

Northwest Power and Conservation Council
Meeting Summary
July 14, 2021
Portland, Oregon

Council Chair Richard Devlin brought the meeting to order at 9:02 a.m. Council Members Jeffery Allen, Doug Grob, Guy Norman, Patrick Oshie, Jim Yost, Chuck Sams, and Mike Milburn joined the webinar. The next Council Meeting is scheduled for August 11, 2021.

Reports from Committees

Fish and Wildlife Committee

Member Allen, Fish and Wildlife Committee Chair, reported on the Fish and Wildlife Committee Meeting held on July 13, 2021.

1. Bonneville Report on Program Research

Research, Monitoring & Evaluation Lead Dr. Jody Lando presented an update on BPA-funded research linked to the Council's Columbia River Basin Fish and Wildlife Program. She provided an overview of the types of scientific questions currently addressed by research projects, and where and how projects are implemented across the Columbia Basin. She highlighted recent publications of key management significance and addressed the relationship to the Council's 2017 Research Plan and the Independent Scientific Advisory Board/Review Panel's 2016 Critical Uncertainties report. There are several remaining worthwhile publications that Vice Chair Norman will review and communicate to the Council.

2. Revisions Proposed for Budget Oversight Group Process

In 2004, Bonneville, the Council, and Columbia Basin Fish and Wildlife Authority formed a budget oversight group (BOG) to conduct a budget tracking process. Over the past 18 years the BOG process has evolved to meet the needs of implementing projects in the Fish and Wildlife Program. Council and Bonneville staff provided an overview of the revised process now called the Project Adjustment Review Group (PAR Group) that will serve the same function, but also addresses mid-year change requests, provides science review for proposed changes to the scope or intent of a project, and outlines the ongoing discussion about how to treat new projects. The formality of this process creates value for the region providing additional transparency for mid-contract requests, providing opportunity for stakeholder engagement, and promoting communication and information sharing. The updating of the process is ongoing and will take additional work to complete.

3. Assessing Program Performance: Approach and Status Update

The Fish and Wildlife Committee held a work session in which Council staff presented preliminary concepts and initial efforts to develop an approach for assessing the performance of the Program and solicited feedback and input from Committee members. Staff described an organizational framework for both a quantitative and qualitative assessment of a fish and wildlife program performance.

The 2020 program addendum addresses program performance through reorganizing and compiling the goals and objectives of the program, which serve as benchmarks for performance, and developing strategy performance indicators. Staff has proceeded as described in the 2020 addendum on reporting against a set of adopted program objectives, and will prepare a geographic overview of investment and progress at the province scale. Additional reports and check-ins are expected later this year.

Power Committee

1. Discussion of First Collected Draft of 2021 Northwest Power Plan

Member Oshie, Power Committee Chair, reported on the Power Committee Meeting held on July 13, 2021.

Council Staff has incorporated feedback from the Power Committee and worked with the Public Affairs Committee to go through a comprehensive copy edit of all sections of the 2021 Northwest Power Plan. The results are now collected into a single document, and the Power Committee met to review this first collected draft for further discussion and feedback.

Fish and Wildlife Committee and Power Committee meeting materials for July 2021 can be found here:

<https://www.nwcouncil.org/meeting/council-meeting-july-13-2021>

Public Affairs Committee

Member Grob, Public Affairs Committee Co-chair, reported on the Public Affairs Committee Meeting held on July 13, 2021.

Details are being finalized for the August 2021 Congressional Staff Tour in Whitefish, Montana. The tour is almost at full capacity. The Committee also discussed the schedule for public hearings on the draft Power Plan possibly to take place in Montana in September and Oregon in October. Washington and Idaho public hearing dates are still to be determined. There will also be virtual public hearings on the draft Power Plan.

Council Meeting Agenda Items

1. Overview of Transmission in the Region

Dave Angell representing NorthernGrid provided an overview of the association. NorthernGrid is a transmission planning association with members spanning the Pacific Northwest and Intermountain West regions. They are comprised of investor-owned utilities, municipalities, public utility districts, and Bonneville Power Administration.

With data from association members and other stakeholders, NorthernGrid is currently drafting a 10-year Regional Transmission Plan which will soon be available for stakeholder review and comment and posted on their website (<https://www.northerngrid.net/>). Their goal is to produce the most efficient, cost-effective Transmission Plan possible and have it finalized by December 2021. Angell discussed the planning process and the complexity of the data being used to create the plan including seasonal load forecasts, resource retirements (coal), resource additions (renewables and other), planned transmission projects (and project combinations), projected transmission flows, and various economic analyses.

