Mike Milburn Chair Montana

> **Doug Grob** Montana

Jeffery C. Allen Idaho

Ed Schriever Idaho



Thomas L (Les) Purce Vice Chair Washington

> KC Golden Washington

Margaret Hoffmann Oregon

Charles F. Sams III
Oregon

Council Meeting Summary
May 13 & 14, 2025
Red Lion Hotel Pasco Airport & Conference Center
2525 N 20th Avenue
Pasco, WA 99301

This is a summary of the Council's May 2025 public meeting and Council decisions made. The meeting agenda and presentation materials for each agenda item during the meeting are posted at https://www.nwcouncil.org/calendar/council-meeting-2025-05-13/. The meeting recording and a copy of this summary will also be posted on that page.

May 13, 2025

Council Chair Mike Milburn brought the meeting to order at 8:01a.m. Pacific Time. Council Members Jeff Allen, KC Golden, Margaret Hoffmann, Thomas L. (Les) Purce, Charles F. Sams III, Ed Schriever, and Doug Grob were in attendance in person. The next Council meeting is scheduled for June 10 & 11, 2025, in Missoula, Montana, and via webinar.

Member Golden gave a welcome from Washington and an afternoon tour overview.

Report from the Executive Director

Interim Executive Director Guy Norman highlighted hardworking staff, the deadline for recommendations to amend the Fish and Wildlife Program, the Power Plan process and scenario development, and the collaborative nature of the Council.

Report from the Public Affairs Committee

Public Affairs Committee Chair Charles F. Sams III reported on the committee meeting on April 24, 2025. His report included a government affairs update from Chris Huckleberry, budget strategies and planning, various media campaigns and productions, and the next annual report.

Council Meeting Agenda Items

1. Basin Climate and Water Supply Outlook

Fish and Wildlife Program Scientist Kate Self introduced Amy Burke, Senior Hydrologist and member of the Water Supply Team at the Northwest River Forecast Center of the National Oceanic and Atmospheric Administration. Amy provided an annual update on current hydrologic and climatic conditions and seasonal water supply forecasts for the Columbia Basin. She highlighted the Ensemble Streamflow Prediction modeling technique, observed monthly and seasonal precipitation, temperatures, snowpack, adjusted observed runoff, and water supply trends.

Presentation materials are available: https://www.nwcouncil.org/f/19398/2025 05 1.pdf

2. Emerging Technology

Senior Energy Policy Analyst Elizabeth Osborne introduced Jud Virden, Associate Laboratory Director for Energy and Environment at Pacific Northwest National Laboratory. Jud provided a high-level overview of Pacific Northwest National Laboratory, then dove deeper into work related to the Council's Power Planning process. He discussed the national labs' core missions in the areas of science, national security, and energy and environment. He covered some of PNNL's research on emerging technologies for energy resilience and national security, grid modernization and energy storage, and nuclear materials and threat analysis. Potential practical applications of this research include increasingly efficient batteries, wildfire risk models, metal extrusion methods that improve conductivity, and grid modernization planned by artificial intelligence.

Presentation materials are available: https://www.nwcouncil.org/f/19399/2025_05_2.pdf

3. Overview of Cold Water Refuge (CWR) and Delta Habitat Assessment efforts in Zone 6 of the Columbia River, with updates on Wind, White Salmon, Klickitat, Umatilla, and Walla Walla Rivers; "Enhancing the CWRs we have and building the ones that salmon need"

