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July 8, 2025

MEMORANDUM

TO: Council Members

FROM: Patty O'Toole

SUBJECT: Fish and Wildlife Program amendment work session

BACKGROUND:

Presenter: Fish and Wildlife and legal staff

Summary: Staff will present an amendment process check-in, summarize the next set of recommendations to amend the Council's [Columbia River Basin Fish and Wildlife Program](#), discuss the comments on the recommendations and begin to discuss key amendment issues.

Relevance: Per the Northwest Power Act, the Council must call for recommendations to amend the Fish and Wildlife Program prior to updating its Power Plan. The recommendation period closed on May 19, and the comment period on the recommendations closed on July 3.

Workplan: This work addresses a primary responsibility under the Northwest Power Act and task A. 4, 5, and 6 of the Fish and Wildlife Division Work Plan under the Program Policy and Planning function.

Recommendations to amend the 2014/2020 Columbia River Fish and Wildlife Program were due on May 19, 2025. Comment on the recommendations closed on July 3, 2025. Staff are currently reading and reviewing those comments while also continuing to read and summarize the

amendment recommendations. The recommendations and comments can be found on the Council's [website](#).

Staff are proposing these four primary items for the work session.

1. Check-in on the current program amendment schedule and next steps
 2. Continue review of the recommendations using the staff summaries as a starting point
 3. Overview of the comments on recommendations which closed on July 3
 4. Begin identifying key issues
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1. The staff will review the basic Program amendment steps, the current focus, and upcoming work and timelines. As the Council has received amendment recommendations and comments on the recommendations, the Council has the information from these two key input sources to begin its work developing a draft of an amended Columbia River Basin Fish and Wildlife Program.
 2. The staff summaries of the recommendations are organized into blocks of related themes. The detailed summaries will be provided to the members separately by email before the July meeting. These serve to organize recommendations around similar topics and identify areas of agreement and disagreement. Not all the recommendations are represented in the material presented by staff, nor will all the details be covered at the meeting. Please refer to the original recommendations for a complete review. We will continue walking through the recommendations for Program topics we have not yet covered with the Council. *See Attachment A for brief overviews of these topics.*
 3. Since the comment period on the recommendations closed recently on July 3, staff need additional time to review and organize the comments. At the July Council meeting, staff will briefly review initial observations and themes of the comments.
 4. In past amendment processes, staff and members have begun our work together on the recommendations and comments by identifying a set of “issues” that are raised by the recommendations. Use of the word “issues” should not imply a negative connotation. These are topics raised during the recommendation process that could create meaningful changes to the Program, or may have conflicting recommendations, or be significant in other ways. These topics require close examination and possibly historical, legal, or other analysis. We suggest that we begin to identify issues during this work session after we have completed discussing the recommendations.

To prepare for this work session, we encourage the Council members to continue to read the recommendations and the comments on the recommendations that are linked at the bottom of this memo. In addition, the staff provided briefings on the existing Program, Program performance and Program history over the last year. It would be helpful to also review this information. Links to those resources are included below.

Additional Information:

- [Link](#) to recommendations and comments
- Links to briefings on the Columbia River Basin Fish and Wildlife Program
 - Organization and structure, Mainstem hydro operations-[memo and presentation](#)
 - Strategies and measures – [memo and presentation](#)
 - [Program adaptive management](#) and [subbasin plans](#) - [memo](#) (click topic for presentations)
 - Implementation of the Program and Program appendices – [memo](#) and [presentation](#)
 - [Link](#) to webpage for historical retrospective and performance assessments

Attachment A. Continuation of review of amendment recommendations

Resident Fish Mitigation

Recommendations emphasize that the hydropower system not only affects the anadromous fish species of the basin but also affects the native resident fish species (native cutthroat, Redband rainbow trout, bull trout, burbot, sturgeon), and also native freshwater mussels, amphibians and aquatic invertebrates. There is continued support for the general measures for resident fish mitigation, in general and for listed species (bull trout). Recommendations call for more focus on how dam operations affect resident fish, and on operational measures to improve conditions incorporated into reservoir rule curves, following the example of the Montana reservoir operations in the program. Other recommendations for resident fish include developing and conducting a standard method for a habitat loss assessment, addressing barriers to passage throughout the basin, continuing to suppress non-native and invasive species, and evaluating the impacts of nutrient levels and toxins. Recommendations note the importance of tributaries and headwaters for their ecological role of supporting resident species and other over health of the Basin. The impacts of non-native/invasive species on resident species are noted and recommendations are made to enhance suppression of non-native species as referenced in the 2020 addendum.

