Bonneville
POWER ADMINISTRATION

INTEGRATED PROGRAM REVIEW
Environment, Fish and Wildlife

July 17, 2018

Legal Overview of BPA's F&W program

Pacific Northwest Electric Power Planning and Conservation Act	• Protect, mitigate and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries. • Equitable treatment of F&W with other purposes. • Consistency with the Columbia Basin F&W program.
Endangered Species Act	• Avoiding jeopardy to listed fish and wildlife. • Avoiding adverse modification of critical habitat. • Biological Opinions.
Tribal treaty and trust responsibilities	• The right to take fish at usual and accustomed places. • Government-to-government consultations.
Clean Water Act	• Comply with applicable water quality standards to the extent practicable.
National Environmental Policy Act	• Assess major federal actions that may significantly affect the environment.
National Historic Preservation Act	• Assess federal undertakings that may adversely affect historic and cultural resources.

Summary of court ruling

- On May 4, 2016, the U.S. District Court for the District of Oregon issued a decision invalidating National Oceania and Atmospheric Administration Fisheries' latest Biological Opinion for the federal dams.
  The Court also ruled that the U.S. Army Corps of Engineers and Bureau of Reclamation failed to comply with the National Environmental Policy Act when they issued decision documents to adopt and implement the BiOp.

Remedy and next steps

The Court ordered NOAA Fisheries to produce a new BiOp and ordered the Corps and Reclamation to continue funding and implementing the current BiOp until then.

The Court also issued an injunction requiring the Corps and Reclamation to comply with NEPA, signaling it expects the agencies to evaluate all reasonable alternatives, including dam breaching as part of the NEPA process.

Per Court order, the action agencies outlined a reasonable NEPA process and 5-year schedule. The Court will retain jurisdiction to supervise compliance with the injunction.

Financial components of BPA's F&W program

- **Integrated Program Review** – BPA's F&W program is a legal compliance program. It funds several hundred mitigation projects to support compliance with applicable laws, including the Northwest Power Act and Endangered Species Act. The program also helps fulfill trust and treaty responsibilities.

- **Debt service** – The projected amortization, depreciation and interest payments for investments directly funded through BPA borrowing, as well as capital investments by the Corps and Reclamation that are funded by the U.S. Treasury and reimbursed by BPA.

- **Fish-related O&M** ("reimbursable expenses") – The hydroelectric share of operations and maintenance and other non-capital expenditures for fish and wildlife activities by the Corps and Reclamation (i.e., O&M of fish facilities at the federal mainstem dams and Corps/Reclamation mitigation hatcheries), and U.S. Fish & Wildlife Service (for hatcheries under the Lower Snake River Compensation Plan – 11 hatcheries and 18 satellite facilities).

