The Parity Paradox

By Eric Bloch, Oregon Member and Vice-Chair, Northwest Power Planning Council

21 years after the Northwest Power Act, the balance Congress sought between salmon and hydropower remains elusive.

Billy Frank's light bulb illuminates a vexing issue for the Pacific Northwest—can we have salmon and inexpensive hydropower too?

This dilemma has been with us as long as dams have blocked rivers, and over the years we have struggled mightily both to confront and avoid it. Facing up to this question has been our region's legal mandate since at least 1980, when Congress passed the Northwest Power Act.¹ That statute authorized the states of Oregon, Idaho, Montana, and Washington to form the Northwest Power Planning Council. It instructs the Council to prepare a program to protect the fish and wildlife of the Columbia River Basin that have been affected by hydropower dams and to ensure the region an adequate, efficient, economical, and reliable power supply as well.² The Act also addresses the federal agencies that operate or regulate both the publicly owned and privately owned dams and reservoirs of the basin-particularly the Bonneville Power Administration (BPA), the US Army Corps of Engineers, the Bureau of Reclamation, and the Federal Energy Regulatory Commission—commanding them to provide "equitable treatment" for fish and wildlife with the other purposes of the hydropower system. In other words, the Act implies that the value of fish and

wildlife is equal to the more widely recognized uses of the hydropower system, such as electricity generation, transportation, and flood control.

This new law directly addressed the difficult balance between salmon and dams in two important respects. First, the Act itself explicitly acknowledged that the system of dams and reservoirs in the Columbia Basin had, indeed,

greatly diminished the fish and wildlife resources of the area. Second, and perhaps more importantly, passage of the Act acknowledged that equitable treatment of fish and wildlife had not been considered in past dam management, and that this equity was important enough-and unlikely enough to occur on its own-to warrant federal legislation. The very first protection program that the Council

prepared in

1982 acknowledged that a "new day" had arrived for fish and wildlife:

The overriding principle of the Act is clear—that hereafter fish and wildlife interests and power interests shall cooperate as partners in the development, operation and management of the Columbia River hydroelectric system for the benefit of all citizens of the Northwest.³

While it seems clear that Congress envisioned that the Council would elevate fish and wildlife interests to a point of

They talk about

cheap electricity.

Hydropower.

It's not cheap.

When these

flying out.

lights come on,

a salmon comes

- Billy Frank Jr.,

1991 Nisgually

Tribal Member

Indian Fisheries

Commission

Chairman, Northwest

It's all been paid

for by the salmon.

equity with a reliable regional power supply and other dam and reservoir purposes, the law provides no clear guidance for achieving the desired balance, nor even a definition of the statute's desired end states. In legal terms, how will we know when we have protected fish and wildlife as the Act intended? How, too, will we know when we have achieved an "adequate, efficient, economic and reliable power supply?" Moreover, even

if the Council could determine the desired balance, it would still need to persuade several federal agencies to operate the dams accordingly. Much like a traveler with a vague notion that he'd like to spend the winter in a warmer climate, but lacking a roadmap or even a specific destination, the Council has spent the past 21 years on mostly exploratory missions, sometimes seriously thinking it had found the "end states" commanded by the Act, only to find-through court ruling, scientific review or political power shifts-that it was mistaken.

More Flow, Less Power

The Council's first attempt at "equity" came in its 1982 Fish and Wildlife Program (the Program). This first Program responded to recommendations from fish and wildlife agencies and Indian tribes by creating the concept of an annual "water budget" to increase flows in the mainstem Snake and Columbia Rivers when juvenile salmon and steelhead are migrating to the ocean. The water budget is a block of water that was to be reserved behind upriver storage dams each winter for release in the two months between April 15th and June 15th, when most of the juvenile fish migrate. The Council requested that federal power system managers include the water budget (originally 4.64 million acre feet: 3.45 in the Columbia measured at Priest Rapids Dam, and 1.19 in the Snake measured at Lower Granite Dam) as an operational requirement, assuming that some of the water would be used to make electricity and some would be spilled to ease salmon migration, resulting in an average annual hydropower loss of 550 megwatts of guaranteed, or firm, power.