Member Oshie asked for clarification on how NorthernGrid defines “cost-effective” considering all of the transmission projects planned through 2030. Angell explained that the NorthernGrid planning process evaluates the transmission required to reliably serve the loads and resources for the future. When that reliability threshold is met, they can determine which projects or combinations of projects are most cost-effective. Cost-effectiveness is a requirement of the Federal Energy Regulatory Commission (FERC).

Chair Devlin asked for clarification of the term “cost allocation” and NorthernGrid’s role in cost allocation as it relates to transmission planning. Angell explained that cost allocation is a requirement from the FERC and the term refers to allocating costs to utilities in the region depending on how much they benefit relative to one another from a project. The Cost Allocation Task Force which is comprised of IOUs and state agencies (commissioners, siting authorities, and energy directors) helps to determine the allocation.

Member Grob cited the substantial projected renewable builds throughout the region and asked how difficult it is to get energy from these new builds to major transmission lines. Angell said that for major transmission lines, the process requires the cooperation of multiple entities, permitting, and a solid cost recovery strategy, and siting can take 10 – 15 years. However, the shorter transmission lines associated with these renewable builds are more attainable and could take 5 years or less.

Member Oshie asked if FERC offers incentives for construction of transmission lines and

asked if congestion pricing is an available tariff option for the west coast region. Angell said that congestion pricing is possible with a full organized market across the region, and we don't have that yet. He said that FERC does offer incentive pricing for building transmission lines.

Member Oshie asked if the Western Interconnect would be prepared to have the technology applications in place to take advantage of congestion pricing if there was a market set up in the region.

Angell confirmed that the necessary measuring and control equipment is already in place, and that the information can already be shared throughout the Western Interconnect.

Chair Devlin asked how often NorthernGrid receives proposals to upgrade existing transmission and what problems arise with the existing transmission.

Angell said NorthernGrid received submissions from Portland General Electric regarding the reconductoring of transmission lines, but it wasn't regional in nature, and generally there isn't much activity at the regional level.

Presentation materials are posted with this summary here:

https://www.nwcouncil.org/sites/default/files/2021_07_1.pdf

2. Basin Climate and Water Supply Summary and Outlook

Ryan Lucas, Senior Hydrologist at the Northwest River Forecast Center (NWRFC) provided an update on the current water supply and climate conditions. Lucas reviewed various modeling tools that indicated record low water supply forecasts across the Northwest from April to September 2021. This is due to record high temperatures and low precipitation.

Take home messages

- At the end of February much of the Columbia basin had near to above normal water supply forecasts. Snake basin had largely below normal volume forecasts. Middle Snake tributaries exhibited especially low volume forecasts.
- With few exceptions, water year precipitation to date was below normal across the River Forecast Center domain. Good snow building in the northern Cascades and in the Upper Columbia basins helped keep water supply volume forecasts up. The Washington and northern Oregon Cascades, Blue and Wallowa ranges all benefited from a healthy snow building in February.
- Very dry conditions since the beginning of March have reduced water supply forecasts domain wide. Currently the only basins with normal to above normal Apr-Sept forecasts are found in the Clark Fork and in the snow-fed portions of the Washington Cascades.

- Many Natural volume forecasts on the west side of the Oregon Cascades, in the Middle and Lower Snake, and Middle Columbia lower tributaries have Apr-Sep volume forecasts that rank in the single digits for driest volumes in the historical record. Many of these forecasts, should they verify, would be the driest Apr-Sep volume on record.

Forecast information and maps can be found on the Northwest River Forecast Center website. <https://www.nwrfc.noaa.gov/rfc/>

Aaron Marshall, Lead Regulator at the Control Center for the U.S. Army Corp of Engineers (USACE), gave an overview of Columbia Basin reservoir operations.

Federal dams throughout the Columbia Basin are owned and operated by the USACE and the Bureau of Reclamation. Bonneville Power Administration is responsible for marketing and transmitting the power generated by the federal facilities. Operations are coordinated between the three agencies in real-time and on a planning basis.