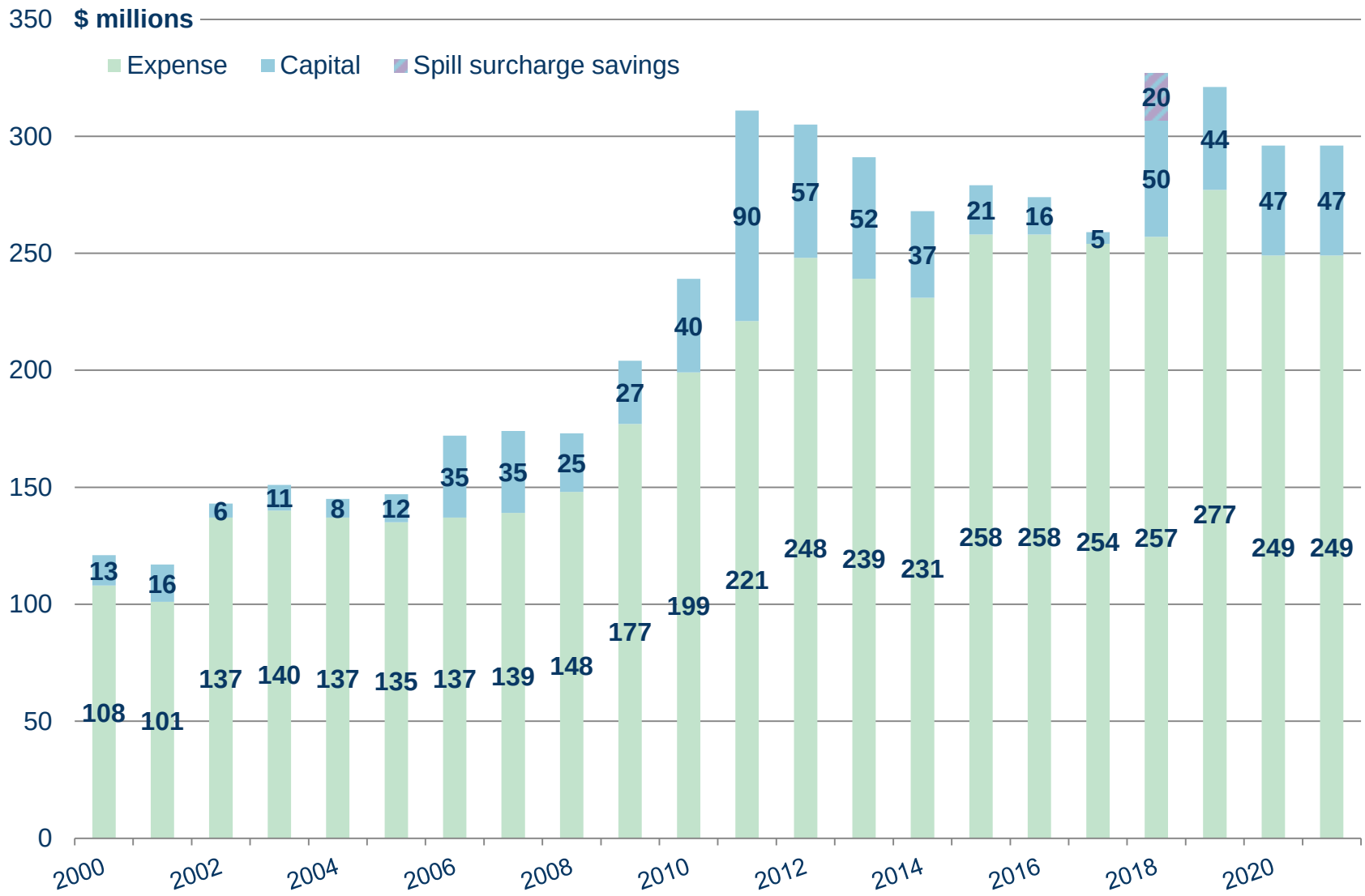
- **River operations** – The power production effects of river operations called for in NOAA Fisheries and USFWS biological opinions.

Total annual average cost of BPA F&W actions

	Percentage of Spending Categories Allocated to F&W	Actuals FY 2016-2017 ($ in Millions)	BP-18 Rate Case FY 2018-2019 ($ in Millions)	2018 IPR Proposal FY 2020-2021 ($ in Millions)
Integrated Program Review	100%	256	277	249
NWPCC	50%	5	6	6
US Fish & Wildlife Service Lower Snake River Compensation Plan	100%	27	34	31
Corps of Engineers O&M	~19%	48	50	49
Bureau of Reclamation O&M	~4%	7	7	7
UNSLICED hydro operations effects (power purchases and foregone revenues)		58	195	TBD
Depreciation & Interest on COE / Reclamation / USF&WS Capital F&W Investments (based on Plant in Service)		135	129	113
Total $		**536**	**698**	**455**
Depreciation & Interest on BPA Direct Program Capital F&W Investments				

This information has been made publicly available by BPA on July 17, 2018, and contains information not reported in agency financial statements.

