

2014 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" (BiOp) or salmon plan.

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 over \$14 billionⁱ on fish and wildlife protection and mitigation measures over the past three decades. State, federal and tribal fish and game managers recommend fish and wildlife measures to the Council for adoption into its plan, and the Council recommends to BPA which measures to fund.

The 2014 Biological Opinion on federal hydro system operations to meet the requirements of the ESA includes a plethora of measures to protect listed salmon, including existing 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; reduction in 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 must be 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 at 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 effects of lost power generation.

Overall costs to Northwest families and businesses are compiled annually by BPA and reported by the Council to the NW Governors and Congress. According to BPA and the Council's most recent reports:

- BPA's fiscal year 2014 fish and wildlife costs – ultimately paid for by NW ratepayers - totaled \$783 million dollars. This includes \$232 million for the direct fish and wildlife program, \$319 million in foregone revenue and power purchases, \$141 million in capital repayment, and \$90 million in reimbursable expenses.
- In recent years, fish and wildlife costs equal about one-third of total costs for BPA power.
- Fish and wildlife costs translate to an average of 14.4 percent of a typical residential family bill, according to the Council's 2009 calculation.

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.

www.nwrivernpartners.org

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ⁱ Bonneville Power Administration information provided to customers.