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June 23, 2025

MEMORANDUM

TO: Council Members

FROM: Patty O'Toole

SUBJECT: Fish and Wildlife Program amendment work session- June 26, 2025

BACKGROUND:

Presenter: Fish and Wildlife and Legal division staff

Summary: Staff will present an amendment process check-in and summarize the next set of recommendations to amend the Council's Columbia River Basin Fish and Wildlife Program. This set covers general ecosystem function, habitat restoration and protection, protected areas, water quantity and quality, the estuary, the ocean, climate change, wildlife, strongholds, and artificial production.

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 Council is currently accepting comments on those recommendations through 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. The Council received recommendations from 60 entities and individuals that were

comprehensive and addressed nearly all areas of the Fish and Wildlife Program. Since then, staff have been busy organizing, posting, reading, and digesting the recommendations. An overview of these recommendations was presented at the first June Council meeting, along with a more in-depth review of hydrosystem recommendations. For the second June Council meeting, staff will summarize the next set of recommendations.

On May 20, the Council opened a public comment period on the recommendations per section 839(h)(4)(B) of the Northwest Power Act. The deadline is July 3, 2025. Comments may be submitted as a general comment or as a specific comment to a recommendation. All of the recommendations and instructions for providing comments can be found on the Council's [website](#).

At the meeting on June 26, the staff will:

1. Provide an brief process and calendar check-in and recognize important upcoming milestones.
2. Continue reviewing recommendations with Council members. This set of recommendations covers general ecosystem function, habitat restoration and protection, protected areas, water quantity and quality, the estuary, the ocean, climate change, wildlife, strongholds, and artificial production. Draft technical summaries of recommendations for these topic areas will be sent to members separately from this memo.

Ecosystem function

Eleven recommendations were submitted related to the overarching Ecosystem Function strategy. These included support for the existing language in the strategy, as written or alternatively, converting the 14 existing strategies to principles. One entity recommended modifications to several existing measures to include preference for habitat restoration and protection in the Basin's headwaters to benefit water quality and quantity throughout the Basin and to protect and reconnect tributary habitat especially in areas of the Basin's headwaters with productive populations.

Habitat restoration and protection

Many entities provided recommendations on habitat restoration and protection at the basinwide, subbasin, or stream scales. There was support for retaining the existing core principles under the 2014 habitat strategy, which are: build from strength, restore ecosystems, not just single populations, use native species wherever feasible, and address transboundary species. Recommendations added additional measures and specificity to habitat actions in specific subbasins and were not about changing the Program's habitat strategy generally. Specific measures were recommended in subbasins and mainstem reaches that detail additional actions to improve salmon and steelhead habitat in the mainstem, at the mouths of all or most of the tributaries, and throughout the tributaries. The implication is that the amount of habitat work implemented under the Program, which is already substantial, would increase significantly, while noting that the additional habitat actions should not come at the expense of implementing existing programs. A suite of recommendations pertained to cold water refuge habitat, large and small habitat restoration projects, adaptation to climate change, easements and acquisitions,

connectivity between, and to, productive areas and productive populations, ecosystems, and the identification and protection of mainstem and tributary habitat and ecological functions.

Protected areas

No recommendations called for changes in the Protected Areas part of the program. The joint recommendation from a number of state fish and wildlife agencies and tribes did recommend the expansion of the protected areas concept to all energy development, with particular emphasis by the Columbia River Inter-Tribal Fish Commission.

CRITFC also recommended a handful of changes to the program's development standards for licensing and re-licensing non-federal hydro projects, especially to make it clear that off-channel pump storage projects should also receive consideration.

The U.S. Fish and Wildlife Service recommended the Council become more involved in FERC licensing processes in order to help protect fish and wildlife values important to the program. The joint recommendation from a number of state fish and wildlife agencies and tribes recommended the Council retain a program provision in which the Council said it would track Hells Canyon licensing and implementation processes to ensure compliance with Program measures.

Water quantity and quality

On the topic of water quantity, recommendations were in support of keeping the Columbia Basin Water Transactions Program as a top priority and enhancing long term support for the Program, including an inflation index as practicable. Emphasis was placed on cold-water source basins and restoring the natural hydrograph to provide flow through water right acquisitions or leases and agricultural water conservation strategies. Additional recommendations were to support the program and possible connections with fish screening and other habitat restoration efforts. Recommendations also included using low-tech methods to slow, spread, and sink protected flows during high flow periods to support late season flows, and protecting groundwater.

Recommendations on water quality prioritized the importance of maintaining and improving cold water refuge habitat in the mainstem and tributary mouths and sources of cold-water inputs in tributaries and headwaters. This included eliminating artificial, warm, ponded water locations connected to the mainstem to address water temperature and predation. Meeting water quality standards regarding temperature was a concern to many, as was being able to provide water temperature adaptation strategies to meet the Columbia and Snake River Temperature TMDL and 2021 Cold Water Refuge Plan. Recommendations also included keeping existing strategies regarding toxic contaminants and added strategies to consider implications of toxic accumulation in lamprey, sturgeon, salmon and steelhead, a mainstem monitoring program for fish tissue and water quality, and incorporate pollution monitoring, reduction, and mitigation techniques into restoration projects.