Oregon's Future



Salmon and Hydropower

The Council reiterated its commitment to the water budget in its 1984 and 1987 revisions of the Program by including a proposed schedule of firm power flows for the April 15 to June 15 period to provide a base from which to measure the water budget. In 1991 and 1992, with data showing a continuing decline in wild salmon and steelhead stocks, the Council supplemented the water budget with additional measures intended to increase salmon and steelhead survival in the mainstem.

Concern arose over whether even the original 4.64 million acre-feet were ever provided, because the water accounting system envisioned by the Council -the system of base flows-was never developed. In addition, the water budget flows were unpopular with fish and wildlife agencies and Indian tribes, who contended that the water budget focused on spring-migrating fish at the expense of summer migrants, and that the amount of water was not enough to make a significant difference in fish travel time. The controversy over the Council's water budget approach appeared justified when Columbia River Salmon stocks began to be listed under the Endangered Species Act.

Fewer Salmon, More Lawsuits

In 1993, 11 years after the Council issued its first Program, salmon runs continued to decline—particularly those in the Snake River, where four stocks (a species within a specific geographic area) had been listed for protection under the Endangered Species Act (ESA).

Fish and wildlife agencies, Indian tribes, and salmon advocacy groups were growing increasingly frustrated with the Council and its failure to protect salmon. Environmental groups sued the Council, arguing that it had failed to achieve the equitable treatment for fish and wildlife that the Act intended.

Also in 1993, the National Marine Fisheries Service (NMFS), acting pursuant to its authority under the ESA, issued its Biological Opinion on the Operation of the Federal Columbia River Power System (FCRPS)-the 29 federal dams and reservoirs on the Columbia and Snake River. That Biological Opinion concluded that normal hydro-system operations did not jeopardize the endangered Snake River salmon. In response, many of the same groups that had sued the Council also sued NMFS, challenging its **Biological Opinion.**

Both the Council and NMFS lost in court. The U.S. Ninth Circuit Court of Appeals rejected the Council's Program because it did not defer to the views of fishery managers when it was amended, as required by the Power Act. The Court noted that the Program adopted river flow measures favored by dam operators despite overwhelming consensus among [fishery] agencies and tribes that significantly higher flows and more scientifically based biological objectives were needed. The U.S. District Court in Oregon rejected NMFS's biological opinion because it "too heavily geared toward a status quo that has allowed all forms of river activity to proceed in a deficit situation," resulting in "relatively small steps, minor improvements and adjustments when the situation literally cries out for a major overhaul."

Following these rulings, the Council revised its Fish and Wildlife Program and reissued it in December 1994. In this revision, the Council called for periodic reservoir draw downs on the Snake River-long advocated by most of the fish and wildlife agencies and the tribes-intended to increase river velocity and speed migrating fish to the mouth of the Columbia. The Council also commented in its Program, however, that "for the near term, it is not clear when and how mainstem fish and wildlife objectives can be achieved along with the other authorized purposes of the hydropower system."

This revised Program, arguably the Council's (and the region's) most meaningful effort to achieve equity for fish and wildlife, was rejected. The federal dam operators chose, instead, to implement the new NMFS Biological Opinion issued in the wake of the district court's decision which did not include a draw-down plan. Ironically, the Council's program for mainstem draw-down was created under the Power Act, which was considered by environmental advocates to be weaker than the Endangered Species Act. In this case, however it would have delivered a more aggressive salmon recovery plan than the ESA-based Biological Opinion.

Where Do We Go from Here?

Equity has been difficult to achieve because, as already noted, the Council was provided little guidance or definition, and it has never stopped to consider what equity for fish and power in the Columbia Basin truly means. To move forward, the Council must recognize that equity is both our destination and our roadmap.

