

2010 Fish and Wildlife Costs Paid by Electricity Customers

Background – Fish and wildlife costs are largely driven by two federal laws: the Endangered Species Act (ESA) and the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act). The ESA requires that federal funds or actions taken that affect species listed under the Act, such as operating the federal dams on the Columbia and Snake Rivers, cannot further jeopardize those species and mitigation actions must be taken to protect them. Those actions are described in what’s called a “Biological Opinion” or BiOp.

The Northwest Power Act requires an entity called the Northwest Power and Conservation Council (Council), with members representing the four Northwest states, to develop a plan to protect, mitigate, and enhance fish and wildlife affected by development of the hydroelectric system on the Columbia and Snake rivers.

The Bonneville Power Administration (BPA) markets the power from the federal hydro system, and the costs of complying with these two laws are borne by Northwest families and businesses through their electric power bills.

Fish and Wildlife Costs – Northwest families and businesses have spent nearly \$11.8 billion* on fish and wildlife protection and mitigation measures over the past three decades. State and federal fish and game managers and tribes recommend fish and wildlife measures to the Council for adoption into its plan, and the Council makes recommendations to BPA on which measures to fund.



The 2010 salmon plan or Biological Opinion (BiOp) on federal hydro system operations to meet the requirements of the ESA includes a plethora of measures to protect listed salmon, including agreements between BPA and Northwest states and tribes called the [Columbia Basin Fish Accords](#).



The BiOp, Council Fish and Wildlife Program, and Accord measures to benefit salmon and steelhead include the restoration of habitat along river banks where salmon rear and spawn, reducing predation by sea lions, birds and non-native fish on salmon and operating and reforming fish hatcheries among other actions.

The hydro system also is operated to help fish by increasing river flows or “spilling” water to push young fish downstream faster at certain times of the year. Such hydro operations reduce the amount of water available to generate power and can be costly as revenues from power sales are reduced and/or power is purchased to replace the lost generation.

Changes in hydro operations to aid salmon also results in environmental consequences. Carbon dioxide emissions are increased when more fossil-fuel generation is used to replace the lost energy. A Council analysis ([Carbon Dioxide Footprint of the Northwest Power System](#)) concluded that CO₂ emissions go up by 5.4 million tons each year as a result of the water that is spilled over dams to aid downstream fish migration.

Hydro operations make up a significant part of the overall cost of the Northwest's fish and wildlife program and need to be carefully tailored to maximize the benefits to salmon while balancing the economic and environmental impacts of lost power generation.

Overall costs to Northwest families and businesses are compiled annually by the Council in a report to the Northwest governors. According to the Council's most recent report:

- BPA's fiscal year 2010 fish and wildlife costs were \$802.3 million. This figure goes up and down annually depending upon a number of factors, including the costs to replace lost hydroelectricity production. BPA's costs were \$745 million in 2009.
- The fish and wildlife program makes up 30.5 percent of BPA's total wholesale power expenditures. In 2009, the figure was 30.1 percent.
- Fish and wildlife costs translate to an average of 14.4 percent of a typical residential family's electric bill, according to the Council's 2009 calculation. For some utilities and customers it is more.
- The Council also estimates that fish and wildlife costs translate to 21 percent of a typical industrial customer bill.

Further detail on [2010 fish and wildlife expenditures](#) is available on the Council's website where expenditure reports from [previous years](#) can also be found.

** The Council's 2010 report **excludes** \$1.9 billion for capital investments that will be paid off over a period of years and includes a \$1.3 billion credit for the non-power share of the fish and wildlife expenditures paid by BPA.*

Northwest RiverPartners is a partnership of farmers, electric utilities, ports, and large and small businesses in the Pacific Northwest. We are dedicated to ensuring the Columbia and Snake remain living, working rivers to benefit families and businesses in the region.

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