



Serving the people  
of the Northwest.



# What does BPA do?

## **IF YOU LIVE IN THE PACIFIC NORTHWEST, CHANCES ARE YOU USE ELECTRICITY THAT'S MARKETED BY THE BONNEVILLE POWER ADMINISTRATION OR IS TRANSMITTED OVER BPA POWER LINES.**

■ Headquartered in Portland, Ore., BPA is a federal agency that markets wholesale electricity and transmission to the region's utilities as well as to some large industries. BPA provides about one-third of the electricity used in the Northwest and operates over three-fourths of the region's high-voltage transmission. ■ BPA does not rely on annual appropriations from Congress for its financing. Instead, the agency recovers all of its costs through sales of electricity and transmission services and repays the U.S. Treasury in full with interest for any money it borrows.

■ BPA sells wholesale power at cost rather than charging market prices. The bulk of the power BPA sells is generated at federal hydroelectric dams on the Columbia River, thus providing some of the lowest-cost electricity in the nation. This low-cost, clean power has been a cornerstone of the Northwest economy for decades, stimulating growth and new jobs.

■ As concerns about global climate change are placing a new premium on clean energy, the federal hydro system has become an increasingly valuable resource. In addition to being low cost, electricity produced by the federal hydro system has no greenhouse gas emissions. And this power source is renewable — replenished each year by the region's rainfall and snowmelt.





# Powering the region.

**BPA WAS CREATED IN 1937 TO MARKET ELECTRICITY GENERATED AT THE NEW FEDERAL BONNEVILLE DAM.** As additional federal dams were built in the Northwest, the agency began selling power from those projects as well. One of BPA's early missions focused on electrifying farms and small communities in the Northwest's rural areas that were not profitable for private utilities to serve. ■ Today, BPA markets power generated at 31 federal dams in the Northwest. The agency's emission-free power portfolio also includes one nonfederal nuclear plant at Hanford, Wash., as well as some nonfederal renewable resources, such as wind projects. ■ When selling power, BPA is required by law to give preference to Northwest utilities that are owned and operated by the people they serve. These include public utility districts, city-owned utilities and electric cooperatives. ■ Northwest customers are assured the first opportunity to buy BPA power. After their needs are met, BPA sells any surplus power to utilities outside the region. Money generated from surplus sales helps keep BPA's power rates low for our Northwest customers.



# Operating the transmission grid.

**TO DELIVER POWER, BPA BEGAN BUILDING TRANSMISSION LINES IN THE 1930s.** Today the system includes more than 15,000 miles of line. ■ BPA's high-voltage electric grid links virtually all utilities in the Northwest. Utilities that generate their own power often rely on BPA's system rather than building their own transmission lines, which reduces the number of power lines that span the landscape. ■ Additionally, BPA operates large interregional transmission lines that connect to Canada, eastern Montana and California and other states. These lines enable BPA and other utilities to bring power into the region when it's needed, such as on very cold winter days, and to sell power outside the region when it is surplus to Northwest needs. ■ BPA dispatchers coordinate and monitor power that flows throughout the region, making sure that this complex, interconnected system runs in a safe, smooth and reliable manner around the clock.





# Balancing a river's many uses.

**THE COLUMBIA RIVER IS A TREMENDOUS RESOURCE FOR THE REGION.** Important fish species, such as salmon, steelhead and sturgeon, make it their home. It provides a vital transportation corridor for ships carrying cargo to and from inland ports. Irrigators draw its water to turn former desert into fertile croplands. And it's a world-class recreational area enjoyed by residents and visitors alike. ■ However, these many uses can compete with each other, which is why coordination of the river's operations is an important role for BPA and its fellow federal agencies – the U.S. Army Corps of Engineers and the Bureau of Reclamation. Together, these agencies operate the Federal Columbia River Power System. Through a series of laws and agreements among many parties in the United States and with Canada (where the Columbia River originates), the river is operated as though run by a single entity. This ensures it is managed at maximum efficiency with minimum environmental impacts. ■ The federal agencies allocate water and coordinate releases from headwaters to provide for flood control, fish passage, navigation and energy production as well as other uses. This delicate balancing act requires constant and often challenging tradeoffs.



# Promoting energy conservation.

**BPA HAS A LONG-STANDING COMMITMENT TO HELPING NORTHWEST UTILITIES CONSERVE ENERGY.** Since 1980, BPA's conservation efforts have saved more than 1,000 average megawatts for the region. That's enough electricity to serve a city about the size of Seattle. To foster energy conservation, BPA invests in a range of programs that encourage the use of energy-efficient technologies, such as compact fluorescent light bulbs. More than 10,000 commercial buildings and 400 manufacturing firms have improved their energy efficiency thanks to various BPA programs. In partnership with other Northwest utilities, BPA funds the Northwest Energy Efficiency Alliance, a nonprofit group that brings energy-efficient products and services into the marketplace. BPA supports the U.S. Department of Energy's Energy Star® program, which helps consumers choose energy-efficient products from televisions to washing machines. The agency also helps weatherize the homes of low-income residents in the region.