Predator management

The Council received a range of recommendations on predator management with 4 main themes emerging:

- 1) Basinwide and regional coordination strategies that lead on agreed-upon metrics and adaptive management when dealing with predation on salmonids and other native species.
- 2) An evaluation and management plan to address the geographic expansion and population growth of non-native piscine predators including walleye, smallmouth bass, and channel catfish, among others.
- 3) Increased support for research and funding to both sustain current efforts and expand upon avian and piscine predation control on salmonids and other native species such as lamprey. For birds, this included attention to removal from man-made structures as well as tributaries and enhanced dissuasion where possible. For fish, this included support for the Northern Pikeminnow Management Project with a suggestion for expansion in this program's scope, location, and species targeted. Continued northern pike monitoring and research was emphasized. Geographically, the estuary, mainstem, certain tributaries (Grande Ronde, Imnaha, Salmon, Clearwater, Yakima, etc.), and the lower Snake River were highlighted.
- 4) Support for better exclusion of marine mammals from fish ladders. Also, full implementation of marine mammal management to meet NOAA requirements and achieve SAR goals.

Non-native and invasive species

The Council received extensive recommendations on non-native and invasive species including zebra mussels, quagga mussels, northern pike, American shad, smallmouth bass, largemouth bass, walleye, brook trout, lake trout, rusty crayfish, New Zealand mud snails, golden mussels, Japanese ribbon grass, blackberry, Russian olive, and Eurasian milfoil. There is a large focus on prevention and early detection with prevention being emphasized as the most cost-effective and ecologically sound method for dealing with non-native and invasive species. When prevention is not possible, rapid response and control are called for across recommendations. Most entities call for funding to develop and/or update emergency response criteria, facilitate regional coordination, and conduct basinwide risk assessments.

Apart from immediate prevention and response, recommendations encourage monitoring and mapping the spread of these species in tandem with regional data sharing. To support these basin-wide tracking and monitoring efforts, entities call for the funding of research on native/non-native dynamics, control methods, and restoration approaches. It is emphasized that these efforts will require funding and multi-agency coordination to support consistent regulations across the basin. The need to protect infrastructure and hydrosystem impacts is included from a biological, economic, and human safety standpoint. Macrophyte growth is highlighted as a cause of sedimentation and temperature increase. Finally, some recommenders emphasize the role that the hydrosystem can play in creating more favorable environments for non-native and invasive species to thrive. Some entities suggest that the non-native and invasive species strategies should be split into separate categories in the next Program.

Anadromous fish mitigation in blocked areas

Several state fish and wildlife agencies and tribes recommend retaining the existing language and measures related to the strategy for anadromous fish mitigation in blocked areas (i.e., sections and measures for all blocked areas, above Chief Joseph and Grand Coulee dams, and above projects in the Willamette River basin). In addition, recommendations were received for new language and measures to support and fund anadromous salmon and steelhead reintroduction above Hells Canyon Dam Complex in the Upper Snake River, as well as supporting passage and reintroduction of priority species emphasizing specific tributary areas (e.g., Yakima, North Fork Clearwater, Walla Walla, middle Snake River tributaries, Grande Ronde, and Spokane). Specific to the blocked areas above Chief Joseph and Grand Coulee dams, there are recommendations for modification of existing language to reflect both the completion of phase one and the initiation of phase two for reintroduction. Additional recommendations include prioritizing hatchery development in the Upper Columbia River Basin and include new language to recognize the history and context leading to the Phase 2 Implementation Plan (P2IP) Memorandum of Understanding & Mediated Settlement Agreement (P2IP Agreement), and its current status. Additional language is also recommended to address potential changes in Columbia River System operations and potential impacts to P2IP implementation, objectives, costs, and/or timelines. Specific to areas above the Willamette River basin projects, recommendations include retaining

this section and adding new measures to support lamprey reintroduction and passage studies in the blocked areas and supporting bull trout reintroduction.

Goals, objectives, indicators, and Program performance

A broad set of recommendations was received from 25 entities or individuals on the topic of Program goals and objectives, indicators, and Program performance. Many recommendations weigh in on the goal of 5 million salmon and steelhead by 2025. Most of those recommendations are supportive of keeping the goal but suggested changing the deadline to 2030 or 2035. Several recommendations call for decreasing the goal, eliminating it, or proposed that the goal does not represent a mitigation obligation for BPA. The Council also received recommendations expressing continued support for the smolt-to-adult return objective for salmon and steelhead, with recommended modifications to limit its application explicitly to wild and naturally spawning fish.

There are also recommendations to add to or modify the existing set of objectives and indicators. For example, new indicators are proposed for improving tracking on predation in tributaries, toxics and other water quality issues, status and trends of mussels, and growth of hatchery and wild juvenile salmon and steelhead. Recommendations also cover updating indicators that were outdated (e.g., changing sturgeon targets to reference new management plans or modifying Eulachon indicators to be more specific). Still others focus on considerations around performance evaluation and reporting. Entities recommend the Council work with StreamNet on identifying their staffing needs to be able to further track the stock status of Columbia Basin salmon and steelhead related to MAFAC (Marine Fisheries Advisory Committee) CBP task force targets. There are also recommendations on the need to have a standardized database for tracking performance and for continued support of program performance tracking tools – such as the Hatchery Program Tracker.

