



## 2019 Fish Facts

*A Public Power Council compilation of relevant facts regarding the BPA ratepayer-funded effort to aid salmon and steelhead in the Columbia and Snake Rivers*

### Status of Columbia and Snake River Salmon Runs

- **Which Runs are Federally Protected:** Twenty-eight West Coast salmon and steelhead populations are listed under the Endangered Species Act (ESA). Of these, thirteen sub-populations, or “runs”, are found in the Columbia and Snake Rivers. Nine runs occur in the mainstem Columbia and Willamette Rivers and four runs are in the Snake River. Four of the Columbia/Snake ESA-listed populations occur primarily below the projects of the Federal Columbia River Power System (FCRPS).<sup>1</sup>
- **Since 2000, salmon and steelhead populations in the Columbia River Basin have been improving due to a combination of ocean conditions, better fish passage survival at the dams, improvements in freshwater habitat, harvest reforms, and predator control.** The FCRPS Biological Opinion which is the region’s fish management plan, initiated many of the mitigation actions that benefit fish.
- **2018 Salmon Return Results:** The 2018 return of most salmon and steelhead stocks were mostly below recent historical averages. Some stocks, however, returned at relatively high levels including sockeye salmon at over 193,816, making it the 9<sup>th</sup> largest observed since counts began in 1938.<sup>3</sup>
- **Snake River Salmon Stocks Improving:** In 1990, approximately 500 wild Snake River fall chinook returned to the Columbia River Basin.<sup>4</sup> In 2017, an estimated 16,965 Snake River fall chinook returned.<sup>5</sup> Returns of these ESA-listed fish have been on a generally positive trajectory for the last 15 years and passage rates for juvenile migrating fish are at or above survival standards of 96 percent.
- **Ocean Conditions Remain Daunting:** 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.<sup>6</sup>
- **High Sea Lion Predation on Adult Salmon:** Recent legislation should allow better management of sea lion populations, but research by regional scientists suggests they ate significant portions of 2018 Columbia River salmon runs. Scientists estimate that over the last several years, sea lion predation of adult spring chinook has ranged from 11 percent to 43 percent of the run.<sup>7</sup>

## Status and Implementation of Fish Protection Plans

- **Fish Protection Plans:** Federal Action Agencies (BPA, U.S. Army Corps of Engineers, Bureau of Reclamation) are creating a new Columbia River Systems Operations environmental impact statement (EIS) due by the end of 2020 to ensure hydro operations comply with National Environmental Policy Act (NEPA) requirements. ESA compliance is ongoing with NOAA Fisheries working on a new Biological Opinion (BiOp) it will release in late March of 2019 and will presumably update following release of the EIS.
- **Implementation of the 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. BiOp measures include but are not limited to, better fish passage at dams, habitat improvement projects in tributaries and the Columbia River estuary, and predator management efforts.

## Power Rates and the Cost of Fish & Wildlife Actions

- **Total cost of BPA Fish & Wildlife actions since inception (1978-2018):** nearly **\$17 billion**.<sup>8</sup>
- **Annual BPA Fish & Wildlife costs:** BPA's fish and wildlife costs vary year to year due to factors including water conditions, program requirements, and the cost of power in the energy markets.
  - For **2018**, fish and wildlife costs were **\$480.9 million** (**\$27.2 million** in foregone revenue and power purchases and **\$453.7 million** in program expenses) with an **additional \$83.2 million** in capital investment.<sup>9</sup> BPA issued a "spill surcharge" of **\$10.2 million** in 2018 due to court-ordered spring spill. The spill cost to BPA was **\$38.6 million** which it offset in-part with other program reductions.
  - **Impact on the BPA power rate:** In recent years, fish and wildlife costs have **ranged from one-quarter to approximately one-third** of total costs for BPA power.<sup>10</sup>

For the foreseeable future, salmon and steelhead mitigation in the Northwest will continue to be one of the largest wildlife recovery efforts in history. PPC remains committed to cost-effective, science-based approaches to ensure ratepayers funds committed to this important endeavor produce measurable results.

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**About the Public Power Council-**The Public Power Council (PPC), established in 1966, is an association that represents consumer-owned electric utility customers of the Bonneville Power Administration in the Pacific Northwest. PPC's goal is to preserve and enhance the benefits of the Federal Columbia River Power System for consumer-owned utilities. For more information, please visit us at [www.ppcpdx.org](http://www.ppcpdx.org)

1. *2010 Status Update for Pacific Northwest Salmon & Steelhead Listed under the Endangered Species Act.*  
[http://www.westcoast.fisheries.noaa.gov/publications/status\\_reviews/salmon\\_steelhead/multiple\\_species/sr-2010-all-species.pdf](http://www.westcoast.fisheries.noaa.gov/publications/status_reviews/salmon_steelhead/multiple_species/sr-2010-all-species.pdf)

2. <https://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/index.cfm>

3. Data available from [http://www.cbr.washington.edu/dart/query/adult\\_annual\\_sum](http://www.cbr.washington.edu/dart/query/adult_annual_sum)

4. *Id*

5. *Id*

6. *ODFW and WDFW 2018 Adult Returns and 2019 Expectations Columbia River Updated Draft – December 12, 2018*

7. *Survival of adult spring/summer Chinook salmon (*Oncorhynchus tshawytscha*) through the estuary and lower Columbia River amid a rapidly changing predator population, NOAA-F NWFSC presentation to Independent Scientific Advisory Board, December 8, 2017*

8. *Bonneville Power Administration (information provided to customers).*

9. *Id.*

10. *NW Power and Conservation Council's 17<sup>th</sup> Annual Report to the Northwest Governors, July 2018.*