

Attachment 1

Fish and Wildlife cost to Bonneville Power Columbia River

Why are B.C. Salmon Catch is important to the U.S.?

Source: [Sixth Annual Report to the Northwest Governors On Expenditures of the Bonneville Power Administration](#)

Costs of the Columbia River Basin Fish and Wildlife Program of the Northwest Power and Conservation Council for 2006 and Long term Average (1978-2006)

Annual Cost of Fish and Wildlife Program

In Fiscal Year 2006, the Bonneville Power Administration incurred costs totaling **\$851.7 million** to mitigate the impacts of hydropower dams on fish and wildlife of the Columbia River Basin. (Approx 90% are Fish related cost, 10% wildlife)

- **\$137.9 million:** direct spending to implement the Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program.
- **\$60.7 million:** reimburse the Corps of Engineers and Bureau of Reclamation for fish-related dam operations
- **\$87.5 million:** fish expenses (interest, amortization, and depreciation on capital investments in facilities such as hatcheries and fish passage
- **\$397.4 million:** forgone hydropower revenues that result from dam operations that benefit fish and reduce hydropower generation
- **\$168.2 million:** power purchases to replace the forgone hydropower
- **\$851.7 Total (2006)**

The 2006 expenditures bring the grand total of Bonneville's fish and wildlife spending, from 1978 when the expenses began, through 2006, to **\$8,662,800,000**.

Expenditures, 1978-2006

- **\$2.90 billion:** power purchases to meet load requirements in response to required fisheries in river operations that reduce hydropower generation.
- **\$1.78 billion:** forgone revenue, the calculated value of hydropower that could not be generated because of required river operations to assist fish passage and improve fish survival, such as water spills at the dams when salmon and steelhead are migrating to or from the ocean.
- **\$1.71 billion:** the Council's direct-program. \$1.38 billion in fixed expenses for bonds issued by Bonneville to pay for capital investments in fish-passage facilities at the dams.
- **\$862.2 million:** to reimburse the U.S. Treasury for the power-generation share of other federal agency expenditures to mitigate the impact of hydropower on fish and wildlife. Primarily these reimbursements are paid to the U.S. Army Corps of Engineers, Bureau of Reclamation, and U.S. Fish and Wildlife Service for efforts to improve fish and wildlife survival apart from the Council's program, such as operation and maintenance of fish passage facilities and federal fish hatcheries.

Fish and Wildlife Expenditures Breakdown Expenditures by species 1978 to 2006

▪ Fish	Wildlife	Total
▪ 89%	11%	100%

Salmon Past Bonneville Dam – Did the changes in the 1998 Treaty work?

1998- 248,000

2006- 525,000

Source: Bonneville Power Administration, Columbia River Basin Council

Attachment 2

Salmon & Hydropower

NOAA Fisheries Service is responsible for ensuring that hydroelectric facilities don't compromise the survival of salmon and steelhead that must pass through them on their migrations to and from the ocean. The majority of hydroelectric dams lack adequate fish passage. Many dams significantly decrease the level of streamflows and destroy important fish habitat. *This causes serious harm to salmon and has a long-term effect on the larger landscape. Hydroelectric dams frequently provide the largest single impact on [Endangered Species Act-listed fish](#) within a specific river basin.* On the other hand, about 60 percent of the region's electricity comes from hydropower, and other economic benefits also result from these projects.

The Federal Columbia River Power System (FCRPS) is a system of dams and reservoirs on the Columbia and Snake Rivers that provide hydroelectric power, flood control and commercial navigation as far inland as Idaho. NOAA Fisheries Service has listed most of the anadromous fish runs in the Columbia Basin for protection under the Endangered Species Act. That act requires that the FCRPS operating agencies – U.S. Army [Corps of Engineers](#), U.S. [Bureau of Reclamation](#) and [Bonneville Power Administration](#) – insure that their actions are not likely to jeopardize the continued existence of listed salmon or adversely modify critical habitat, and that they seek NOAA Fisheries Service's biological opinion in the course of doing so. Since the first salmon runs were added to the ESA list in 1991, ESA compliance with the FCRPS has been controversial and almost continuously in litigation.

Did the 1998 Treaty changes work?

Pacific Salmon Treaty

A Treaty between the Government of Canada and the Government of the United States of America concerning Pacific Salmon¹

¹ Agreement signed January 1985, Annex amended May 1991

Article 111

Principles

1. With respect to stocks subject to this Treaty, each party shall conduct its fisheries and its salmon enhancement programs so as to:
 - Prevent overfishing and provide optimum production; and
 - *Provide for each Party to receive benefits equivalent to the production of salmon in its waters.*
2. In fulfilling their obligations pursuant to paragraph 1, the Parties shall cooperate in management, research and enhancement.
3. In fulfilling their obligations pursuant to paragraph 1, the Parties shall take into account:
 - The desirability in most cases of reducing interceptions;
 - *The desirability in most cases of avoiding undue disruptions of existing fisheries, and*
 - Annual variations in abundances of the stocks