Estuary

The Council received recommendations on the estuary strategy from 9 states or tribes, along with other entities who supported their recommendations. These recommendations included implementation objectives, monitoring and evaluation needs, integrating new technology into

monitoring, and implementing restoration for the benefit of ESA-listed fish. Estuary restoration objectives included 40% of estuary habitat recovery by 2050 for biological integrity, 30% recovery by river reach of historic extent of priority habitats by 2030, and no net loss of native habitats as of 2009. Long term monitoring was retained from the 2014 Program, but the strategy was expanded to include eulachon and shad (in addition to salmon, steelhead, sturgeon, and lamprey). Entities recommended that long term monitoring to address critical uncertainties should focus on the following topics: juvenile fish utilization of habitat, parameters affecting life history expression and survival of juveniles, adults with estuary dependent life histories, and monitoring adults to focus restoration efforts and forecasting tools. Recommendations highlighted opportunities for integrating modern technologies into monitoring (for example eDNA, real-time sensors, and other automated imaging technologies) and evaluating suitable habitat and survival of critical fish species, with respect to certain physical variables (e.g., flow, turbidity). Finally, entities recommended continued restoration in the estuary for the benefit of ESA-listed fish. This also included remediation of dredge spoil habitat and a recommendation for monitoring and evaluating any impacts on piscivore and avian predation rates, fish survival, and fluvial estuary function.

Ocean

A total of 25 unique recommendations were received from 11 entities on the ocean and plume topic. These included a combination of maintaining or emphasizing existing measures from the 2014/ 2020 Program, and modifying or adding measures. Topics included monitoring, research, restored/ increased funding for existing projects, analytical products to aid managers in forecasting returns (stoplight charts), coordination, a set of actions in freshwater to improve ocean survival (carryover effects), a survival target, and explicit consideration of how needs may change under a changing climate.

Climate change

A total of 19 entities submitted 67 unique recommendations related to climate change. These included keeping many of the existing 2014/2020 climate measures. Proposed measures covered eight general subtopics: (1) risk assessments, (2) planning considerations and technical information needed to inform planning (e.g., G.I.S. support), (3) funding of new resilient hatchery infrastructure and implementation of the 2014 Climate Change strategy, (4) monitoring and research (e.g., understanding climate change impacts on a variety of species, environments, or infrastructure), (5) models and forecasting needs (e.g., modeling climate change scenario impacts on hydrosystem operations or producing satellite derived spatially high-res temperature observations), (6) developing a climate change vision, (7) cold water refuges (created through hydrosystem operations or habitat restoration and protection), and (8) improved outreach and engagement on climate change issues, including keeping the 2020 measure calling for a science-policy forum. Across these topics, the majority of recommendations were on monitoring and research.

Wildlife

The 2014/2020 wildlife mitigation strategy includes measures covering the process to acquire habitat for the benefit of wildlife, assign mitigation credit for that habitat, and track its quality over time. Measures further describe the process for establishing long term agreements, review of crediting through the wildlife advisory committee, and other process and tracking topics. Specific

measures on restoration of habitat that benefits multiple species- including wildlife- falls under the habitat strategy. For the Program amendment, 13 entities proposed keeping many of the existing measures, along with modifications to the list of focal species requiring mitigation, language regarding agreements, and details regarding crediting and long term funding.

Strongholds

Recommendations on the Stronghold strategy were primarily in favor of eliminating the strategy. Reasons for eliminating the strategy include: 1) the strongholds strategy fails to recognize the need to concurrently rebuild weak populations by giving preference to healthy populations which could result in further deterioration of salmon and steelhead populations; 2) it is redundant with recovery plans; 3) it has not been successfully used in the program because of the challenges in identifying these areas and the lack of resources to develop the appropriate metrics to do so. The idea behind strongholds is already being addressed in other strategies, such as the habitat strategy, and is therefore redundant. There was also a recommendation in favor of the concept of strongholds- specifically noting that it is important to preserve existing strongholds because they build strength in genetic diversity and life-history adaptations that allow fish to respond positively to changing conditions and stressors.

Artificial production

Recommendations emphasize that hatchery programs remain a critical mitigation tool and highlight the importance of retaining many of the existing measures and associated language in the Program, including support for funding adequacy for hatchery infrastructure and operations & maintenance (O&M) funding of hatchery programs. Measures support artificial production of anadromous Salmon and Steelhead, resident fish, Sturgeon, Lamprey, and native freshwater mussels. Several recommendations for new measures are included to:

- Incorporate as measures into the Program, inclusion of all Federal and non-Federal hatchery mitigation program responsibilities in the Columbia Basin to support funding adequacy of hatchery infrastructure, O&M, and associated research, monitoring and evaluation (RM&E) to support adaptive management of hatchery programs.
- Fund new conservation hatchery actions, including actions to prevent extirpation of ESA-listed species, and reintroduction of anadromous Salmon and Steelhead in specific areas. Identify all existing anadromous Salmon and Steelhead hatchery actions occurring in select subbasins as measures, including hatchery mitigation actions outside the Council's F&W Program.
- Incorporate current hatchery Master Planning and other developed or developing planning documents as measures.

Note: staff is still developing in-depth summaries of the recommendations for *other areas* of the Program. These will be shared and reviewed with members at future Council meetings.

Additional Information:

- [Link](#) to recommendations