

Fact Sheet

January 2019

BPA invests in fish and wildlife

BPA protects, mitigates and enhances fish and wildlife with a focus on sound science, fiscal efficiency and on-the-ground results. Each year, BPA invests hundreds of millions of dollars in fish and wildlife mitigation, including making dams safer for fish and improving habitat.

Fish and wildlife protection, mitigation and enhancement is fundamental to BPA's public service mission and its core value as a trustworthy steward of the basin. It's also required under the 1980 Northwest Power Act, which gave BPA the role of mitigating fish and wildlife affected by the construction and operation of the federal dams.

Under its Northwest Power Act authorities and responsibilities, BPA mitigates for the effects of the federal hydropower system on fish and wildlife in the Columbia River Basin while providing equitable treatment with the Act's power generation and other purposes and also complying with other federal environmental laws. BPA partners with other federal agencies, states, tribes, conservation organizations, and others to enhance habitat, improve hatchery practices and protect lands and streams. These mitigation actions help BPA fulfill its responsibilities under the Northwest Power Act, the Endangered Species Act and other environmental laws, as well as its federal trust and treaty responsibilities to affected Native American tribes.



Fish biologist taking measurements, lower Columbia River estuary.

BPA manages a Fish and Wildlife Program and implements hundreds of projects across the Columbia River Basin each year. The Fish and Wildlife Program mitigates impacts to anadromous and resident fish as well as wildlife through actions such as habitat protection and enhancement, hatchery production to aid fish



BPA fish and wildlife investments 2007-2018 (\$ in millions)

COST CATEGORY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BPA direct F&W Program	139.5	148.9	177.9	199.6	221.1	248.9	239.0	231.8	258.2	258.1	254.7	258.7
Direct funded	60.3	62.2	64.3	69.7	74.3	73.0	78.5	90.3	84.9	88.2	85.2	89.9
Fixed expenses	112.9	116.2	120.0	123.5	127.2	131.5	143.4	141.3	150.6	148.2	121.4	105.1
Power purchases	120.7	274.9	240.3	310.1	70.7	38.5	85.8	196.2	67.5	50.3	(20.5)	24.3
Forgone revenues	282.6	273.5	142.8	99.4	156.7	152.2	135.5	122.7	195.8	76.6	9.6	2.9
TOTAL*	715.9	875.8	745.3	802.3	649.9	644.1	682.4	782.6	757.0	621.5	450.4	480.9

^{*}Total investments have declined since 2016 due to decreases in forgone revenues, which reflect low power market prices and demand.

conservation efforts and reopening blocked habitat. Key components of the program also include monitoring the effectiveness of habitat actions, monitoring fish populations and researching critical issues.

BPA's Fish and Wildlife Program implements these mitigation actions with federal, state, tribal and local partners in coordination with the Northwest Power and Conservation Council and its scientific review processes.

BPA has been working hard to enhance fish habitat in tributaries of the Columbia River and the estuary. Since 2007, more than 13,519 acres of estuary floodplain have been protected or restored.

In addition to mitigation actions through its Fish and Wildlife Program, BPA coordinates with the U.S. Army Corps of Engineers and the Bureau of Reclamation, which

BPA and its partners are restoring wetlands through the Clark Fork River Delta Restoration project, the largest restoration effort on Idaho's Lake Pend Oreille behind Albeni Falls Dam.

operate the federal dams, on system operations and actions to improve fish passage and survival. The federal agencies have made substantial progress.

System operations and structural enhancements at the dams in the mainstem Columbia and Snake rivers are integral for ensuring optimal fish passage. Approximately 96 percent of spring-migrating juvenile salmonids and 93 percent of summer-migrating juveniles now safely travel past each dam.

Fish travel times and survivals per mile are approaching those of an undammed river. Salmon and steelhead are returning to rivers and streams in the basin where they haven't been seen in decades.

Funding and ensuring results

BPA's funding for fish and wildlife has five main components:

■ BPA DIRECT F&W PROGRAM

BPA funds hundreds of fish and wildlife projects in the Columbia Basin, including habitat restoration, hatcheries, land acquisitions, predator control and research and evaluation.

■ DIRECT FUNDED

BPA directly funds the Corps and Reclamation for the portion of the costs to operate and maintain the fish passage improvements at the dams and for O&M costs for certain hatcheries operated by the Corps, Reclamation and the U.S. Fish and Wildlife Service.

■ FIXED EXPENSES

BPA recognizes fixed capital related fish and wildlife costs associated with its own capital investments, such as federally owned hatcheries and fish passage improvements at the dams. These costs include interest, depreciation and amortization expense directly related to the fish and wildlife capital program.