Equity as a Destination

Identifying-and then reaching-our destination begins by adopting a new view of the hydropower system, one that does not accept it as either immutable or the predominant power supply of the future. That may sound heretical in a region with a rich history of hydropower largess, but the truth is that dams are machines, and machines become antiquated, both mechanically and conceptually. The federal dams have more than fulfilled their original purpose of electrifying the rural West at a low cost. We have accepted them as the region's primary power supply for many decades-it is now time to rethink that dominance.

The Northwest Power Act provides such an opportunity to the Council, insofar as it is required to ensure the region an adequate, efficient, economical and reliable power supply. The Act, however, does not say hydropower supply. Clearly, Congress saw hydropower as one part of the region's mix of generating resources; it also made energy conservation a key resource to meet future demand for power. We have the opportunity, then, to think broadly about our future power supply, with special focus on adding resources that can reduce our dependence on hydropower. This is not a new

idea. The Council's power planning has promoted a broad mix of resources since its inception, but the matter is more critical today. It has become quite clear that our over-reliance on the Federal Columbia River Power System has made it all but impossible to have a power supply that meets our current and future demand for electricity while simultaneously protecting river-dependent fish and wildlife.

Equity as a Roadmap

Only when we know our destination can we move forward productively on the difficult path to reach it. In the decisions we make every day that affect fish, wildlife, and power-and they are many-no one interest can be presumed sacrosanct. Risks and benefits must be fairly allocated during good times and in times of crisis. Such guidance was woefully absent in the decisions made this summer to address the drought conditions on the Columbia River. Because of our absolute dependence on the Federal Columbia River Power System, last spring and summer we were forced to choose between reserving water to generate electricity this winter and helping ensure the survival of juvenile salmon and steelhead migrating to the ocean. Everyone involved clearly understood that reducing spill would kill more fish at the dams-vet that is exactly what we did because saving water for power was deemed more important than releasing it for fish. In short, the fish absorbed the brunt of the crisis, while power interests and even the financial health of the BPA were largely protected.

The drought forced us to make this choice because it reduced hydropower generation

capability by about 4,000 megawatts in the region—enough power to supply four Portlands and the City of Eugene. Drought or no drought, we should strive to never again find ourselves in this position.

We can start down this road with the Council's planning process. Its 2000 Fish and Wildlife Program articulates a strategy for the Federal Columbia River Power System that focuses on providing conditions that "most closely approximate the natural physical and biological conditions" and "assure that flow and spill operations are optimized to produce the greatest biological benefits with the least adverse effects..." In 2001, the Council is further amending its Program with a plan for mainstem river and dam operations. The mainstem plan gives the Council the opportunity to recommend operations that emphasize a more natural hydrograph (the conditions, boundaries, flow, and related characteristics of surface waters)-even if that means drawing less electricity from the dams. What the dams do not produce in power can be restored in other ways, including out-ofregion purchases, conservation, renewables, and natural gas-fired power plants. More broadly, the mainstem plan provides a venue in which to rethink the roadmap to a truly equitable and balanced power system for the long term.

Moving Beyond the Impasse

Achieving equity between salmon and power is, understandably, a difficult thing. The scale has been weighted heavily in favor of power—not necessarily because society favors dams over fish, but because we have not sufficiently diversified our power supply and, therefore, feel we

have no other choice. Moving beyond this historical imbalance will take time. The vision of the Power Act-of a Northwest that enjoys affordable, reliable electricity and abundant fish and wildlife-is an achievable, if somewhat undefined, end state, but undoubtedly one we must work towards. Every journey begins with a first step, and neither we nor the salmon can afford to delay any longer. The glow from Billy Frank's light-and the salmon that die for it-remind us that our work is not yet done.





Eric J. Bloch is an attorney serving on the Northwest Planning Council. Eric is also assisting Governor Kitzhaber to achieve more regional authority over fish and wildlife restoration planning and related hydropower issues.

Footnotes:

I. Pacific Northwest Electric Power Planning and Conservation Act, Public Law 96-501 (The Northwest Power Act, hereafter the Act), 16 USC 839

2. 16 USC 839b(h)(5)

3. Columbia River Basin Fish and Wildlife Program, Nov. 15, 1982, Page 1-1