Program adaptive management

A total of 33 unique recommendations were received on the topic of adaptive management from 14 different entities. We received many recommendations on the adaptive management process in general and how it should be used to guide an RM&E plan for the Program- specifically. Fish and wildlife managers propose working with the Council to refine and expand the existing adaptive management section from the 2014 Program.

Data management

A total of 17 entities submitted 50 recommendations on the topic of data management. These were very thorough recommendations on three general themes. First, we received many recommendations in support of the Fish Passage Center (FPC). Entities call for continuing to fund (or increasing funding for) the FPC and monitoring programs, developing a management board that includes Tribal representation, managing the FPC monitoring projects as a portfolio, maintaining existing roles and responsibilities of the FPC, adding the Comparative Survival Study

(CSS) analysis as an activity of the FPC, and bringing appendix H content into main Program. In contrast, one entity recommends scrutiny of the CSS and suggested future funding of that effort should occur through an open bid process.

The second theme was Program performance. Entities express support for using StreamNet and their data products as the source of information for tracking aspects of Program performance. They suggest linking tracker to the StreamNet database. Other recommendations focus on creating standardized databases- in general- for sharing information relevant to performance, and call for BPA to support tools for tracking performance.

The third theme was general data sharing and access. We received a detailed set of recommendations on collaboration and data sharing, long-term security, discoverability, outreach, and the need for a basinwide monitoring plan. Other recommendations call for increasing support for data stewards who flow information from their entities into the StreamNet database and supporting collaborations between StreamNet and Pacific Northwest Aquatic Monitoring Partnership (PNAMP), along with participation in workgroups. This overview represents the general themes we heard about; the specifics can be found in the summary and excerpts.

Reporting

Recommendations for measures related to reporting requirements were received from 13 entities on the following general topics: fish propagation, reintroduction hatcheries, sturgeon, lamprey, Program or project implementation, and general good practices for reporting. A total of 20 unique recommendations were received on these topics. In general, recommendations call for reporting on project results at regular intervals, providing context around results, and using transparent and user-friendly communication tools when reporting on Program or project results.

Research, monitoring, and evaluation (RM&E)

Over 160 unique recommendations were received on the topic of RM&E from 26 different entities or individuals. These recommendations represent an expansion in RM&E over what was included within the 2014/ 2020 Program, but not an expansion over the previously identified critical uncertainties and the existing research plan. Recommendations cover the hydrosystem, ecosystem function topics (e.g., habitat restoration, invasive species, etc.), artificial production, and other subjects that were programmatic (covering multiple categories at once) in nature. A substantial number of recommendations are focused at the subbasin scale and aimed to expand understanding on topics that are currently found in the Program (e.g., action effectiveness monitoring. Within the hydrosystem category of RM&E, recommendation subtopics included species monitoring, spill and passage, PIT tag arrays and evaluation, sturgeon and lamprey. Under ecosystem function, subtopics include status and trends monitoring, life-cycle models, limiting factors, distribution, restoration, water quality, planning and assessments, non-native

and invasive species, predator management, lamprey, sturgeon, and eulachon. The majority of recommendations fit under the hydrosystem and ecosystem function categories. Recommendations on artificial production are diverse- covering hatchery-natural origin interactions, monitoring supplementation and reintroduction, and continued investment in RM&E. Other general topics include the Columbia River plume and ocean, climate change, reintroduction into blocked areas, and harvest/ test fisheries.

Implementation provisions for the Program

Many of the state fish and wildlife agencies and tribes recommend modification and/or new text to existing language in the Implementation provisions section of the 2014 Program (Part 6, p.110 - 123), including the potential for treating this section as a strategy with specific measures. Below are brief overviews of the three relevant sections of the 2014 Program.

Program coordination:

Many of the state fish and wildlife agencies and tribes would like the Council to continue its coordination efforts and support the coordination work of the Program's implementors as outlined in this section of the 2014 Program. The recommendations also support the Council in continuing to organize and facilitate the Regional Coordination Forum, but with an emphasis on coordination meetings occurring only with the 20 regional coordinating entities (separate from other interested entities) and potentially occurring more frequently. There are recommendations to add new language to this section: first, to recognize that regional coordinators have coordination needs beyond those that occur only with the Council and directly with the Program, and thus broader coordination activities should be part of the Program coordination funding for regional coordinators. And second, the Council should request Bonneville and other federal agencies periodically discuss their projects, strategic initiatives, and priorities for the Columbia Basin with the Council. The recommendations also include minor modifications to link objectives and SPIs to existing language.

