for Lower Snake River Compensation Plan (LSRCP) hatchery modernization, upgrades, and maintenance, as guided by the priorities of other fishery managers including the Six Sovereigns.
 - An additional \$100M in funding under the Bonneville Administrator’s authority under 16 U.S.C. § 832a(f) over 10 years for projects that contribute to the restoration of salmon and other native fish populations. To implement this commitment, Bonneville will provide an annual \$10M payment to the Six Sovereigns in a manner to be agreed upon, to distribute to specific projects, as prioritized by the Six Sovereigns. The Six Sovereigns will coordinate with relevant regional sovereigns as appropriate on projects.
 - Nothing in these USG commitments or any implementing agreement is intended to affect BPA’s reimbursement obligations regarding the Columbia River Fish Mitigation and O&M

costs associated with the CRS project funds provided by the Corps or Reclamation. The USG and agencies, however, intend that all other funds committed by the agencies in support of the USG Commitments are non-reimbursable funds by BPA, whether or not expressly stated. The Federal agencies agree to coordinate before incurring any new reimbursable expenditure in support of the USG Commitments.

In the event that Congress appropriates funds that require reimbursement by Bonneville for one of the specific USG Commitments identified in this document, and that type of reimbursement does not arise from BPA's current reimbursement obligations, then that reimbursed amount will count toward Bonneville's total \$300M funding commitment.

- For the specific Bonneville funding commitments in this agreement, Bonneville will use the following approach to address inflation:
 - The \$100M for fish restoration actions will be indexed for inflation based on the GDP Deflator published by the U.S. Bureau of Economic Analysis and will be further described in the associated funding agreement with Six Sovereigns.
 - Inflationary pressures on the \$200M for LSRCF will be addressed on a project specific basis reflecting FWS' annual projected needs and will be further described in the associated funding agreement with FWS.
- **OMB Crosscut Budget.** OMB commits to developing a crosscut, all-of-government, budget that illustrates the Federal funding historically targeted toward Columbia River Basin salmon and steelhead protection and restoration efforts. This crosscut budget will be completed and shared with the regional sovereigns and other Regional Stakeholders, including the Six Sovereigns, by January 2024. This crosscut budget analysis will then help inform prospective annual budgeting and appropriations.
- **Increased Funding in Support of Basin-Wide Restoration.** In addition to the specific additional USG funding commitments herein, which will support centerpiece actions necessary for this basin-wide effort, and continuing Reclamation, Corps, and BPA funding for fish and wildlife accords, BPA intends to continue current funding for its Fish and Wildlife Program, subject to changed circumstances and/or legal requirements. The USG commits to thoroughly evaluate the potential options for increasing non-rate-payer fish restoration funding¹³ in the Basin, taking into account the CBRI's recognition that at least a doubling of basin-wide funding is needed to make meaningful progress towards "healthy and abundant" salmon, steelhead, and other native fish rebuilding goals. This evaluation will include a thorough assessment of all available mechanisms without additional rate impacts, through a whole of government approach, including direct congressional requests; increased requests in future Presidential budgets; and other avenues as they may present themselves. This funding will support those actions that the USG and regional sovereigns (including the Six Sovereigns) agree are important, on top of the commitments already outlined in this document, for advancing the recovery of "healthy and abundant" Columbia Basin fisheries consistent with the Sept. 27, 2023 Presidential Memorandum, the NOAA Rebuilding Report, and the CBRI. The Six Sovereigns and

¹³ For clarity, "fish restoration funding" is understood broadly to include funding for any and all actions that would support the restoration of healthy and abundant native fish and shellfish consistent with the Sept. 27, 2023 Presidential Memorandum, the NOAA Rebuilding Report, and the CBRI.

the USG will work together (and with other sovereigns as appropriate) to develop by June 30, 2024 a 10-year basin-wide suite of actions to meet this goal. Project proponents will coordinate actions taken under this commitment with relevant regional sovereigns as appropriate.

- **Budget Workshop.** As part of this work together, OMB will provide Federal budget information to the regional sovereigns, including the Six Sovereigns, to ensure that the regional sovereigns and the USG have a common understanding of applicable Federal processes, and are aligned on how the Administration’s budgeting process works and on potential mechanisms available for potential future additional funding related to the goals of commitments already outlined in this document, for advancing the recovery of “healthy and abundant” Columbia Basin fisheries consistent with the Sept. 27, 2023 Presidential Memorandum, the NOAA Rebuilding Report, and the CBRI; delivering affordable and reliable clean power; and meeting the many resilience needs of stakeholders across the region.