The USACE works with regional partners to operate the Columbia Rivers System to serve 8 Congressionally authorized purposes:

- Flood risk management
 - Flood risk management is one of the primary purposes of operating dams in the Columbia Basin. Space is needed in storage reservoirs to manage flows in the lower Columbia and lower Snake Rivers. Limited space is available for flood risk management compared to how much runoff is typically received. Flood risk management is dependent on having accurate water supply forecasts.
- Hydropower
 - Hydropower is largely a byproduct of managing the reservoir system for all other purposes. USACE has 21 hydropower dams within the Columbia River Basin. Of all the hydropower generated by the USACE dams throughout the country, about 63% occurs in the Pacific Northwest.
- Navigation
 - Adequate depth and velocity limits allow vessels to navigate the river channel. There are 8 locks on the lower Columbia and lower Snake River dams in order to maintain and sustain navigation and shipping to inland ports.
- Fish and Wildlife
 - Dams are operated in accordance with current United States Fish and Wildlife Service and NOAA Fisheries. Operations manifest as flow targets, reservoir elevation targets, and hydropower generation limits. Project-specific spill requirements are managed to aid fish passage within water quality standards. There are juvenile fish passage spill requirements across the spring and summer.

- Water quality
 - Spill over the spillway can aid migrating juvenile salmon heading to the ocean, but can also produce total dissolved gas (TDG). Spill is managed to balance fish passage benefits with TDG production. Some projects (Dworshak, Libby, and Hungry Horse) are operated to provide temperature benefits downstream.
- Water supply and irrigation
 - USACE manages reservoirs to maintain a minimum elevation to supply for irrigation, and Municipal and Industrial purposes.
- Recreation and construction
 - These activities often need specific reservoir levels or flows. They generally happen incidental to all other operations.

2021 Operations

At Dworshak, USACE is releasing cold water to keep Lower Granite tailwater temperature at or below 68°F. This began in June 22, 2-3 weeks earlier than normal due to the record heatwave in June. Dworshak filled to about 3 feet below full pool before drafting for temperature augmentation.

At Grand Coulee, USACE released water for flow augmentation during the spring for juvenile salmon out-migration. There was a spring target of 220,000 cfs at McNary Dam, but it wasn't necessarily met the entire time because of the limitations of water supply throughout the basin due to lack of precipitation and snow accumulation. There will be an additional 2-foot draft by August 31 due to low water supply to support salmon flow objectives.

At Ice Harbor, Lower Monumental, Little Goose in the lower Snake River, USACE received a special request from state and tribal salmon manager partners to close the surface weirs earlier than they would normally to help lower temperatures in the lower Snake River for adult migrating salmon.

Member Norman asked Marshall how USACE will meet their objectives (e.g. flow augmentations, minimum pool requirements) considering the low flow forecasts. Marshall acknowledged the low forecasts, especially for the summer and fall. Marshall anticipates being able to meet objectives for hydropower, navigation, and irrigation, but the challenge this year with the low flows is going to be water supply for fish, and making sure that water continues to be cool enough for upstream fish migration.

Director of Fish & Wildlife Patty O'Toole provided additional context on the NWRFC and USACE presentations recalling 2015 presentations about the impacts of warm water temperature and low flow on migrating salmon. She asked Ryan Lucas how 2021 compares

to 2015 in terms of precipitation and temperature. Lucas said he would send links to their website showing what 2015 volume run offs were compared to forecasts.

Patty O'Toole gave a brief presentation on what conditions various fisheries managers are observing and what actions are being taken.

Montana benefitted from late spring snow and rain, but there are concerns that drought conditions will worsen in August. The Montana Department of Fish, Wildlife and Parks is considering a variety of management activities including administering agency held instream flow water rights by potentially making a call on junior water users when stream flows fall below crucial instream flow criteria. They are implementing community drought plans and likely also implementing fisheries regulation changes.

Throughout the basin numerous fisheries managers are implementing emergency fishing restrictions like "hoot owl" regulations where fishing is closed prior to the heat of the day to remove additional stress from various fish.

Idaho Fish and Game is hauling trapped sockeye salmon from Lower Granite Dam to Eagle Fish Hatchery. This is in response to increased water temperatures and lower conversion rates of sockeye through the Columbia River. They are also relocating chinook salmon broodstock from the South Fork Salmon River to Rapid River Hatchery due to warm water temperatures in the holding ponds which are exceeding 70°F as of last week.

A drought advisory has been issued in Washington for much of the state. Washington is regularly reevaluating and considering the need for emergency declaration within the state. The Yakima Nation is moving sockeye to Cle Elum to avoid hot water. There are anecdotal reports of fish mortality in the Kettle River potentially due to warm water temperatures.