■ POWER PURCHASES

Fish operations — such as spilling water over dams rather than passing it through turbines — can limit the amount of electricity generated at the dams. If fish operations cause BPA to purchase power to meet its load obligations, the cost of purchased power is identified as a fish cost.

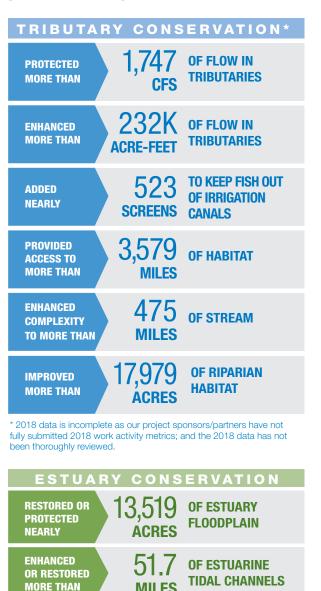
FORGONE REVENUES

The value of energy that could have been generated if water had passed through turbines instead of being spilled for fish passage represents the opportunity costs of forgone revenues. These costs vary depending on power market prices and water volume.

BPA strives to achieve biological objectives in the most cost-effective manner and uses an ecosystem-based approach to benefit both fish and wildlife.

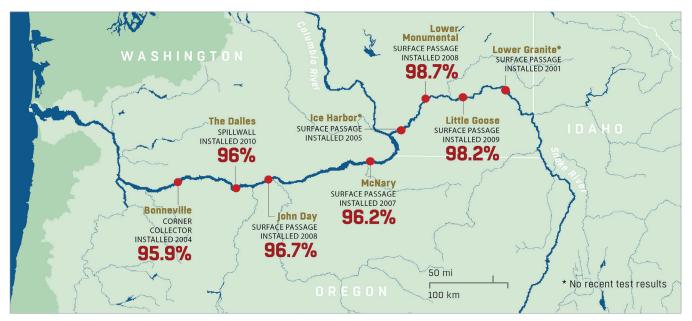
This includes actions to account for uncertainty and adaptive management in the face of changing environmental conditions and other emerging issues. BPA's Fish and Wildlife Program has evolved over the past few decades to culminate in successful results for fish and wildlife and has strengthened partnerships within the region. BPA will continue to build on this strong base of accomplishments to ensure ongoing fulfillment of its statutory fish and wildlife responsibilities and exceptional stewardship of the Pacific Northwest's natural environment.

What has BPA's Fish and Wildlife Program accomplished for habitat? (2007 to 2018)



BPA's estuary habitat acquisition and restoration (in acres)

YEAR	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Acquisition	0.0	374.21	387.3	0.0	0.0	1,308.4	598.4	22.0	46.0	0.0	18.4	1.1
Restoration	80.0	504.5	15.6	612.3	381.6	127.1	868.5	1,160.7	1,275.0	1,074.0	437.0	4,277.4
Total	80.0	878.7	402.9	612.3	381.6	1,435.5	1,466.9	1,182.7	1,321.0	1,074.0	455.4	4,228.5
CUMULATIVE	80.0	958.7	1,361.6	1,973.9	2,355.5	3,791.0	5,257.9	6,440.6	7,761.0	8,835.0	9,291.0	13,519.0



Around 96 percent of spring-migrating juvenile salmonids and 93 percent of summer-migrating juveniles safely travel past each dam.

In addition to the ratepayer dollars that BPA invests in fish and wildlife, a number of other federal agencies are actively involved in fish and wildlife restoration in the basin. These agencies, collectively known as the Columbia Basin Federal Caucus, include the Corps, Reclamation, the U.S. Fish and Wildlife Service, the U.S. Forest Service, NOAA Fisheries and others. For more information on the caucus, visit www.salmonrecovery.gov.

The Accords

In 2018, a set of historic agreements known as the Columbia Basin Fish Accords reached expiration. But after this successful collaboration, BPA and its federal partners, along with six tribes and the states of Idaho and Montana, decided to extend the agreements for up to four more years. This action will strengthen the federal-tribal partnership and ensure effective and biologically important projects are implemented, continuing the work that has taken place through the Accords over the last 10 years. The original agreements, signed in 2008, guaranteed states and tribes more than \$900 million for salmon and steelhead restoration projects in the Columbia and Snake river basins.



The Accord extensions, which could run through September 2022, set aside more than \$400 million for salmon and steelhead restoration and protection. For more information, see the 2018 Accords fact sheet.