Fisheries Management & Other Partnership Commitments

- **Fish & Wildlife Mitigation Management Reforms.** NOAA and FWS will work with the Six Sovereigns and all other relevant regional sovereigns, and seek collaboration with the NPCC, to consider management reforms to Columbia Basin fish and wildlife mitigation programs. The conversation will identify options for increased tribal and state co-management within the scope of existing legal authorities and coordination with Federal fisheries services, as well as any impediments and opportunities to maximize the beneficial impacts of available fish and wildlife funding. The conversation will be initiated no later than January 2024, and recommendations will be developed no later than September 2024.
- **Fish & Wildlife Contracting Reforms:**
 - The USG will work with the Six Sovereigns, and other regional fish and wildlife mitigation project implementers, and regional stakeholders as appropriate, to identify and implement fish and wildlife mitigation contract efficiencies and flexibilities in a manner that respects state and tribal fish and wildlife expertise regarding mitigation and restoration project implementation, subject to applicable Federal law. In support of this objective, Bonneville commits to near-term changes in support of the Six Sovereigns’ autonomy over fish and wildlife actions by:
 - Bonneville agrees that the Six Sovereigns shall collectively and autonomously determine their priorities for the \$100M over 10 years described above. Annual \$10M payments of these funds will be made directly as described above, vs. through the traditional Bonneville procurement process.
 - In addition, Bonneville will initiate a pilot with the Six Sovereigns to expand the use of grant and multi-year agreements within the Six Sovereigns’ portfolio of projects in Bonneville’s Columbia Basin Fish and Wildlife Program as appropriate, based on the type of planned work. Implementation of the pilot will begin in FY25 and would replace eligible, current agreements as they expire. Bonneville estimates that roughly a third of the current Six Sovereign portfolio could be applicable for the pilot.
 - DOI (and other Federal agencies, as appropriate) will work with the tribal parties to explore opportunities for federal contracting reforms to support more appropriate Federal-Tribal

funding instruments and policies to better reflect the unique relationship that occurs when the Federal government provides funds to tribes working to mitigate historic impacts to their Treaty and trust resources.

- ***Continued Administration Engagement.*** The USG will continue to engage with the Six Sovereigns, and other regional sovereigns and stakeholders as appropriate, regarding the CBRI's recommendations, and will ensure that EOP staff and senior Administration officials are available to coordinate and lead these discussions on behalf of the USG. As the USG advances its commitments in response to the CBRI in partnership with the Six Sovereigns, EOP staff and senior Administration officials will act as the coordinating center for advancing the Administration's comprehensive strategy for the Columbia Basin.

Appendix A

DOE Energy Program Proposal: Advancing Tribal Energy Sovereignty in the Pacific Northwest

The Department of Energy (DOE) is committed to Tribal Energy Sovereignty in the Pacific Northwest (PNW). Policy decisions that assist in meeting regional and national climate change goals¹⁴ are also important to recovery of ESA listed species., as the 2022 report by the National Oceanic and Atmospheric Administration (NOAA), “Rebuilding Interior Columbia Basin Salmon and Steelhead,” notes, “The growing frequency and magnitude of climate change related environmental downturns will increasingly imperil many ESA-listed stocks in the Columbia River basin and amplify their extinction risk (Crozier et al. 2019, 2020, 2021).”

To this end, DOE proposes funding and supporting a “PNW Tribal Energy Program” to provide technical assistance, planning, and funding (subject to appropriate DOE funding procedures) to the four Lower Columbia River Tribes¹⁵ (the “LRTT’s”) to plan and develop clean, renewable, socially-just energy resources (to include distributed energy resources (including efficiency and demand response), other generation, storage, and transmission resources) in the region. DOE will work with LRTTs individually and collectively to support quantified goals for energy project development, presumed to be at least 1,000-3,000 MW of clean energy resources, and to determine the role LRTTs want to take with regard to various projects (e.g., individual or collective ownership, leasing, power procurement, etc.). This Pacific Northwest (PNW) Tribal Energy Program will run in parallel with ongoing DOE assistance and resources related to tribally supported projects that are under development outside of the PNW Tribal Energy Program and nothing in this USG commitment is intended to be exclusive to PNW Tribal Energy Program protects or limit resources to Tribally-supported projects that are not identified by a Tribe as part of the PNW Tribal Energy Program. As conceptualized, this PNW Tribal Energy Program will work in parallel with the regional energy planning process described below, to which DOE will also contribute funding and support, to help achieve the energy goals of the Pacific Northwest and facilitate Tribally-owned clean energy resources in the region.

DOE will draw on its ability to support this proposal and regional clean energy efforts by having a dedicated Project Manager that will coordinate with the LRTT’s Tribal managers, DOE labs, and state energy managers. Additionally, DOE is uniquely situated to support Tribal and regional clean energy goals through the expertise and technical assistance programs available in its Grid Deployment (GDO), Energy Efficiency and Renewable Energy (EERE), Indian Energy Policies and Programs (IE), and Loan Programs (LPO) Offices, as well as the Pacific Northwest National Laboratory (PNNL), the National Renewable Energy Laboratory (NREL), and potentially other labs.

The specific scope and nature of the PNW Tribal Energy Program —for example, whether Tribal Nations prefer to work more collectively or individually, or where on the spectrum of long-term

¹⁴ See Fifth National Climate Assessment, available at <https://nca2023.globalchange.gov/>.

¹⁵ The Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation and the Nez Perce Tribe.

planning to specific project development they want to focus—will determine the best options for how DOE can support and structure it. This will also factor in to the timing of the Program’s implementation. DOE will design the program of work in full partnership with the Tribes, which will be memorialized in writing and co-signed by Tribal and Department Leadership by the end of March 2024. After an agreed upon scope, a senior DOE official will be designated by Department Leadership to manage these efforts and work with Tribal energy counterparts to ensure the actualization of projects through the PNW Tribal Energy Program.

One form that this PNW Tribal Energy Program could take is described below, with two discrete but interrelated parts:

1. Tribal Energy Sovereignty Resource Planning Process

This process would be designed to meet the Tribes where they are and help them reach where they want to go. It would start with working with the Tribes to develop appropriate goals for the quantity and type of energy resources the Tribes choose to prioritize. This includes supporting long-term energy sovereignty visions that are already in development, as well as helping develop new plans for Tribal Nations that either do not have them or would like technical assistance in updating or advancing existing plans for clean energy, storage, energy efficiency, and transmission or grid reliability projects (e.g., microgrids).