# Supporting renewable energy.

**THE DEMAND FOR GREEN (EMISSION-FREE) POWER CONTINUES TO GROW IN THE NORTHWEST.** To help meet this demand, BPA currently offers its customers renewable energy capacity from wind projects and one small solar project. ■ Wind power is the fastest-growing renewable power source in the Pacific Northwest. To support this development, BPA has been upgrading its high-voltage transmission system to connect new wind projects into the region's power grid. The agency is also working with others in the region to resolve the technical challenges of integrating wind and other intermittent renewable resources into the Northwest power system. ■ Because wind is an intermittent resource, it must be coupled with another resource that can back it up when the wind is not blowing. The hydroelectricity marketed by BPA provides the ideal back-up for wind, since it can be ramped up or down almost instantly to meet demand. ■ BPA also supports renewable energy by funding research to investigate how wind, ocean wave and in-stream tidal technologies can best be harnessed to benefit the region.



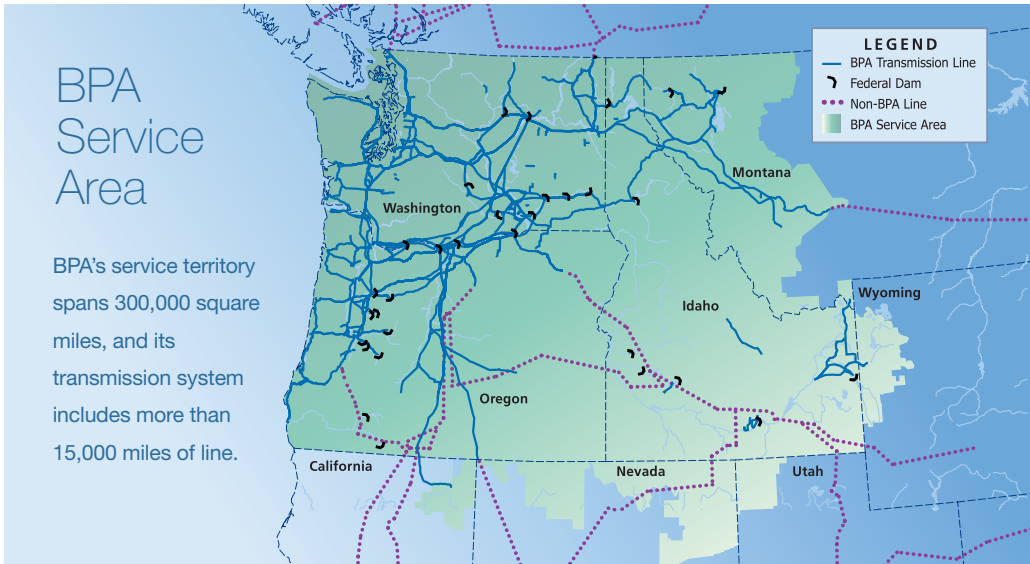


# Protecting fish and wildlife.

**WHILE DEVELOPMENT OF THE COLUMBIA RIVER HYDRO SYSTEM HAS BROUGHT MULTIPLE BENEFITS TO THE NORTHWEST, IT HAS COME AT A COST TO FISH AND WILDLIFE, PARTICULARLY THE REGION'S ICONIC SALMON.** ■ As a result, BPA helps fund

and manage the largest fish and wildlife program in the world. This program includes hundreds of projects such as repairing spawning habitat, opening up tributaries through water purchases and leases, hatchery improvements, habitat protection for wildlife and control of predators.

■ Over the last 15 years, the federal dams have been overhauled to make passage safer for fish. In addition to major structural changes, actions include releasing water from reservoirs to speed the migration of young fish to the ocean, spilling water at the dams to help juvenile fish traverse the structures more safely, and transporting fish around the dams when research shows that is the most effective approach. These and other efforts have significantly improved fish survival at the federal dams. ■ BPA continues to work with federal and state agencies, Northwest tribes and other stakeholders to make the Columbia Basin's rivers and habitat better for fish and wildlife.



# Collaborating with the region.

**AS A PUBLIC AGENCY THAT SERVES THE WHOLE NORTHWEST, BPA MUST BALANCE MULTIPLE INTERESTS AND CONCERNS.** We work collaboratively with the region, frequently consulting our customers, stakeholders, local tribes, elected officials and government agencies on a range of issues that may affect them. Whenever BPA makes major policy decisions, we provide opportunities for all stakeholders, including members of the public, to give their input.



# How to contact us.

**FOR DETAILS ON CURRENT ISSUES, BPA PROJECTS AND PUBLIC INVOLVEMENT OPPORTUNITIES, VISIT OUR WEB SITE AT [WWW.BPA.GOV](http://WWW.BPA.GOV).**

Or call BPA's Public Information Center at (503) 230-7334 or toll free at (800) 622-4520.

# Bonneville Power Administration

P.O. Box 3621, Portland, OR 97208-3621

[www.bpa.gov](http://www.bpa.gov)

DOE/BP-3949 • Second printing • May 2009 • 5M