Fish and wildlife annual expenditures



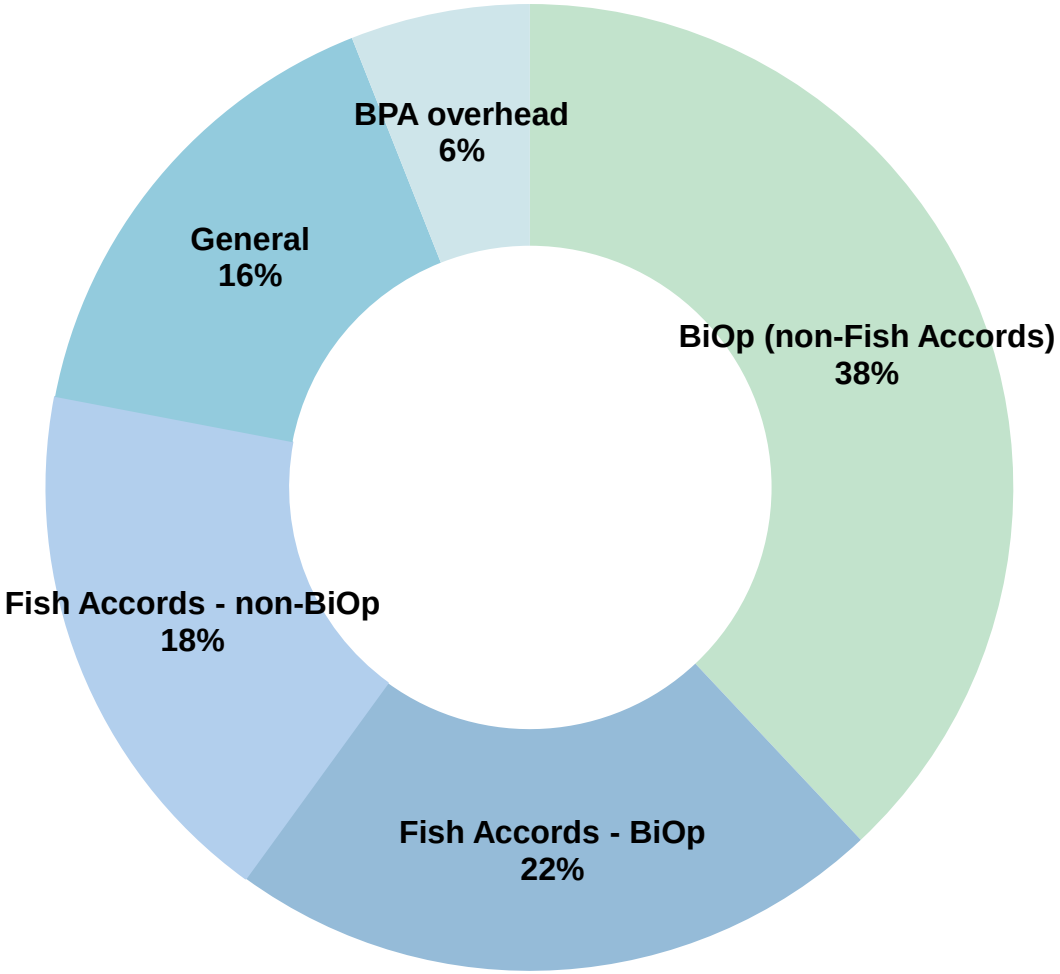
F&W and LSRCP – capital and expense

	Actuals			BP-18 Rate Case		2018 Initial IPR	
($ Thousands)	2015	2016	2017	2018	2019	2020	2021
Fish & Wildlife	$258,177	$258,142	$254,555	$276,713	$276,703	$249,000	$249,000
LSRCP	$30,930	$28,645	$26,040	$33,483	$33,483	$31,000	$31,000
Expense total	**$289,107**	**$286,788**	**$280,596**	**$310,196**	**$310,187**	**$280,000**	**$280,000**
Fish & Wildlife	$21,408	$16,024	$5,402	$50,532	$44,000	$47,266	$47,266
Capital total	**$21,408**	**$16,024**	**$5,402**	**$50,532**	**$44,000**	**$47,266**	**$47,266**

Key products and outputs:

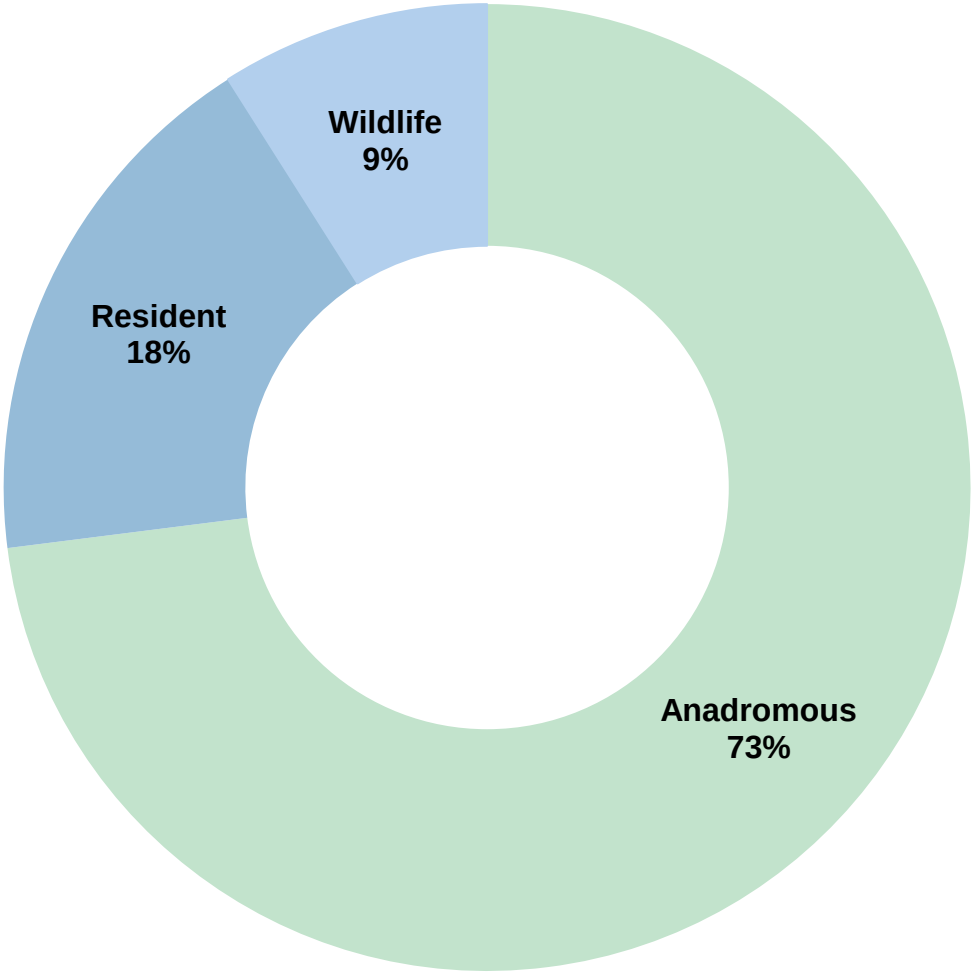
- The BPA Fish and Wildlife program is carried out consistent with the Northwest Power and Conservation Council's Columbia River Basin Fish and Wildlife Program. The Council develops and updates its program every five years, making recommendations to BPA for projects to implement in support of the program. An amendment process is underway in 2018.
- The Fish and Wildlife program also implements projects that help fulfill BPA's commitments under applicable biological opinions issued by the U.S. Fish and Wildlife Service and NOAA Fisheries.
- The Fish and Wildlife program expense budget also ensures the agency's environmental and cultural resource compliance for program activities, through analysis and documentation consistent with the requirements of the National Environmental Policy Act and the National Historic Preservation Act.

Breakdown of fish and wildlife costs



FY15 – FY17 expense; General includes settlements and agreements related to resident fish and wildlife

Fish and wildlife costs by species type



FY 2015 - 2017 expenditures

Fish and wildlife objectives

- Objectives are to protect, mitigate and enhance fish and wildlife affected by the federal dams, while assuring the region an adequate, efficient, economical and reliable power supply, and also provide fish equitable treatment with power.
- Consistent with the 2018-2023 Strategic Plan, fish and wildlife program funding should be at or below the rate of inflation, and reflect legal and biological compliance priorities.
- Promote regional collaboration for broad support of fish and wildlife actions.
- Collaborate on and prepare a comprehensive EIS for Columbia River system operations by 2021.
- Ensure future program implementation is as efficient and cost-effective as possible.

Managing F&W budgets for efficiency

- Financial efficiency and biological compliance (biological investment portfolio).
- Budget and operational stability and predictability.
- Cost management tools.
- Asset management.