This planning process and the regional energy needs planning process (below) would be funded by GDO and potentially EERE, IE, or the Office of Clean Energy Demonstrations. It would be executed by PNNL and NREL in collaboration with other regional experts.

Transmission, generation, and storage work – for both this Tribal Energy Sovereignty Resource Planning Process and the Supplemental Regional Energy Needs Planning Process (below) could be modeled in part on the PR100 and LA100 studies, in which the DOE leveraged its network of National Laboratories with advanced planning and modeling capabilities to serve as trusted unbiased conveners and coordinators among major energy stakeholders. With these studies, they performed engineering and economic analysis for Puerto Rico and for Los Angeles Department of Water and Power (LADWP) to identify multiple paths to achieve a 100 percent renewable and carbon-free grid. This work was led by NREL and involved PNNL and several other Labs. Another potential model for this approach is the EERE’s [Clean Energy to Communities](#) program. DOE is committed to customizing a similar process for Tribal energy projects in the region.

The DOE will work with the Tribes to design a mechanism that permits them to create a portfolio of energy projects. This portfolio should be eligible for funding both by the TELGP (Tribal Energy Loan Guarantee Program) and additional funding sources, allowing tribes to route these finances through their established energy funds dedicated to supporting the portfolio.

Any (non-Tribal) projects funded by DOE will be required to develop Community Benefits Plans that include, among other elements, meaningful engagement with communities, including Tribes (and including Tribal consultation, consistent with [Presidential Memorandum](#) of November 30, 2022), and documented benefits for energy justice communities, including Tribes.

2. Tribal Energy Sovereignty Project Development

In addition to the collaborative development of a LRTT's goals for energy sovereignty and plans for meeting their goals, DOE proposes to work with the Tribes to advance energy projects (including, but not limited to, those resulting from planning processes). Development of these projects would be "parallel tracked" in that it would not wait for the regional energy planning process (other than perhaps for particular types of projects, e.g., where nature or location of projects is specific to the services provided by the LSR dams).

This would consist of:

Targeted technical assistance by DOE, its National Labs (specifically PNNL and NREL), and third-party experts to help advance project concepts through the development process. DOE would focus on how best the Tribes can take into account new project economics made possible by the tax credits in the IRA. This includes new direct-pay tax provisions, bonus investment and production tax credit incentives, and related policies, such as Federal preference for power from Tribal projects.

Accounting for Tribal energy projects as "replacement" power. In coordination with the Six Sovereigns, the USG and DOE will develop a means of "accounting" for the region's development of resources available to serve as "replacement"¹⁶ energy services for the lower Snake River dams, based on the particular services needed in the event Congress authorizes dam breach. This accounting mechanism will be developed no later than February 1, 2024, to be coordinated with the regional energy needs planning process. This accounting mechanism will track the availability, as of the date of these commitments and beyond, of regional resources that can contribute to replacement of the dams' energy services. The Regional Energy Needs Planning Process described below, specifically its scenarios for regional clean energy development that include replacement power in the event Congress authorizes breach of the LSR dams, will identify portfolios of potential replacement resources (as well as energy resource options, e.g., storage, efficiency or transmission, that could enable greater grid management flexibility to manage the hydropower system for greater fish benefit, as well as reliability, affordability, decarbonization and other regional goals during the interim period before breach is authorized). The "accounting" approach would provide regular updates on the region's development of clean energy resources, including the type of resources needed to replace the specific energy services of the LSR dams, as compared to the portfolios identified in the energy analysis. The "accounting" approach will document the totality of clean energy development in the region, presumably including resources in development prior to and/or as of the time of signing of any agreement among the US Government and the Six Sovereigns.

DOE would also work with Tribes, if requested, to identify project structures, contracting, funding and transmission arrangements that could facilitate commercial development of energy services, such as generation, storage, demand response and transmission, that could contribute to replacement of energy services in the event Congress authorizes breach of the LSR dams. Of particular note may be the need for structuring near-term sale of power—to ensure near-term revenues and to improve the credit-worthiness of the projects and other economic benefits to

¹⁶ Note that under BPA statutes, the term "replacement" has a specific statutory meaning (see, 16 USC 839a(10)(C)); throughout this document, the terms "replacement" and "replacement power" are not intended to reference the statutory term.

LRTTs—while allowing for future sale of power to replace the energy services of the LSR dams. DOE would additionally work with the Tribes to explore options for speeding interconnection of projects to the transmission grid and making such connections cost-competitive, recognizing the interconnection is under the purview of grid operators and BPA’s reforms to interconnection processes are addressed below. DOE would additionally work with the Tribes to fully explore legal and regulatory options for speeding interconnection of projects to the transmission grid.¹⁷

Targeted technical assistance to identify and develop funding strategies for projects. DOE would work with the Tribes to map specific projects on to all the present and future funding opportunities available to them within DOE and other Federal agencies (e.g., USDA and EPA programs), including those made possible by the Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL). Potential funding opportunities at DOE include but are not limited to—

- Grid resilience grant funding through the GDO provides \$2.3 million in grants to modernize the electric grid, thereby reducing the consequences of disruptive events. Through this program, DOE will provide up to \$459 million annually over five years to states and Tribes to help fund projects that modernize transmission systems and strengthen them against extreme weather and other hazards such as wildfires.
- Energy Efficiency and Conservation Block Grants from the Office of State and Community Energy Programs provides \$5.5 million of formula and competitive grants that can assist Tribes in implementing strategies to reduce energy use and fossil fuel emissions and to improve energy efficiency.
- Electric Appliance Rebates from the Office of State and Community Energy Programs provides \$225 million in formula grants to Tribes to administer rebates for installing efficient electric technology into low- and medium-income single- and multi-family homes.
- The Energy Improvement in Rural and Remote Areas program in the Office of Clean Energy Development provides \$1 billion to support improving the resilience, reliability, and affordability of energy systems in rural and remote areas.
- The Loan Programs Office has \$20 billion to lend to Tribes for energy investments (see below for more information).

