

Fish Facts

If you stay current with regional news you have heard many opinions about the future of Northwest salmon and steelhead. Currently, twenty 28 West Coast salmon and steelhead populations are listed under the Endangered Species Act.

Many claim the federal hydroelectric dams on the Columbia and Snake rivers are solely to blame for declining populations. Although dams do affect fish runs, increase in fish survival at the dams instead point to the impact of predators and climate factors that threaten the iconic Northwest symbol.

The following facts about dams, salmon and their predators were compiled by the Public Power Council. For more information, contact Benton REA at 509-786-8265.

Columbia and Snake River Runs

- ▶ Thirteen of the 28 endangered salmon runs are found in the Columbia and Snake rivers. Nine runs occur in the Columbia and Willamette rivers and four runs are in the Snake River. Four of the Columbia/Snake endangered species populations are primarily below the projects of the Federal Columbia River Power System.
- ▶ Since 2000, salmon and steelhead populations in the Columbia River Basin have improved due to a combination of ocean conditions, better fish passage survival at the dams, improvements in freshwater habitat, harvest reforms and predator control.
- ▶ The 2018 salmon and steelhead returns were mostly below recent historical averages. Some stocks, however, returned at relatively high levels, including sockeye salmon at more than 193,816, making it the ninth largest observed since counts began in 1938.
- ▶ In 1990, approximately 500 wild Snake River fall chinook returned to the Columbia River Basin. In 2017, an estimated 16,965 returned. Returns of these endangered fish have been on a positive trajectory for the last 15 years. Passage rates for juvenile migrating fish are at or above survival standards of 96 percent.
- ▶ Warm ocean conditions coupled with high predator populations reduced the survival of juvenile and adult fish in the ocean. As a result, 2019 adult salmon and steelhead returns projections are below recent 10-year averages.
- ▶ Research by regional scientists suggests sea lions ate significant portions of 2018 Columbia River salmon runs. Scientists estimate that during the last several years, sea lion predation of adult spring chinook has ranged from 11 to 43 percent of the run.



The juvenile fish bypass at John Day Dam.

Photos courtesy of the Bonneville Power Administration

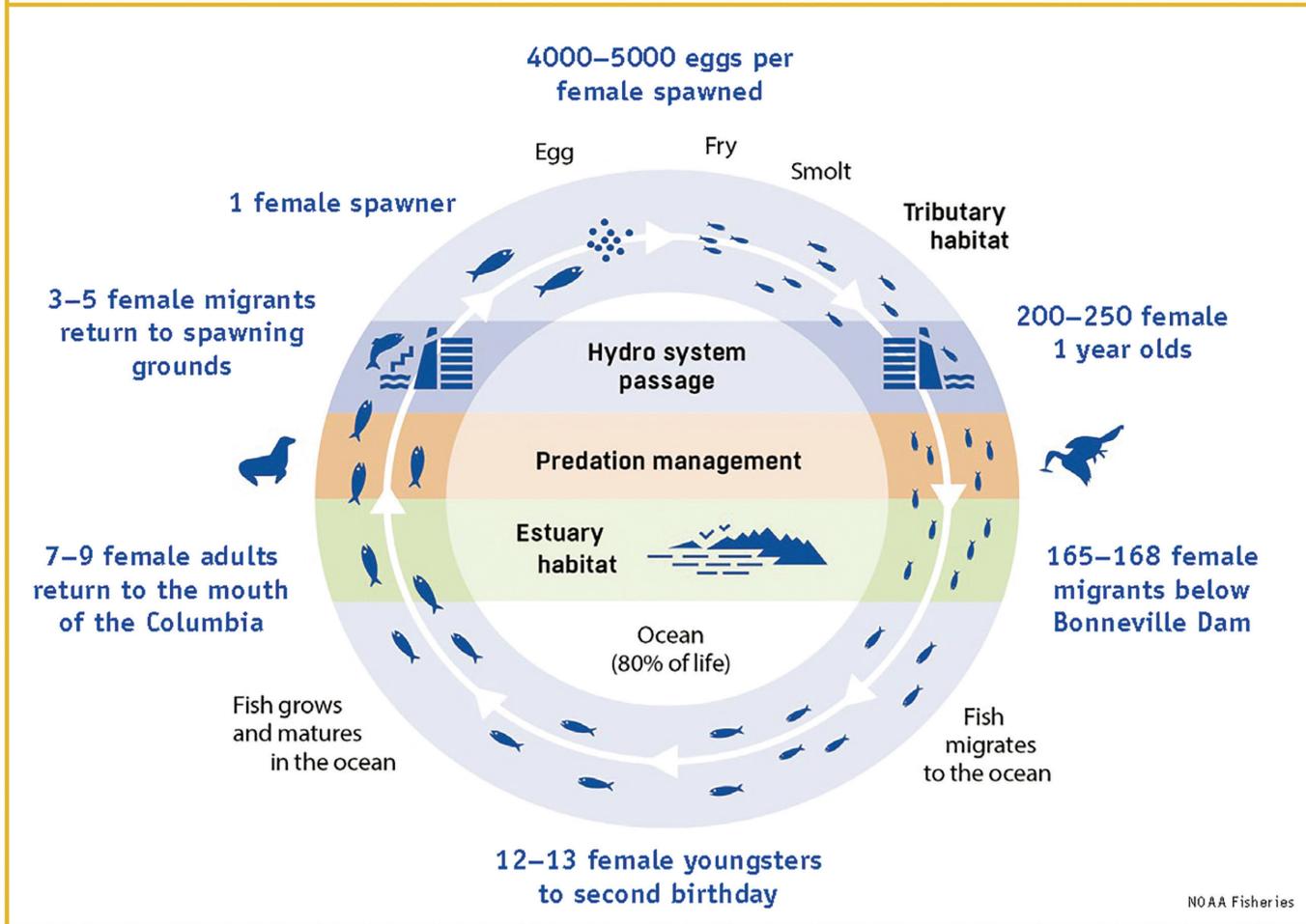
For the foreseeable future, salmon and steelhead mitigation in the Northwest will continue to be one of the largest wildlife recovery efforts in history.

Public Power Council



The fish ladder at Ice Harbor Dam.

Snake River Spring/Summer Chinook Life Cycle



The Cost of Fish and Wildlife Actions

- ▶ From 1978 to 2018, \$17 billion has been spent by the Bonneville Power Administration (BPA) on fish and wildlife actions.
- ▶ 2018 BPA fish and wildlife costs were \$480.9 million, \$27.2 million of that due to foregone revenue and power purchases and \$453.7 million spent on programs.
- ▶ In 2018, BPA spent an additional \$83.2 million in capital investment.
- ▶ BPA issued a spill surcharge of \$10.2 million to its ratepayers due to court-ordered 2018 spring spill. The spill of water over the dams cost BPA \$38.6 million, which it offset in part with other program reductions.
- ▶ In recent years, fish and wildlife costs have ranged from one-quarter to one-third of total costs for BPA power.

Fish Protection Plans

- ▶ Federal action agencies—including the Bonneville Power Administration, the U.S. Army Corps of Engineers and the Bureau of Reclamation—are creating a new Columbia River Systems Operations environmental impact statement due by the end of 2020 to ensure hydro operations comply with National Environmental Policy Act requirements.
- ▶ Implementation of the current NOAA Fisheries Biological Opinion (BiOp) is ongoing until the new BiOp is issued in early 2019. The BiOp includes state and tribal projects that are positively impacting fish runs.