Fish and Wildlife Policy Analyst Rudy Salakory introduced Bill Sharp, Yakama Nation Fisheries Scientist, and Jerimiah Bonifer, Umatilla Fisheries Program Manager. Bill described the

detrimental effects of sediment fans and deltas; Cold Water Refuges (CWR) and their benefits to fish migration and ecosystems; recent coordinated actions under the Water Resources Development Act; federal commitments and the Cold Water Refuge Team; and data synthesis. Project examples include data collection in and geomorphic assessment of the Wind River; bathymetry and delta modeling of the Klickitat River Delta; White Salmon River dredging and restoration; protection of lands adjacent to CWR; and more. He also addressed funding streams and grant writing efforts. Jeremiah focused on the Umatilla, a partial CWR, and Walla Walla Rivers. Current and near-term work in those basins includes floodplain restoration in a system shifting from snow-based to rain-based and negotiating water rights to increase stream flows during the summer, significantly reducing water temperatures at a crucial time. He stressed the importance of partnerships between states and sovereigns, in-stream flow modeling, and the removal of the Bateman Island Causeway. Council members inquired about Umatilla water rights settlements, project costs, funding mechanisms, conservation easements, cold water in impounded areas, and wildfire impacts to tributaries and sediment loading.

Presentation materials are available: https://www.nwcouncil.org/f/19386/2025_05_3.pdf

4. State of Washington and Oregon Invasive Mussel Prevention and Readiness

Washington Policy Analyst and Biologist Stacy Horton introduced Justin Bush, Aquatic Invasive Species Division Manager for Washington Department of Fish and Wildlife and Keith DeHart, Invasive Species and Wildlife Integrity Coordinator for Oregon Department of Fish and Wildlife. Keith gave an overview of invasive freshwater mussels, known as aquatic bio-foulers. He discussed their lifecycles, species, characteristics, introduction to the United States, and ecosystem devastation. He also highlighted Oregon's prevention activities, response program, and coordinating entities. Justin presented economic risks; damages to infrastructure; cultural and human health impacts; monitoring, prevention, and preparedness plans and actions in Washington State; funding; and partnerships.

Presentation materials are available: https://www.nwcouncil.org/f/19392/2025_05_4.pdf

5. Efforts of the Oregon and Washington Invasive Mussel Near-Term Action Working Group

Justin Bush and Keith DeHart transitioned into a discussion of the Oregon and Washington Invasive Mussel Near-Term Action Working Group, in which the states of Oregon and Washington, in partnership with many other organizations/entities, work together to build common objectives and plans for shared sections of the Columbia River Basin. Both speakers

highlighted its purpose and stressed the importance of joint prevention and response efforts, as well as golden mussel risk dynamics; the potential vector of ballast water; the group's findings; near-term actions; long-term actions; and plan implementation in each state. Discussion with members included the possibility of a national prevention alert regarding ballast water releases.

Presentation materials are available: https://www.nwcouncil.org/f/19400/2025_05_5.pdf

6. State of Washington Invasive Mussel Detection Canine Demonstration

Policy Analyst and Biologist Stacy Horton introduced Justin Bush, this time alongside Nick Knauss, Aquatic Invasive Species Canine Handler and Inspector with Washington Department of Fish and Wildlife, and Fin, Aquatic Invasive Species Detection Canine. Invasive mussel detection dogs are specifically trained to sniff out quagga and zebra mussels on boats and watercraft and are one more line of defense preventing their spread. Nick explained daily life with Fin, his training timeline, the number of boats he may inspect in any one day, the bond they share, and how this program is funded.

Presentation materials are available: https://www.nwcouncil.org/f/19387/2025_05_6.pdf

Chair Milburn adjourned the meeting at 12:10p.m. Pacific Time.

May 14, 2025

Council Chair Mike Milburn brought the meeting to order at 7:59a.m. Pacific Time. Council Members Jeff Allen, KC Golden, Margaret Hoffmann, Thomas L. (Les) Purce, Charles F. Sams III, Ed Schriever, and Doug Grob were in attendance in Pasco, Washington. The next Council meeting is scheduled for June 10 & 11, 2025, in Missoula, Montana, and via webinar.