Partnering with DOE’s Loan Programs Office (LPO) to specifically scope, develop, and fund projects or package of projects that will benefit from the \$20 billion available through the [Tribal Energy Loan Guarantee Program](#). This is one of the only non-competitive programs at DOE that can invest in or fund project development, and DOE has recently gotten Congress to make several key changes to the program that make it far more accessible to Tribal Nations than in prior years. This low-cost capital, combined with the direct-pay tax credit option, makes ownership of energy infrastructure easier for a greater number of Tribes. Direct pay functionally reduces the overall cost of the energy project by allowing Tribal governments and other entities exempt from income tax to receive a direct payment from the IRS in lieu of a clean energy tax credit. While not a grant, the combination of a loan with direct pay functions similar to a grant.

¹⁷ BPA must follow its Open Access transmission tariff which imposes non-discriminatory terms and conditions

Tribes are able to use a loan from the Tribal Energy Loan Guarantee Program for a broad range of technologies and uses, including solar and wind generation, energy storage, and hydrogen conversion for community and commercial use. Tribes can apply independently or in co-ownership arrangements to develop projects on and off Tribal lands. LPO, in conjunction with other DOE Offices, would offer support to help plan, scope, and develop larger-scale clean energy, storage, and/or transmission projects that could be jointly owned by multiple tribes for this program, which specifically looks to cultivate projects or packages of projects that are eligible.

Additional Implementation Details for the PNW Tribal Energy Program Proposal

Funding. The Tribal Energy Sovereignty Resource Planning Process and the Regional Energy Needs Planning Process would be funded by GDO and potentially EERE, IE, or the Office of Clean Energy Demonstrations. The exact funding amount would be determined in further discussion and scoping with the Tribes and states.

DOE Program Leads. As stated above, DOE would designate a Project Manager to oversee this proposal. The Tribal Energy Sovereignty Resource Planning Process and the Regional Energy Needs Planning Process would be executed by PNNL and NREL in collaboration with other regional experts. Transmission assessment and planning work would be led by GDO and be based on the [National Transmission Needs Study](#), the National Transmission Planning Study, and the West Coast Offshore Wind Transmission Study.

If the Tribes choose to pursue the Tribal Energy Sovereignty long-term planning process along the lines of the work done under an MOU between the Secretary of Energy and the Navajo and Hopi Nations (see below), the Office of Indian Energy Policies and Programs would likely guide that process.

Memorandum of Understanding. DOE proposes defining and further guiding the direction of this PNW Tribal Energy Program Proposal through the co-development of an MOU. This MOU could be modeled on the MOU signed by Secretary of Energy Jennifer Granholm and Navajo Nation President in December 2022. The Navajo Nation MOU provides a framework for collaboration among the Navajo Nation, DOE, and other Federal agencies to define and energy vision and plan, including scoping specific energy transition and economic diversification projects that can take advantage of the BIL and IRA competitive funding and other opportunities. To date, the work has resulted in over 30 identified projects to pursue and included interagency participation from USDA, DOT, EPA, DOI and others. The program reports that under this project, Tribal government leadership, Tribal staff, Tribal enterprises, Tribal colleges, non- profits and community members have worked together towards goals of Nation and communicated in the same room.

Sub-Appendix: Relevant Programs in Other Federal Agencies

Through the PNW Tribal Energy Program, DOE would work with other Federal agencies to identify prospective funding opportunities that would help fund Tribal projects. Examples of these other Federal programs are below.

U.S. Department of Agriculture (USDA)

As stated in the USG commitments above, the USDA is dedicated to supporting Tribally-owned clean energy projects through the Powering Affordable Clean Energy (PACE) Program and Rural Energy for America Program (REAP).

[The Rural Energy for America Program \(REAP\)](#) offers grants and guaranteed loans to agricultural producers and small businesses, including Tribes and Tribal businesses, in rural areas. REAP funds can be used for Tribally-owned renewable energy systems or energy-efficient infrastructure upgrades and provide grants for up to 50 percent of the total project costs for Tribes. Grants for clean energy and energy efficiency projects can be anywhere from \$1,500 to \$1 million in size. USDA is prepared to provide technical assistance support to the Columbia River Basin Tribes with the goal of identifying and putting together applications for at least 10 REAP projects in the region. This assistance could be provided through the new FY 2023 competitive REAP Technical Assistance Grant (TAG) program. TAG grants can cover 100 percent of the costs of conducting energy assessments and audits and planning, building, and developing those projects. Alternatively, the Tribes could choose an entity to provide them with this technical support, and USDA can enter a cooperative agreement with that organization to complete their REAP projects.

Environmental Protection Agency (EPA)

[The Solar for All grant competition](#) makes available \$7 billion to expand the number of low-income and disadvantaged communities primed for residential solar investment. It will award up to 60 grants to states, territories, Tribal governments, municipalities, and eligible non-profits to create and expand low-income solar programs. These programs will provide financing and technical assistance to enable low-income and disadvantaged communities to deploy and benefit from residential solar. Tribes and Intertribal Consortia will need to submit a Notice of Intent (NOI) by August 28, 2023 to eligible to apply.

