



Salmon and Wind Dueling for Subsidies in Pacific Northwest

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The Columbia River Basin, which drains the four-state area of Idaho, Oregon, Washington, and western Montana, as well as lower British Columbia (see **Exhibit 1**), has been the focus of a decades-long effort to restore wild salmon runs.

Beginning in the 1930s, the federal government began to develop what became the Federal Columbia River Power System to meet the needs of electric power production, land reclamation, flood control, navigation, recreation, and other river uses. In fact, Bonneville Dam, the first dam constructed on the Columbia River, was a public works project that employed thousands of workers during the Great Depression.

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another federal agency, sells that power, as well as the power from the region's sole nuclear power plant and a few small resources. The BPA also operates the high-voltage transmission system and, as the BPA itself touts, "is a leader in integrating renewable resources, such as wind energy, into its grid."¹

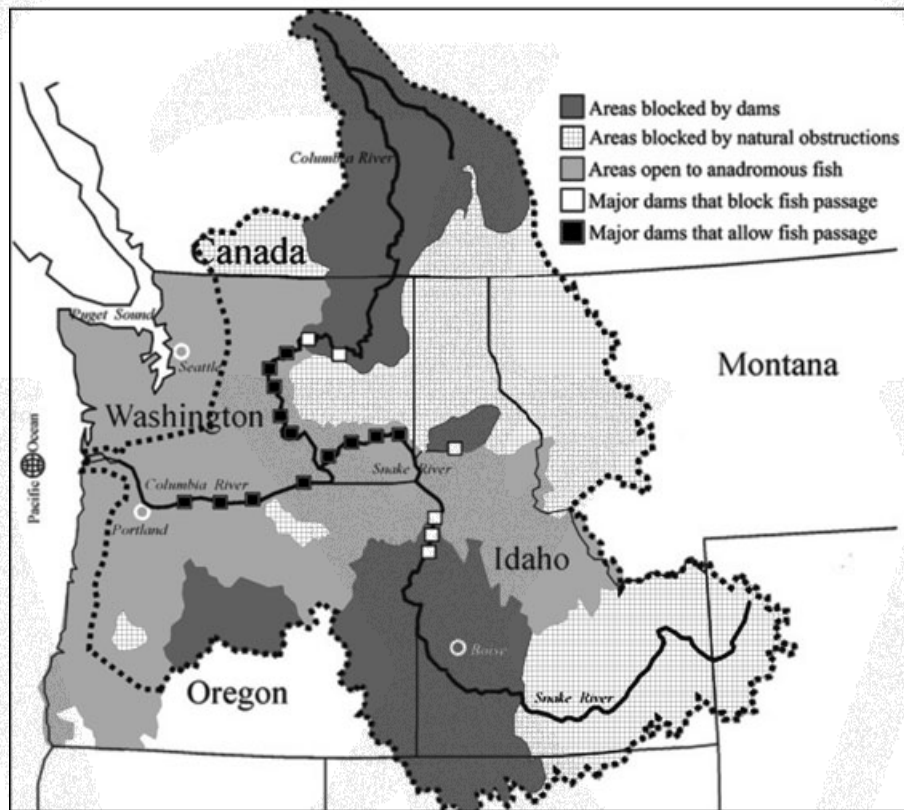
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FISH FLUSH TO THE FORE

In building all of those dams, however, wild salmon runs were devastated. Even the most Olympian salmon could not leap over the dams. Having access to their spawning grounds blocked, salmon runs steadily decreased, and most of the runs that did continue were fish that had begun life in hatcheries. Thus, with environmentalists threatening to bludgeon the BPA, the region's electric utilities, and everyone else with Endangered Species Act listings, in 1980 President Carter signed the Northwest Power Act,² which created a four-state entity called the Northwest Power Planning Council (now called the Northwest Power and Conservation Council) to issue voluminous 20-year power plans and work with the BPA to restore salmon fisheries in the region.³

Under the direction of the Council, and input from other stakeholders, such as the vari-

Exhibit 1. Columbia River Basin



Source: Northwest Power and Conservation Council.