Council Meeting Agenda Items, Continued

7. Council Work Session for the Fish and Wildlife Program Amendment

a. Amendment process check-in and review of administrative record requirements

Fish and Wildlife Division Director Patty O'Toole and General Counsel John Shurts reviewed the Columbia River Basin Fish and Wildlife Program amendment current and next steps and requirements for developing the administrative record that the Council uses to make its

amendment decisions. There was a reminder of the close of the recommendation period on May 19, and the beginning of the public comment period on recommendations on May 20. The public comment period closes on July 3.

b. Untangling the strategies guiding mitigation for fish and wildlife

Biologist for Program Performance Kris Homel provided an outline of the presentation, then details for each section as follows: foundational elements of the Northwest Power Act and Fish and Wildlife Program (Program); a multi-species, ecosystems approach; the organization and intersection of various strategies over time; and clear actions highlighted by logical organization. Heather Hendrixson, Fish and Wildlife Habitat Specialist, and Maureen Hess, Fish and Wildlife Program Scientist, described and listed examples of a multi-species, ecosystem approach to mitigation for the effects of the hydrosystem in the Columbia River Basin. Fish and Wildlife Division Director Patty O'Toole summarized the potential for Program reorganization, and members agreed.

c. Hydrosystem operations – the intersection of Fish and Wildlife Program and Power Plan

Fish and Wildlife Program Scientist Kate Self explained the efficiency of the Fish and Wildlife and Power Divisions joining forces to consider hydropower operations. She covered current operations and major actions and later gave examples of potential modifications. Power System Analyst Dor Hirsh Bar Gai explained integration into GENESYS of 2023 Commitments actions called for in the Resilient Columbia Basin Agreement and the impacts to modeled spill, generation and needs. Then, Hirsh Bar Gai and Director of Power Planning Jennifer Light discussed the proposed Changing Hydro Operations Scenario modeling for the Ninth Power Plan as a way to explore changing operations from the planning side. General Counsel John Shurts examined why these things matter, what they benefit, and how. Finally, Fish and Wildlife Division Director Patty O'Toole covered a timeline of possible next steps. Discussion with members included price impacts; tensions between adjustments (turning dials) and their attendant costs/tradeoffs; scenario modeling and interactions with the Fish and Wildlife Program; implications of the Columbia River Treaty; and effects of hydrosystem flexibility on fish behavior.

Presentation materials are available: https://www.nwcouncil.org/f/19388/2025_05_7.pdf

8. Power Plan Update

Director of Power Planning Jennifer Light provided a Power Plan update, beginning with the timeline and elements. We are entering the scenario modeling phase, and Director Light highlighted which studies and scoping sensitivities are included, as well as what to expect in the coming months. The scenario analysis will include multiple studies, which staff plan to bring to the Council in large batches to help with the understanding of the different results. Multiple work sessions will help build a solid, well-informed, flexible synthesis.

Presentation materials are available: https://www.nwcouncil.org/f/19389/2025_05_8.pdf

9. Proposed Conservation Resources, Part 2

Director of Power Planning Jennifer Light introduced Kevin Smit, Power Planning Resources Manager, and Christian Douglass, Senior Resources Analyst. Smit listed many of the resources selected for the conservation supply curve in the Ninth Power Plan, a feedback summary of conservation measures, and measure highlights. Comparing the 2021 Power Plan to what is available now, Douglass discussed residential and commercial lighting; ductless heat pumps; and ENERGY STAR-rated appliances. Smit described new construction potential and building codes; distribution efficiency (Conservation Voltage Regulation); electric motors in the industrial sector; and industrial heat pumps. Douglass then explained the draft energy efficiency (EE) supply curve for the upcoming Plan and annual incremental EE to date. Smit finished up with work in progress.

Presentation materials are available: https://www.nwcouncil.org/f/19390/2025 05 9.pdf

10. Proposed Demand Response Potential, Part 1

Director of Power Planning Jennifer Light introduced Joe Walderman, Resources Analyst, who described the Demand Response (DR) potential under development for the Ninth Power Plan and its role in modeling. He defined DR, how it was treated in past Power Plans, the existing regional capacity, and current needs and opportunities. Examples included electric vehicle charging and time-of-use rates; HVAC programs; water heating; irrigation, the greatest source of existing regional DR currently; commercial and industrial demand curtailment; behind-the-meter batteries; and price-based and system programs. Walderman then covered specific parameters and assumptions: cost parameters, impact parameters, dispatch parameters, dispatch assumptions, and progress and next steps.