[The National Clean Investment Fund](#) has \$14 billion to provide grants to 2–3 national non-profit clean financing institutions or green banks capable of partnering with the private sector to provide accessible, affordable financing for tens of thousands of clean technology projects across the country. Grantees will be required to use at least 40 percent of grant funds for the purposes of providing financial assistance in low-income and disadvantaged communities, including geographic areas within Tribal lands. While Tribes will not be direct recipients of these grants, they will be able to access this low-cost financing system to support the buildout of clean energy.

[The Clean Communities Investment Accelerator](#) competition will provide grants to 2–7 hub non-profits that will, in turn, deliver funding and technical assistance to build the clean financing capacity of local community lenders working in low-income and disadvantaged communities—so that underinvested communities have the capital they need to deploy clean technology projects. These community lenders could include community development financial institutions (including Certified Native CDFIs), credit unions, green banks, housing finance agencies, minority depository institutions, and other types of lenders. This competition will require each grantee to expend 100

percent of funds for the purposes of providing financial and technical assistance in low-income and disadvantaged communities, including geographic areas within Tribal lands. While Tribes will not be direct recipients of these grants, they will be able to access this low-cost financing system to support the build out of clean energy.

Department of Interior (DOI)

[The Tribal Electrification Program](#) received \$145 million in the IRA. This is a new program focused on electrifying Tribal homes and may include funding for the deployment of microgrids on Tribal lands.

[DOE Energy Program Proposal: Regional Energy Needs Planning Process](#)

DOE will jointly fund with Washington, and co-convene with LRTTs and states, a regional analysis- and stakeholder engagement-based planning process designed to advance the resource development and infrastructure investment (in generation, transmission, storage, efficiency, and demand response resources, including distributed resources) that will be required to meet the region's economy-wide decarbonization and resource adequacy requirements and goals. The process will develop one or more scenarios for potential combinations of specific resources capable of replacing the energy services of the LSR dams in the context of meeting the region's decarbonization goals in the event Congress authorizes power replacement and breach of the dams. This regional planning process is a key component to accelerating the regional infrastructure investment and buildout necessary to both meet regional decarbonization goals and to identify the combination of projects that would meet regional energy needs if Congress authorizes dam breach.

This regional analysis will be a collaboration among the U.S. Government, Tribes, States, and other key regional stakeholders (e.g., significant transmission owners and operators, utilities, clean energy developers, and NGOs). The process will be co-convened by Washington and Oregon, Tribes, and DOE. PNNL and potentially other DOE National Labs will lead the technical analysis and will partner with BPA, the Northwest Power and Conservation Council, States, and Tribes, and engage with key stakeholder.¹⁸ **DOE will seek to support adding Tribal capacity for expert engagement in this process, and will explore pathways to doing so.**

The process would focus in particular on identifying medium- and long-term transmission and grid infrastructure needs and will also develop a more granular assessment of which resources in which locations, including distributed energy resources, can best meet the region's goals, while taking account of, and assessing where appropriate, other regional energy issues such as regional market formation. It would identify candidates for clean, non-emitting firm (flexible, dispatchable) resources (e.g., geothermal, long-duration storage).

Additionally, DOE will develop a detailed plan to provide targeted technical assistance, if requested, for planning and financing options for BPA customer utilities to develop new, clean energy resources and transmission.

Accounting for "replacement" power. In coordination with the Six Sovereigns, the USG and DOE will develop a means of "accounting" for the region's development of resources available to serve as

¹⁸ This may include engagement with utilities, transmission owners and operators, clean energy developers, and/or nongovernmental organizations.

“replacement” energy services for the lower Snake River dams, based on the particular services needed in the event Congress authorizes dam breach. This accounting mechanism will be developed no later than February 1, 2024, to be coordinated with the regional energy needs planning process. This accounting mechanism will track the availability, as of the date of these commitments and beyond, of regional resources that can contribute to replacement of the dams’ energy services. The Regional Energy Needs Planning Process, specifically its scenarios for regional clean energy development that include replacement power in the event Congress authorizes breach of the LSR dams, will identify portfolios of potential replacement resources (as well as new energy resource options, e.g., storage, efficiency, or transmission, that could enable greater grid management flexibility to manage the hydropower system for greater fish benefit, as well as reliability, affordability, decarbonization and other regional goals during the interim period before breach is authorized). The “accounting” approach would provide regular updates on the region’s development of clean energy resources, including the type of resources needed to replace the specific energy services of the LSR dams, as compared to the portfolios identified in the energy analysis.

1. Bonneville Power Administration Work to Accelerate Clean Energy Build-Out

In accordance with the Presidential Memorandum dated September 27, 2023 entitled Restoring Healthy and Abundant Salmon, Steelhead, and Other Native Fish Populations in the Columbia River Basin, the following commitments describe initial steps the Bonneville Power Administration and the Department of Energy will take to contribute to the goals of this agreement and the Memorandum. DOE would continue to support the Bonneville Power Administration (BPA)’s ongoing efforts to update and modernize policies and practices to enable its customers and the region to access the benefits of affordable, reliable clean energy. BPA’s actions, including but not limited to the provider of choice contract policy and contracts and BPA’s resource acquisition planning processes and decisions, including decisions around augmenting the amount of power sold at Tier 1 rates, will account for changes in load, new clean energy generation and transmission needs, and changing hydropower system conditions, consistent with the Presidential Memorandum as well as the Northwest Power Act and other law. This would include, but is not limited to:

