In 1980, Congress passed the Northwest Power Act, authorizing the states of Idaho, Montana, Oregon, and Washington to form the Northwest Power and Conservation Council, an interstate compact, giving the region a greater voice in how we plan our energy future and manage natural resources in the Columbia River Basin. The Act requires the Council to develop, with broad citizen participation, a regional power plan and fish and wildlife program. Wholesale power revenues from the Bonneville Power Administration fund the Council.

Regional Power Plan

The Council develops a 20-year plan, which it revises every five years, to ensure the Northwest of an adequate, efficient, economical, and reliable power supply. The Act directs the Council to give priority to cost-effective energy efficiency, followed by cost-effective renewable resources when developing the plan.

It includes several key components, including an electricity demand forecast, electricity and fuel price forecasts, an assessment of the amount of cost-effective energy efficiency that utilities can acquire over the life of the plan, and a least-cost generating resources portfolio.

The plan guides the Bonneville Power Administration’s resource decision-making, as Bonneville must act consistent with the Council’s plan when developing resources. Other entities, including investor-owned utilities, use the plan to guide their decisions as well.

Columbia River Basin Fish and Wildlife Program

The Council revises its fish and wildlife program every five years as part of the power plan. The program seeks to mitigate the effects of hydropower dams on fish and wildlife and incorporates a variety of strategies, including improving habitat for fish and wildlife throughout the basin and replacing lost fish production with hatcheries. It recommends projects for funding to the Bonneville Power Administration, including 14 hatchery programs with projects operated by nine Indian tribes and all four-state fish and wildlife agencies.

Target species include salmon, steelhead, and resident fish such as sturgeon and bull trout. It also recommends river flows at and between dams in the Columbia River system to improve fish production, migration, and survival. In 2022, direct Bonneville-funded program costs were $249.4 million in expense funding, plus obligations to capital projects of $16.1 million.
Energy efficiency is the Northwest’s second largest resource after hydropower. Since 1980, the region has saved 7,530 average megawatts of energy efficiency, enough electricity to power nearly seven cities the size of Seattle

- Energy efficiency has reduced consumers electricity bills, estimated to be over $5 million in total savings annually
- The efficiency achieved in the region has avoided more than 24 million metric tons CO₂ emissions
- Improved fish survival at dams, improved fish and wildlife habitat
- Preserved more than 400,000 acres for wildlife
- Protected fish and wildlife habitat on 44,000 miles of undammed Northwest rivers and streams

Recent Highlights

2021 Northwest Power Plan
The Council adopted its 2021 Northwest Power Plan in February 2022 to ensure a reliable and economic power supply for the region. The plan was developed as major shifts in the electricity industry were underway: Clean energy policies and decarbonization goals to address climate change driving changes to loads and resource options; a dramatic drop in the cost of wind and solar energy making them more competitive; and retiring coal plants across the West, driven by economics, changing the availability of existing system energy.

The Council’s scenario analysis explored the risk and uncertainty around these changing dynamics to inform a robust resource strategy for the years ahead.

The plan includes a resource strategy for 2022-2041 and near-term action plan for 2022-2027. The six-year action plan calls for:

- Developing at least 3,500 megawatts of new renewable resources in the Northwest to provide energy and offset emissions from the region’s existing fossil fuel-based generation
- Acquiring between 750 to 1,000 average megawatts of cost-effective energy efficiency to maintain an adequate system, meet load growth, and reduce risk from rapidly changing market dynamics
- Implementing demand response to reduce electricity use when needed and support the integration of renewables into the power system
- Maximizing the efficiency of the existing power system and increasing reserves used to balance daily needs
These new resources are expected to complement the existing system, dominated by hydropower in the Northwest, to meet the region's needs for an adequate and affordable system.

Evaluating the Performance of the Fish and Wildlife Program

The Council’s Columbia Basin Fish and Wildlife Program represents a 40-year effort to mitigate the effects of the hydropower system on fish and wildlife in the basin. The scope and investment in the program make it one of the largest mitigation efforts in the world.

In February 2023, The Council updated its Fish and Wildlife Program Tracker, a tool designed to share information about a variety of program strategies that will eventually help evaluate the performance of the program.

The tracker compiles and displays data and information on performance indicators to track the status of ecological and biological conditions. The launch of the tracker culminated two years of work with fish and wildlife managers to integrate data from multiple sources in the basin.

Funding for Habitat Restoration and Hatchery Projects

The Council approved an array of habitat and hatchery projects in the anadromous zone of the Columbia Basin in the spring of 2022. Projects addressing fish mitigation actions like hatchery operation and maintenance, fish screen installation, habitat restoration, and their associated monitoring and evaluation activities are ongoing and implement measures in the Council’s program. Annual funding for these projects is approximately $134 million, with a reported total confirmed cost share of approximately $463 million over time. Some of the projects in this group leverages Bonneville’s funding by an impressive 8 to 1.
Congress authorized the Council in the Northwest Power Act of 1980 during a period of uncertainty and turmoil in the region. People recognized the need to secure new energy resources for the future, reallocate the existing supply of electricity generated by the federal hydroelectric system, and address the damage to fish and wildlife by dams on the Columbia and Snake rivers.

Perhaps the most critical factor to passing the Act was the region’s disastrous decision to build five nuclear power plants in the state of Washington in the 1970s. Utilities based their decision in part on inaccurate Northwest electricity load forecasts. Only one of the plants, the currently operating Columbia Generating Station, was ever completed. Due to exorbitant cost overruns, utilities abandoned or mothballed the other four plants prior to completion.

Two of the unfinished plants were responsible for one of the largest bond defaults in the history of the nation, while the Bonneville Power Administration backed the financing for the other three plants. Even today, more than 30 years after Congress enacted the Northwest Power Act, Bonneville pays millions of dollars a year on debt service for two of the unfinished nuclear plants. And, from 1978 to 1984, Bonneville was forced to raise its rates by 418 percent (adjusted for inflation) to pay for the cost of these plants.

Congress concluded that an independent agency, without a stake in selling electricity, should be responsible for forecasting the region’s electricity load growth and determining which resources should be built.

Energy efficiency would be the priority energy resource for meeting the region’s future load growth, a visionary decision even by today’s standards. For the first time in history, energy efficiency was deemed a legitimate source of energy, on par with generating resources.

The Council’s fish and wildlife program is part of its power plan to ensure that the region meets its energy needs, but not at the expense of our natural resources. The program is implemented primarily by the four Northwest states, Columbia Basin tribes, and federal fish and wildlife agencies.