Asset management:

The recommendations acknowledge the success of the Council's effort to support non-recurring maintenance needs for the Program's assets, especially for hatcheries and fish screens – stating that to ensure the infrastructure associated with these assets are met to achieve the objectives and goals as intended. Bonneville's SAMP (Strategic Asset Management Plan) should also be supported as a means for infrastructure needs. Emphasis is also placed on the adequacy of annual funds to ensure that these investments can keep pace with recurring maintenance and can keep pace with inflation and cost of living. The recommendations also note that climate change be taken into consideration for the resilience of these assets. Recommendations call for adequate support of mitigation lands to address land management plans. Continued support is recommended for the continuation of the BOG (Budget Oversight Group) and for an annual reserve fund to address emergency funding type needs. We received recommendations to develop a renewable Asset Plan to put renewable assets on a replacement schedule.

Project review:

Many recommendations were received that spoke to the need to revise the review evaluation process to ensure better transparency and communication with managers and the ISRP. A simplified process is emphasized with attention to the review template detailing progress and lessons learned, as applicable, and to ensure accountability. In addition, the review process should reflect manager insight and knowledge to benefit the Program priorities to create strong projects. Suggestions are made for the development of a Scientific Peer Review Group that not only includes scientists from the region, but also managers. Integration of the ISRP into the watershed collaboratives is suggested. Prioritization, efficiency, and cost effectiveness are also mentioned as part of review efforts. Also noted in the recommendations is the need for increased awareness and engagement in the loss of federal funding processes and the implication to the Program projects.

The staff offers two additional summaries that are general cross-cutting observations of the recommendations as they relate generally to how the program is implemented:

Roles and responsibilities

Many recommendations relate to specific roles and responsibilities of the Program, the Council, the region's fish and wildlife agencies and tribes, and Bonneville and other federal and non-federal operators and their mitigation programs; with recommendations that include coordinated roles and responsibilities among entities. Recommendations call for the Program to include more comprehensive and improved coordination among all the Columbia River Basin's hydrosystem-related mitigation programs, to explicitly integrate protections for fish and wildlife into energy resource planning and development, and to track and achieve recovery goals of ESA-listed species in specific areas. Some recommendations emphasize that BPA has a responsibility to allocate funding to projects that have a direct nexus to the hydrosystem, and should maintain its funding decision authority, while other recommendations emphasize the Council and region's fish and wildlife agencies and tribes take a more comprehensive role in Program planning, tracking, funding and operational decisions. This includes tracking and advocating for work to be implemented by Bonneville, but also by non-ratepayer funded federal and non-federal agencies (e.g., U.S. Army Corps of Engineers, Bureau of Reclamation, private and public Utilities). Recommendations also encourage the Council to continue to track and report on performance of the Program.

Overall funding, priorities and agreements

Recommendations related to overall Fish and Wildlife Program funding cover both existing mitigation funding and calls for new, additional mitigation funding. Recommendations highlight the importance of protecting past and current investments by providing adequate operation and maintenance funding, adequate protection of Program assets and infrastructure, and providing an inflation factor across all program funding to ensure that mitigation does not decrease due to increasing costs of labor and materials. Recommendations also reflect an interest in ensuring equal priority across all the program's core protection and mitigation activities especially if

proposed funding cuts begin to threaten the substantive work and ability to meet project objectives.

Some recommendations call for improved budget management and transparency processes utilizing existing and new coordination mechanisms. Some recommendations call for finding efficiencies within current projects to free up space for funds to address new priorities without adding additional financial obligations on Bonneville and to consider biological and cost effectiveness in the Program. Other recommendations call for a balance of biological effectiveness and cost-effectiveness, especially when considering the vast financial contribution borne by BPA's customer utilities and their end-use ratepayers.

Recommendations that call for significant new funding for the Program also identified many priorities for additional funding. These priorities include funding for habitat protection and restoration measures, new hatchery facilities, increased funding for coordination and capacity building for implementation entities, specific species priorities (such as white sturgeon) and addressing threats such as invasive and non-native species. The recommendations generally did not include specific cost estimates for new funds or priority funds.

There is a call for improved coordination for all Program funding sources, including ratepayer supported mitigation funds and non-rate payer supported mitigation funds. Several entities recommended that the amended Program specifically include their most recent funding agreement (accord) with Bonneville.

Several existing agreements were recommended as important to include in an amended Program. These include the Colville Tribes' 2022 Accord Extension, the Phase Two Implementation Plan (P2IP) for reintroduction of anadromous fish into the upper Columbia River, and the Memorandum of Understanding and Settlement Agreement ("Agreement") for funding and implementation of the P2IP.