- Prioritizing the acquisition of cost-effective energy efficiency and considering demand response resources, consistent with the Northwest Power Act and, as appropriate, the Northwest Power and Conservation Council’s Power Plan and updates to it, and to explore, along with the Council via the regional energy planning process, ways to better take advantage of demand-side resource potential;
- Continuing BPA’s recently announced transmission buildout¹⁹ using its recently increased borrowing authority and continuing to explore additional near-term transmission projects for potential use of its borrowing authority as appropriate, and looking to the regional planning process described above and to the Western Power Pool Process described below to consider and pursue where appropriate additional medium- and long-term transmission development to help the region meet transmission needs, consistent with its legal authority. BPA has led the initiation of a regional process, and will continue to participate in the process led by the Western Power Pool, to build consensus among transmission stakeholders on infrastructure priorities as well as on timelines and responsibilities for development.

¹⁹ Subject to NEPA and other applicable laws.

- Continuing to advance reforms to BPA’s interconnection processes to more efficiently enable new clean energy generation to gain access to the transmission system, aiming to significantly speed the interconnection process and identifying tools and means for more efficient use of existing transmission;
- Consistent with its statutory and other legal requirements and authorities: (1) as part of energy needs assessment planning processes (including considering the regional energy needs planning process) and subsequent necessary resource acquisition, BPA will consider acquisition of new clean energy resources in the region as well as new clean energy resources developed by BPA customer utilities; and (2) BPA will seek to support customer utilities meeting load growth and new and emerging needs. DOE will provide technical assistance to help address barriers to development and acquisition of clean energy resources to help meet state policy goals.
- Nothing in BPA’s contract for sales of power shall limit the Administrator’s authority to acquire power consistent with the NWPA, including “replacement power” as defined in this document, in the event any Federal resources become unavailable.
- When considering resource acquisitions necessary to meet the Administration’s obligations, BPA shall consider purchases of power generated by Tribally-owned or -sponsored power resources, as appropriate, consistent with the Tribal Preference Authority, which allows Federal agencies to prioritize purchasing Tribally-owned energy.

Appendix B

COLUMBIA RIVER SYSTEM OPERATIONS: 2024-2033

SPRING SPILL OPERATIONS

	Operation (2024–2033)	Implementation Comments
Season	4/3 to 6/20	
Lower Granite (LWG)	125% TDG Gas Cap (or 40% when adult passage delays are detected) ²⁰	See adult delay protocol below.
Little Goose (LGS)	125% TDG gas cap spill for 24 hours (to adult criteria), no flexible spill, ²¹ 125% TDG gas cap spill for 16 hours, 30% for 8 hours	Maintain similar implementation language from 2023 FOP with operational flexibility of target timeframes to reduce spill for adult passage during lack of load conditions. LGS operations at 30% for 8 hours during daytime hours will be prioritized if adult delays occur at LWG or LMN and lack of load conditions exist (like 2023 FOP).
Lower Monumental (LMN)	125% TDG Gas Cap (or 40% when adult passage delays are detected)	See adult delay protocol below.
Ice Harbor (IHR)	125% TDG gas cap spill for 24 hours	Like operations implemented in 2023.
Season	4/10 to 6/15	
McNary (MCN)	125% TDG gas cap spill for 24 hours Maintain current minimum generation range of 50-60 kcfs for transmission services; powerhouse outflows may increase up to 80 kcfs for reserves (without a spill variance)	Increased powerhouse generation allowances will allow for additional generation to be brought on-line for the purpose of providing real-time operators greater access to reserve capacity prior to requiring variance tracking or declarations of power system emergency. As needed, these ranges will be utilized under low flow conditions (e.g., minimum generation and spill the rest) and when flexibility elsewhere has been maximized.

²⁰ The agencies will use the current Columbia River DART’s Reach Distribution and Delay for PIT Tag Adult Returns tool (“DART tool”) to identify adult delays and passage issues.

²¹ LGS Adult Criteria: Within 1 business day of when the earliest of the following conditions occurs: (1) a cumulative total of 25 adult spring Chinook salmon (not including jacks) pass Lower Monumental Dam; or (2) a cumulative total of 50 adult spring Chinook salmon (not including jacks) pass Ice Harbor Dam; or (3) April 24, 2024. See 2023 FOP.

<p>John Day (JDA)</p>	<p>Spill during daytime hours 40% and increased spill up to 125% TDG gas cap spill during nighttime hours (following 2023 FPP JDA-5 table where nighttime hours defined and generally between 2200 and 0600)</p>	<p>Increased powerhouse generation allowances will allow for additional generation to be brought on-line for the purpose of providing real-time operators greater access to reserve capacity prior to requiring variance tracking or declarations of power system emergency. As needed, these ranges will be utilized under low flow conditions (e.g., minimum generation and spill the rest) and when flexibility elsewhere has been maximized.</p>
	<p>Daytime hourly spill target of 40% river flows with $\pm 5\%$ variance of river flows for balancing reserves, consistent with current spill variance tolerance calculations</p> <p>The Corps sets JDA spill caps to maximize spill, up to 125% TDG in the tailwater of JDA and TDA and to maintain TDA spill at 40%</p> <p>Maintain current minimum generation range of 50-60 kcfs for transmission services; powerhouse outflows may increase up to 80 kcfs for reserves (without a spill variance)</p>	
<p>The Dalles (TDA)</p>	<p>40% for 24 hours</p> <p>Allocation of reserves may result in spill above 40% of river flows; maintain current minimum generation range of 50-60 kcfs for Transmission services</p>	<p>Like operations implemented in 2023.</p>
<p>Bonneville (BON)</p>	<p>125% TDG gas cap spill for 24 hours (150 kcfs cap)</p> <p>Maintain current minimum generation range of 30-40 kcfs for Transmission services; powerhouse outflows may increase up to 60 kcfs for reserves (without a spill variance)</p>	<p>Increased powerhouse generation allowances will allow for additional generation to be brought on-line for the purpose of providing real-time operators greater access to reserve capacity prior to requiring variance tracking or declarations of power system emergency. As needed, these ranges will be utilized under low flow conditions (e.g., minimum generation and spill the rest) and when flexibility elsewhere has been maximized.</p>

