

## Salmon and Hydropower

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The CRITFC Tribal Energy Vision for the Columbia River identifies the elements of a comprehensive energy plan. It is designed to lower the long-term cost of delivered power, reduce the risks of higher future energy costs, improve fish passage and productivity by promoting conservation and alternative sources, and improve siting of new generation.

Until this vision is realized, the Columbia Basin's salmon crisis is far from over. Development and operation of the Columbia River system primarily for power, irrigation, navigation, and municipal and industrial use over the last several centuries has reduced salmon and other migratory species like Pacific lamprey to the brink of extinction. At the same time, we estimate that BPA's new wholesale rates are too low and will require an additional \$400 million per year to fund salmon recovery measures identified in the Biological Opinion and tribal recovery plans. Expensive? Yes. But the price of salmon recovery will never get cheaper.

A few weeks after publicly playing salmon recovery against rate increases, BPA Administrator Steve Wright told the region that the threats to long-term reliability and service of the federal hydropower system are linked to

salmon restoration success. The irony of Wright's statement could not be more obvious in a year that Federal Agencies made the Columbia more deadly to Salmon than ever before.

By any measure, Northwesterners treasure their salmon heritage. The Columbia River treaty tribes are determined not to let 2001 go down as the year that the Northwest Power Act died. CRITFC is committed to strengthening the links between analysts, planners, operators, and scientists. Our vision begins with the premise that we are all Salmon People.



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# The Fallacy of Fish vs. Power

By Scott Corwin

New science and new attitudes are pushing the Northwest toward a comprehensive approach to the salmon recovery challenge.

When looking toward Oregon's future, many wonder how we can resolve the conflict between fish and power in the Columbia River Basin. Posing the problem as a dichotomy creates a convenient platform for headline writers and fundraisers who frame issues in the regional battles surrounding salmon recovery. But is this a useful way to approach the subject? Does it address the fundamental issues that the region must tackle to restore salmon and steelhead?

The notion that a battle rages between fish and power received a large boost last summer when policymakers made the difficult decision to modify the spill program that is intended to aid downstream migration of salmon and steelhead. Even though reducing spill averted an energy shortage that could have threatened human safety this winter, the decision led to assertions that the Bonneville Power Administration (BPA) and other federal managers needlessly sacrificed fish in favor of the region's need for power. The context

behind their decision paints a very different picture.

### The Summer Crisis

Apart from any action taken by hydrosystem managers, the second-worst drought recorded in Columbia Basin history dramatically increased the mortality of fish last summer. A volatile power supply in the West, unprecedented energy prices prompted by the crisis in California, and a longer-than-expected shutdown of the Northwest's only nuclear plant added to the human component of this natural calamity.

In the midst of the crisis, the BPA announced a wholesale power rate increase of 46 percent, and entreated its customers to engage in widespread conservation efforts. In rural areas, where farmers use electricity to pump irrigation water and refrigerate produce, the price increase had an especially demoralizing effect.

During the power emergency, federal executives made the prudent decision to keep more water in the reservoirs in order to create important flexibili-

ty and power reliability to help us run our hospitals, traffic lights, heaters, and computers this winter. They also negotiated load reductions to preserve water for a smaller spill program for Snake River Chinook, the only Endangered Species Act-listed species that migrates downstream in the summer.

When deciding how to manage the fish crisis, river managers relied on a National Marine Fisheries Service (NMFS) study which estimated that adhering to an unmodified spill program would increase Snake River Chinook's survival rate by only 0.02 percent.<sup>1</sup> Another report, by the Northwest Power Planning Council, indicated that only 2 of these fish out of 1000 might be helped.<sup>2</sup> River managers' caution was not a decision against fish but a decision made in favor of human health and security.

### What Do We Mean by "Power Interest"?

The notion that a monolithic "power interest" aligns a segment of the Northwest community against fish is misguided. Just as every Northwesterner has an interest in the restoration of healthy runs of salmon and steelhead, each also has a stake in the hydropower system. Hydropower accounts for 70 percent of the electricity capacity in the Northwest, and almost every citizen of the Northwest benefits from this power ([http://www.bpa.gov/Corporate/KCC/ff/bpa\\_facts/](http://www.bpa.gov/Corporate/KCC/ff/bpa_facts/)). We have received clean and cheap power for so long that we take it for granted. Power from this system keeps 28.3 metric tons of carbon dioxide out of the air each year, the equivalent of taking 5.7 million cars off the road.<sup>3</sup>

In addition, the hydroelectric system makes possible many criti-

cal uses of the Columbia/Snake River, including navigation and irrigated agriculture. The system also supports recreation and controls flooding. Thousands of jobs have grown up around the river system and the industries these uses have created. For example, 43 percent of all U.S. exports of wheat are shipped on the Columbia River.<sup>4</sup>

Twenty-one years ago, at another time of great concern about power supply in our region, legislators challenged the fallacy of a fish vs. power dichotomy. The Pacific Northwest Electric Power Planning and Conservation Act of 1980 (PL 96-501, "the Act") clearly stated that fish and power be considered together and in a consistent manner. Section 4(h)(5) declares, "The program shall consist of measures to protect, mitigate, and enhance fish and wildlife affected by the development, operation, and management of such facilities while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply."