In Oregon, emergency hoot owl fishing regulations are in place in some areas. There have been closures of areas where salmon hold in order to take pressure off of the fish. There are modifications to operations in the Willamette River to deal with warm water temperatures and flow. In the Warm Springs River spring Chinook adults are being transported from the Warm Springs Hatchery upstream to cooler holding and spawning areas because of lethal warm water temperatures at the hatchery.

Finally, fish managers are reporting low steelhead counts and are tracking concerns about upstream migration problems.

O'Toole explained that this is not an exhaustive list, the situation is dynamic and changing quickly, and management actions are changing almost daily.

Presentation materials are posted with this summary here:
https://www.nwcouncil.org/sites/default/files/2021_07_2.pdf

Remarks from Chair Richard Devlin

Chair Devlin acknowledged the contributions of Karl Weist and his 27 years of service to the region as he retires from the Oregon Council office. Chair Devlin, Member Allen, Melinda Eden, Henry Lorenzen, and Ted Ferrioli gave high praise, shared jokes, and shared stories of Karl's work and character.

3. Council Business

Council approval of the June 2021 Council Meeting minutes.

Vice-Chair Norman moved that the Council approve for the signature of the Vice-Chair the minutes of the June 9, 2021, Council Meeting held in Portland, Oregon via webinar, as presented by staff.

Chair Devlin seconded.

Motion approved.

Decision to Adopt Fiscal Year 2023 and Fiscal Year 2022 Revised Budget

Vice-Chair Norman moved that the Council adopt a Fiscal Year 2022 Revised Budget of \$11,941,824, adopt a Fiscal Year 2023 Budget of \$12,191,895, and authorize reprogramming of available Fiscal year 2021 funds for unanticipated Fiscal Year 2021 costs, all as presented by staff [with any changes made by Members at today's meeting].

Member Yost seconded.

Motion approved.

Approval of Amendment to Contract with Systematic Solutions Inc. to respond to Data Requests

Vice-Chair Norman moved that the Council approve an amendment to contract C2021-03 with Systematic Solutions Inc. to add \$5,000 to the budget for a total amended contract budget not to exceed \$90,356 to support staff in responding to requests for data from existing model runs, as presented by staff.

Member Oshie seconded.

Motion approved.

Public Comment

Scott Levy, host of bluefish.org, presented Pacific Northwest Electric Power Planning and Conservation Act section 839b(e)(3)(E) which states “an analysis of reserve and reliability requirements and cost-effective methods of providing reserves designed to insure adequate electric power at the lowest probable cost;”

Levy stated that the lowest probable cost system for the electrical grid would be one that has removed the Lower Snake River dams. He suggested that there is a lot of misinformation surrounding the removal of the dams and that this has influenced how the removal of the dams was addressed in the 6th and 7th Power Plans.

Levy cited that the dams are costly and deadly for fish, and that Idaho’s forests have been seriously degraded by not having salmon come back to them. He said there would be significant saving to Bonneville if they were to remove the dams.

He again stated that removing the dams would lead to the lowest probable cost, and suggested that not having the removal of the dams in the next Power Plan would make the Plan illegal.

Jim Waddell of Port Angeles, Washington is a Civil Engineer who is retired from a 35-year public service career with the U.S. Army Corps of Engineers. He is also a PUD commissioner. He is searching for the true cost of the hydro system and how it will play out over the next 20 years considering new renewable builds and everything the models show. He doesn’t think we have the kind of information that PUDs and Co-ops need to make solid decisions in terms of contracts.

He mentioned that the CRSO places hundreds of millions of dollars just on the Lower Snake’s flexibility to provide balancing reserve, and he doesn’t believe this is the case. He believes these dams are out of flexibility and said that Member Yost and the USACE are saying the same thing.

He mentioned that in the models, the Lower Snake dams are referred to as storage dams. He believes that the operations of the dams are not indicative of storage dams and don’t provide any of the flexibility like Grand Coulee and the Canadian dams do. He suggests adjusting the modeling to reflect this.

He asked that Council staff consider analyzing and releasing to utilities and the public what the benefit, value, and utility of the hydro system truly is, considering transmission, renewables, climate change, and the dire salmon situation in the Lower Snake.

Chair Devlin adjourned the meeting at 12:43 p.m.

Northwest Power and Conservation Council meeting materials for July 2021 can be found here: <https://www.nwcouncil.org/meeting/council-meeting-july-13-2021>