Reserves: Spill reductions to maintain reliability will continue to be implemented as described in the Fish Passage Plan and when powerhouse flows exceed the ranges proposed above by the USG at each of the lower Columbia River projects, spill variances will be reported.

SUMMER SPILL OPERATIONS

	Operation (2024–2033)	Implementation Comments
Season	6/21 to 7/31 8/1 to 8/31	
Lower Granite (LWG)	18 kcfs SW flow (as river flow allows)	Reducing summer spill flows on August 1 from 18 kcfs to SW flow (as river flow allows)
Little Goose (LGS)	30% SW flow or 7 kcfs spill	Reducing summer spill flows on August 1 from 30% to SW flow (or 7 kcfs spill)
Lower Monumental (LMN)	17 kcfs SW flow or 8 kcfs spill	Reducing summer spill flows on August 1 from 17 kcfs to SW flow (or 8 kcfs spill)
Ice Harbor (IHR)	30% SW flow or 9 kcfs spill	Reducing summer spill flows on August 1 from 30% to SW flow (or 9 kcfs spill)
Season	6/16 to 7/31 8/1 to 8/31	
McNary (MCN)	57% 20 kcfs	Reducing summer spill flows on 8/1 57% to 20 kcfs Like spring operations, increased powerhouse generation allowances will allow for additional generation to be brought on-line for the purpose of providing real-time operators greater access to reserve capacity prior to requiring variance tracking or declarations of power system emergency. As needed, these ranges will be utilized under low flow conditions (e.g., minimum generation and spill the rest) and when flexibility elsewhere has been maximized. USG will release 57% of river flows based on previous days average flow to minimize gate changes until spill gate/crane repairs are complete.
John Day (JDA)	Daytime spill hourly target average of 35% river flows with $\pm 5\%$ variance of river flows for balancing reserves, consistent with current spill variance tolerance calculations 20 kcfs	Reducing summer spill flows on 8/1 35% to 20 kcfs. Hourly spill of 35% with range of $\pm 5\%$ for reserves (without spill variance).

The Dalles (TDA)	40% 30%	Reducing summer spill flows on August 1 40% to 30%. Provide a target spill of 40% (or 30% in late summer) with range of $\pm 5\%$ for reserves.
Bonneville (BON)	95 kcfs 50 kcfs	Reducing summer spill flows on August 1 from 95 kcfs to 50 kcfs.

FALL/WINTER SPILL OPERATIONS

	Operation (2024–2033)	Implementation Comments
Season	9/1 to 11/15, 3/1 to 3/20 3/21 to 4/2	
Lower Granite (LWG)	Surface weir (SW) spill 7 days per week, for 4 hours (9/1 to 11/15, 3/1 to 3/20) SW spill 24 hours (3/21 to 4/2)	
Little Goose (LGS)	SW spill 7 days per week, for 4 hours (9/1 to 11/15, 3/1 to 3/20) SW spill 24 hours (3/21 to 4/2)	
Lower Monumental (LMN)	SW spill 7 days per week, for 4 hours (9/1 to 11/15, 3/1 to 3/20) SW spill 24 hours (3/21 to 4/2)	
Ice Harbor (IHR)	SW spill 7 days per week, for 4 hours (9/1 to 11/15, 3/1 to 3/20) SW spill 24 hours (3/21 to 4/2)	
Season	9/1 to 11/15, 3/1 to 3/20 3/21 to 4/9	
McNary (MCN)	1 SW spill 7 days per week, for 4 hours (9/1 to 11/15, 3/1 to 3/20) 1 SW spill 24 hours (3/21 to 4/9)	
John Day (JDA)	No surface spill in fall-winter, except for 1 SW spill 24 hours (3/21 to 4/9 <i>only</i>)	Overshoot monitoring at JDA should continue to inform potential adaptive management. Not implementable to open and close SW daily.

The Dalles (TDA)	ITS 24/7 spill of ~3-5 kcfs spill from 3/1 to 12/15; continue adult ladder spill	
Bonneville (BON)	B2CC (like 2023 coordinated spring operation); ITS full year for 24 hours	Codify recent changes to BON made through regional processes; addressing surface passage 24/7 for 365, including work with regional sovereigns to address issues and concerns on B2CC.

Additional Information/Explanation — No change to fall-winter operations at JDA, TDA or BON.