One of the authors of the fish and wildlife provisions of the Act, Representative John Dingell (D-MI), expressed this need to commingle power and fish con-

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cerns. Quoting the House Commerce Committee Report, he described the Committee's intent for the new fish and wildlife program by stating, "The recommendations are clearly required to include, as appropriate, a broad range of measures which could, for example, be regulatory or management-type, to 'protect, mitigate, and enhance' fish and wildlife and their spawning grounds and habitat. The objective is to

give flexibility to all concerned to devise effective and imaginative measures that are also reasonable and will not result in unreasonable power shortages or loss of power revenues."<sup>5</sup>

### Developing Solutions

Our interest in fish can co-exist with our need for hydropower if our leaders improve the fish and wildlife policy apparatus in the Northwest. The following suggestions highlight improvements needed to not only address short-term emergencies, but also implement a long-term comprehensive solution.

**Clarify goals.** NMFS and the state and tribal fisheries man-

agers need to adopt unambiguous policies for their agencies, and to unify behind consistent goals that will restore Columbia Basin Stocks to levels that will ensure survival. They could start by agreeing on a clear policy for hatchery production and harvest practices. This issue recently came to the forefront when a federal court ruled that NMFS could not exclude hatchery salmon from the protections given to endangered "naturally spawning" coastal coho salmon.<sup>6</sup>

**Improve research, monitoring and evaluation.** Unclear or conflicting sets of data and models impede the development of effective salmon policy. Enhancements in scientific research, monitoring, and evaluation of salmon and steelhead, both in a drought emergency and during the course of normal business, should help solve this problem.

**Clarify protocols.** BPA and other federal agencies admirably plowed new ground this summer and quickly pulled together emergency criteria for river operations. Now the federal, state, and tribal agencies need to work together to clarify how they will protect human safety and protect fish as much as possible during future droughts.

**Set priorities for water management.** Policymakers in the region often react to the most immediate issue without considering the enduring effects of their actions. Water used now will not be in the reservoirs for the needs of fish later in the year. Clearly defining priorities ahead of time will enable federal, state, and tribal agencies to use water efficiently for the greatest biological benefit to salmonids.

**Consider cost effectiveness.** Those drafting the plans to implement the Biological Opinion

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and other salmon recovery directives need to pursue policies that are cost-effective. Even in a thriving economy there will not be unlimited funding available for these efforts. Electricity ratepayers have invested over \$4 billion toward the effort to preserve fish and wildlife. Customers who are footing the bill need to hold the resource managers accountable for results.

**Address management conflicts.** Policymakers must address the conflicts of law that have plagued fish recovery efforts, such as protections for predators that devastate salmon stocks. Interpretations of the Endangered Species Act, the Migratory Bird Treaty Act, and the Marine Mammal Protection Act, among others, must be coordinated with the ultimate goals of recovery.

**Develop a comprehensive approach.** None of the above suggestions will succeed unless the region unites to address the many factors besides hydropower that determine fish mortality. The early development of commercial fishing, mining, agriculture, and grazing, and the introduction of non-native fish species, each significantly reduced populations of salmonids in the Northwest.<sup>7</sup>

The three million salmon and steelhead (the largest number since at least 1938) that returned to the Columbia this year indicate that ocean conditions play a significant role in fish survival.<sup>8</sup>

Every viable salmon recovery strategy in recent years refers to a comprehensive "All-H" focus to address the causes of salmon mortality.

All-H refers to habitat, harvest, hatcheries, and hydropower. The concept is based on the realization that fish survival depends on many factors both inside and outside the hydropower corridor. Studies that support the All-H concept show markedly improved fish survival in the hydropower system in recent years, and emphasize efforts to restore the tributaries and estuaries where populations spawn and rear. Restoring the health of these areas promises the greatest gains in fish survival (See <http://www.salmonrecovery.gov/archive.shtml>). The Four Northwest States Governors' Plan, the Northwest Power Planning Council's 2000 Fish and Wildlife Program, the NMFS 2000 Federal Columbia River Power System Biological Opinion, and the Basin wide Recovery Strategy (All-H Paper) all embrace this direction (See Governor's plan at <http://www.governor.wa.gov/esa/srn/recommend.pdf>, Council plan at <http://www.nwcouncil.org/library/2000/2000-19/Default.htm>, and both federal plans at <http://www.salmonrecovery.gov/archive.shtml>). These documents form a strong body of work and underscore the obsolescence of the fish vs. power argument.

### Conclusion

Clearly, Northwest residents want to utilize the hydropower system and preserve the great natural resources of the region. Both are possible if we support a farsighted scientific approach to salmonid restoration that is balanced with the safety of the Northwest's population in mind. The needs of fish and the needs of the hydropower system are not unavoidably incompatible. It is time to let go of the fallacy of fish vs. power.

#### Footnotes:

1. NMFS Paper, Expected Effects of 2001 Water Conditions and Alternative Summer Spill Operations on Juvenile Fish Survival Through the FCRPS, June 13, 2001
2. NWPPC, Issue Paper: Analysis of 2001 Federal Columbia River Power System Operations on Fish Survival, March 28, 2001
3. Pacific Northwest Waterways Association White Paper, Columbia-Snake River Issues, April 7, 2000, p.3
4. Ibid., p.5
5. Congressional Record, H10683, November 17, 1980
6. Alsea Valley Alliance et al. v. Evans et al., 99-6265-HO, Oregon, September 10, 2001
7. Jim Lichatowich, Salmon Without Rivers, 1999, Chapter 4; and Ernest Brannon, Paper to PSU Symposium July 2000, *The Salmon Crisis: A Lesson in Semantics*, p. 60
8. Columbia Basin Bulletin, 9/14/01, 2. *Columbia River Runs Approach 63-Year-Old Record*



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