ous Indian tribes, the BPA collects over \$220 million every year from ratepayers in the region for salmon restoration. Whereas there is no doubt that these restoration efforts over the last three decades have greatly increased fish populations and fish habitat, they have also created The World's Most Expensive Salmon. Every spring, for example, water must be spilled, rather than run through generating turbines, to speed juvenile salmon toward the Pacific Ocean. The "fish flush," as it is sometimes called, means lost revenues from hydropower sales, revenues that must be made up by ratepayers. At other times of the year, water cannot be spilled so as to reduce dissolved gases in the river.⁴ Instead, the water is run through the generating turbines. And, at still other times, the system is managed to help salmon swim upstream to their spawning grounds.⁵

ENVIRONMENTALISTS SEE HYDROPOWER DROWNING WIND

Although one might presume that running water through the turbines to generate zero-cost electricity would be uncontroversial. One would be wrong. The reason stems from another resource wrapped in the mantle of environmental sanctity: wind.

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Besides offering plenty of hydroelectric potential, the Columbia River Gorge, which separates western Oregon and Washington, is windy. And thanks to generous, if involuntary, support from

ratepayers and US taxpayers, wind generation has grown rapidly in the region, especially along the Gorge, where over 2,000 megawatts of wind generation are clustered. More is on the way, too, with the BPA projecting over 6,000 megawatts of wind capacity by 2013.⁶

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Besides selling power, operating the transmission system, and chaperoning salmon up and down rivers, the BPA must also coordinate all of that wind power, whose financial viability depends, in large part, on generous production tax credits. And this, coupled with record snowfall and spring runoff, set off an environmental battle this spring, pitting wind against salmon.

The demand for power is generally low in spring. Coupled with constrained transmission, on some days there is simply nowhere for all of the electricity from all of the wind and hydro to go. Wind generators, dependent on their subsidies for economic survival, have demanded that the BPA spill more water over the dams, rather than running that water through the turbines. Bound by its mandate not to gas fish, as well as prevent downstream flooding in cities like Portland, the BPA has instead told wind generators to back down their units, having first backed down thermal generating units in the region.

There are also calls for the BPA to invest billions of ratepayer and taxpayer dollars in battery storage systems, pumped-hydro storage facilities, and so forth, so as to ensure wind generators can always produce the electricity they need to earn their subsidies.

The wind industry, predictably, is screaming. US Rep. Earl Blumenauer (D-OR) complains that the BPA hasn't used \$2 billion in Obama administration stimulus money to build new transmission lines fast enough.⁷ Also predictably, legal action is expected to soon follow. There are also calls for the BPA to invest billions of ratepayer and taxpayer

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If it were not for the fact that the US deficit is \$14 trillion and increasing, the situation would be comical. The government spends hundreds of millions of ratepayer and taxpayer dollars annually to restore endangered salmon. The government also spends hundreds of millions of ratepayer and taxpayer dollars annually to subsidize wind generators. "Solving" wind generators' "problem"—that they cannot Hoover up all of their promised subsidies because of competing environmental goals—will require spending billions of additional ratepayer and taxpayer dollars to build more transmission lines and exotic power-storage facilities. These "solutions," of course, will themselves be opposed by still other environmentalists. We have been hoisted on our (green) petard. 🌊

NOTES

1. Bonneville Power Administration, 2010 Annual Report, p. 1. Retrieved from http://www.bpa.gov/corporate/finance/a_report/10/AR2010.pdf.
2. The full name is the Pacific Northwest Electric Power Planning and Conservation Act, Public Law 96-501, 1980.
3. For a history of the NPCC and an overview of its roles and responsibilities, see Northwest Power and Conservation Council, 2010 Briefing Book, at <http://www.nwcouncil.org/library/2010/2010-13.pdf>.
4. The 2011 Spring Fish Operations Plan, prepared by the US Army Corps of Engineers, contains a detailed discussion of how both high and low water flows are managed. You can find the plan at http://www.nwd-wc.usace.army.mil/tmt/agendas/2011/0323_Spring_Fish_Operations_Plan.pdf.
5. Endangered sea lions have also discovered that lounging below the Bonneville Dam provides bountiful meals of endangered salmon attempting to swim upstream. This has created a battle between devotees of salmon, who prefer shooting the sea lions, with devotees of sea lions, who prefer they be "relocated" downstream, from whence they swim back upstream.
6. BPA Annual Report, p. 2.
7. Bernard, J. (2011, May 23). Wind industry demands NW grid overload solution. *Bellingham Herald*. Retrieved from <http://www.bellinghamherald.com/2011/05/23/2027241/wind-industry-demands-nw-grid.html>.