RESERVOIR ELEVATIONS

	Operation (2024–2033)	Implementation Comments
Season	4/3 to 8/14 (LGS, LMN, IHR) 4/3 to 8/31 (LWG)	No change to operations at LGS, LMN, and IHR
Lower Granite (LWG)	733-734.5'	Will operate at MOP with a 1.5 foot forebay operating range and a 1.0 foot range to the extent possible (referred to operationally as a “soft constraint”).
Little Goose (LGS)	633-634.5'	See LWG explanation
Lower Monumental (LMN)	537-538.5'	See LWG explanation
Ice Harbor (IHR)	437-438.5'	See LWG explanation
Season	4/3 to 8/14	No change to operations at MCN, JDA, TDA and BON.
McNary (MCN)	337-340'	

John Day (JDA)	262-266.5 (3/1-3/14) 262.5-266.5 (3/15-4/9) 264.5-266.5 (4/10-6/1) 262.5-266.5 (6/2-6/14) 262.5-264.5 (6/15-8/31)	
The Dalles (TDA)	157-160'	
Bonneville (BON)	71.5-76.5'	

MISCELLANEOUS

Miscellaneous	USG Operation (2024–2033)
Zero Generation.	Continue 2023 Operations

Adult Migration Delay Protocol for Spring Spill Operations at Lower Granite and Lower Monumental projects

Lower Granite and/or Lower Monumental daytime spill levels will be decreased to 40% for 8 hours per day when adult delay or passage issues are observed at both/either of these projects. An adult delay or passage issue occurs when the following three criteria are met: (1) *fewer than* 50% of the daily cohort of PIT tagged adult spring/summer Snake River Chinook detected at the downstream project (i.e., Ice Harbor or Little Goose dams) arrive at the upstream project (i.e., Lower Monumental or Lower Granite dams) within 3 days and this pattern persists for 3 consecutive days,²² (2) a running 3-day minimum of 7 PIT tagged adult spring/summer Snake River Chinook salmon are detected at the downstream projects,²³ and (3) if the upstream dam’s average outflow was below 160 kcfs each day of the delay.

If all three criteria are met, the Corps will implement a 40% daytime spill operation (adult daytime spill operation) and continue for 3 consecutive days. Information on the three criteria

²² The return to 125% TDG spill 24/7 will be triggered if 50 percent or more of the running 3-day cohort for the most recent day (e.g., day 3 of adult daytime spill) is detected at the upstream dam. The agencies will use Columbia River DART’s Reach Distribution and Delay for PIT Tag Adult Returns tool for this purpose.

²³The agencies will use the current Columbia River DART’s Reach Distribution and Delay for PIT Tag Adult Returns tool (“Running 3-day DART tool”) to determine if criteria one and two have been met. See top panel, in- season graphics of Cumulative Arrival Percent by Days in Route to Lower Granite or Lower Monumental dams. https://www.cbr.washington.edu/dart/query/pitadult_reachdist

would be available on day 4 and the adult daytime spill operation would begin the following business day (day 5) with a targeted start time between 0400-0800 if feasible.

Assuming *greater than* 50% of the daily cohort of PIT tagged adults arrive at the upstream project by day 3 (information available on day 4),¹⁹ then standard operations (125% TDG spill 24/7) would be reinstated the following business day (day 5). If greater than 50% of the daily cohort does NOT arrive at the upstream project by day 3 and project average flow was below 160 kcfs, adult daytime spill operations would continue an additional day, and would be evaluated again the following day as previously described. This would continue until the adult delay or passage issue has been resolved and the standard operations can be reinstated as described.

The Technical Management Team may consider in-season deviations from these criteria if unforeseen factors are reasonably expected to cause substantial delay (e.g., lack of load conditions, priority turbine unit outages, etc) and the Fish Passage Operations and Maintenance Committee may consider refinements to these triggers following each spring spill season.

Additional Information and Studies—Operations are supplemented with the following studies, which helps inform the risks inherent in modifying operations in ways that have not previously occurred (or been studied):

- Develop, fund, and implement adult active tag study(ies) no later than 2025 to evaluate the causal mechanism and inform adaptive management of adult passage delays under changing spill and flow conditions (e.g., passage delays, depths at fishway entrances, etc.). Study designs will be collaboratively developed in the Studies Review Work Group (SRWG) regional forum.
- Develop, fund, and implement active tag study(ies), no later than 2025, to evaluate juvenile migration through different passage routes under changing spill and flow conditions. Study designs will be collaboratively developed in the Studies Review Work Group (SRWG) regional forum.
- Develop, fund, and implement studies to improve PIT tag detection capabilities to evaluate long-term efficiency of operations at the LSR and LCR projects. These studies and proposals will focus on (1) designing and installing a spillway detector in one of the surface passage route spillbays at McNary Dam; (2) designing and installing a system to detect fish passing via the spillway at Bonneville Dam; and (3) designing and implementing efforts to improve PIT tag detections in the estuary. Study designs will be collaboratively developed in the Studies Review Work Group (SRWG) regional forum.
- Develop, fund, and implement, no later than 2025, collaboratively developed studies to evaluate depth and downstream profile of TDG/GBT impacts, including estimating population-level impacts for non-salmonid resident species (sculpin, lamprey ammocoetes, native mussels).

- Conduct ERDC modeling of alternative/modified McNary spill patterns prior to start of spring spill operations of 2025.
 - Washington and Oregon water quality agencies, under their existing delegated authority from EPA and consistent with Clean Water Act monitoring requirements, will continue to regulate total dissolved gas levels in the lower Snake and Columbia rivers. If the USG identifies additional concerns with TDG impacts to native aquatic species, the USG will continue to notify and coordinate with the Six Sovereigns, F&W managers, and the state water quality agencies to identify actions, including monitoring methodologies, sampling locations, and triggers for changes to lower Columbia and LSR dam operations, necessary to protect these aquatic species.
-