Presentation materials are available: https://www.nwcouncil.org/f/19391/2025 05 10.pdf

11. Final Approach to Wildfire Operational Risk Modeling

Director of Power Planning Jennifer Light introduced Dor Hirsh Bar Gai, Power System Analyst, who presented the Council's approach to wildfire risk modeling. The central question is, how do we quantify the operational risks of wildfires to new transmission/generation acquisitions and adequacy? Hirsh Bar Gai provided an overview of past work and outlined bulk transmission system impacts, generation risks, solar capacity reduction and sudden generation drops (Wiggle Effect), and the intricacies of modeling all of this. Feedback from the Wildfire Operational Risk Multi-Advisory Committee further shaped the approach by staff. Discussion with members included density of smoke, the effects of ash/detritus, line derating, and smoke movement and temporal duration.

Presentation materials are available: https://www.nwcouncil.org/f/19395/2025 05 11.pdf

12. Columbia Generating Station (CGS) Extended Power Uprate (EPU)

Director of Power Planning Jennifer Light introduced Ryan Egerdahl, Manager of Long Term Power Planning, and Carla Essenberg, Market Policy & Pricing Operations Research Analyst, from Bonneville Power Administration. Egerdahl provided an overview of the Tier 1 system size and characteristics. Essenberg presented the need for more Tier 1 power, candidate resources to meet Tier 1 System Size needs, specific modeling years, sensitivities and results, and least-cost portfolios with and without the CGS EPU. Egerdahl provided key takeaways. Council members inquired about timelines; mode of analysis; CGS' capacity and larger needs in the region; reliability; the potential loss of Inflation Reduction Act (IRA) tax credits; and the true cost of all generation resources without it.

Presentation materials are available: https://www.nwcouncil.org/f/19393/2025 05 12.pdf

13. Council Business

Motion to Approve Summary of the April 2025 Council Meeting

Member Purce moved that the Council approve for the signature of the Vice Chair the official summary of the April 2025 Council Meeting held in Portland, OR, and via webinar, as presented by staff.

Member Grob seconded.

No discussion.

Voice vote - all in favor, none opposed.

Motion was approved.

The approved summary of the April 2025 Council meeting and other materials from that meeting are at https://www.nwcouncil.org/f/19394/2025_05_13a_minutes.pdf

Motion to Approve Summary of April 29, 2025, Special Council Meeting

Member Purce moved that the Council approve for the signature of the Vice Chair the official summary of the April 29, 2025, Council Meeting held via webinar, as presented by staff.

Member Golden seconded.

No discussion.

Voice vote – all in favor, none opposed.

Motion was approved.

The approved summary of the April 29, 2025, Council meeting and other materials from that meeting are at https://www.nwcouncil.org/f/19396/2025_05_13b_specialminutes.pdf

Motion to Release for Public Comment the Draft Fiscal Year 2027 and Fiscal Year 2026 Revised Budgets

Member Purce moved to release the draft Fiscal Year 2027 and Fiscal Year 2026 revised budgets for a comment period through June 30, 2025, as presented by staff.

Member Schriever seconded.

No discussion.

Voice vote – all in favor, none opposed.

Motion was approved.

The draft fiscal year 2027 budget and fiscal year 2026 revised budget are posted at https://www.nwcouncil.org/f/19397/2025_05_13c_budget.pdf

Public comments

Scott Levy (bluefish.org) provided virtual public comment about warm water and mass die-offs of salmon and steelhead going unresolved without the removal of the Lower Snake River dams.

Chair Milburn adjourned the meeting at 3:11p.m. Pacific Time.