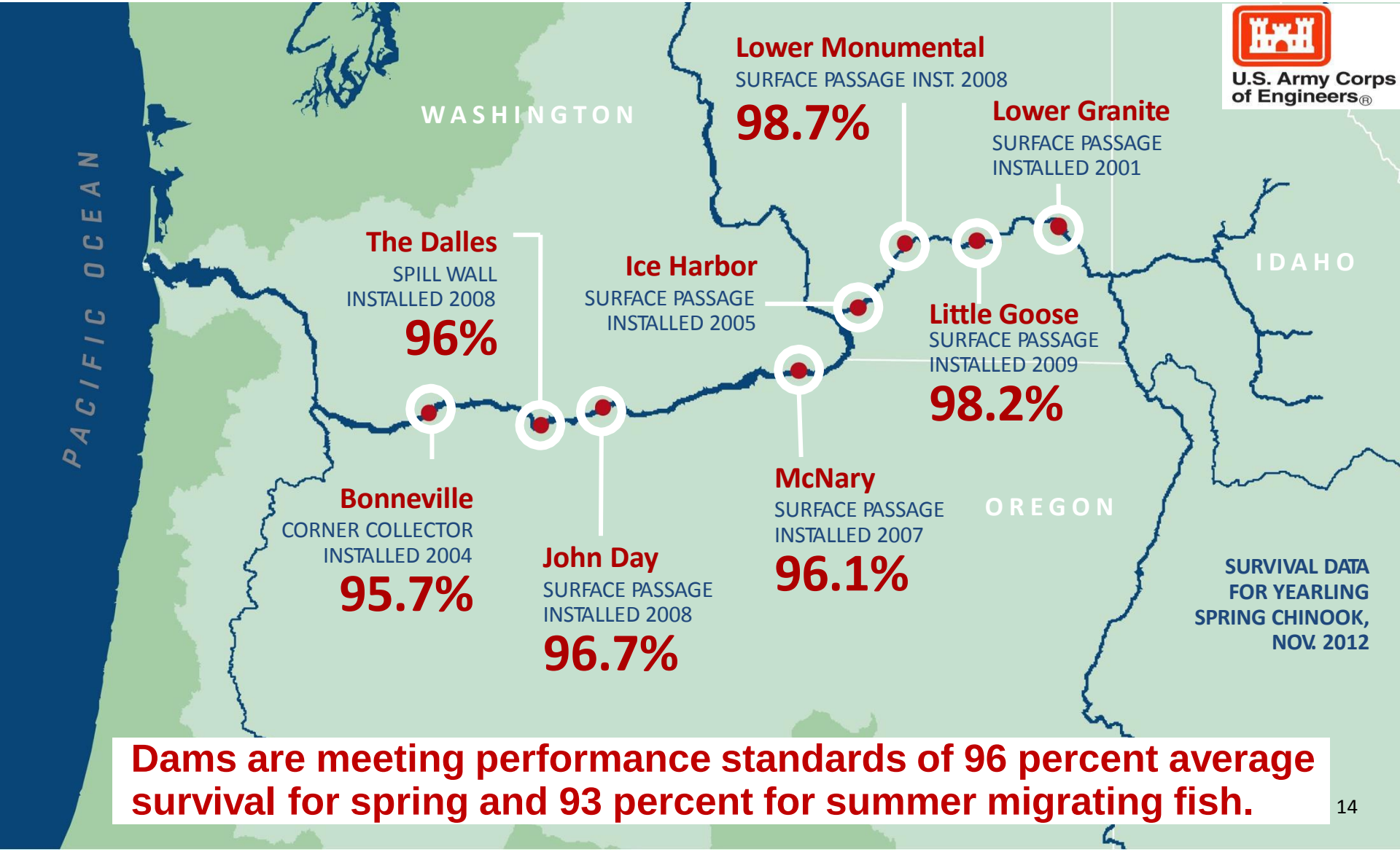
2008 BiOp for salmon and steelhead

2008 to 2018 approach:

- Hydro: Achieve 96 percent dam survival for migrating spring fish and 93 percent for summer fish (juvenile fish swimming downstream to ocean).
- Habitat: Restore high priority habitat in tributaries and the estuary.
- Hatcheries: Produce fish to support, and not impede, the recovery of listed fish.

GOAL: Mitigate effects of dams on Columbia Basin fish.

2008 BiOp hydro performance standards



Dams are meeting performance standards of 96 percent average survival for spring and 93 percent for summer migrating fish.

Fish and wildlife accomplishments since 2007

Tributary habitat (2007 to 2017)

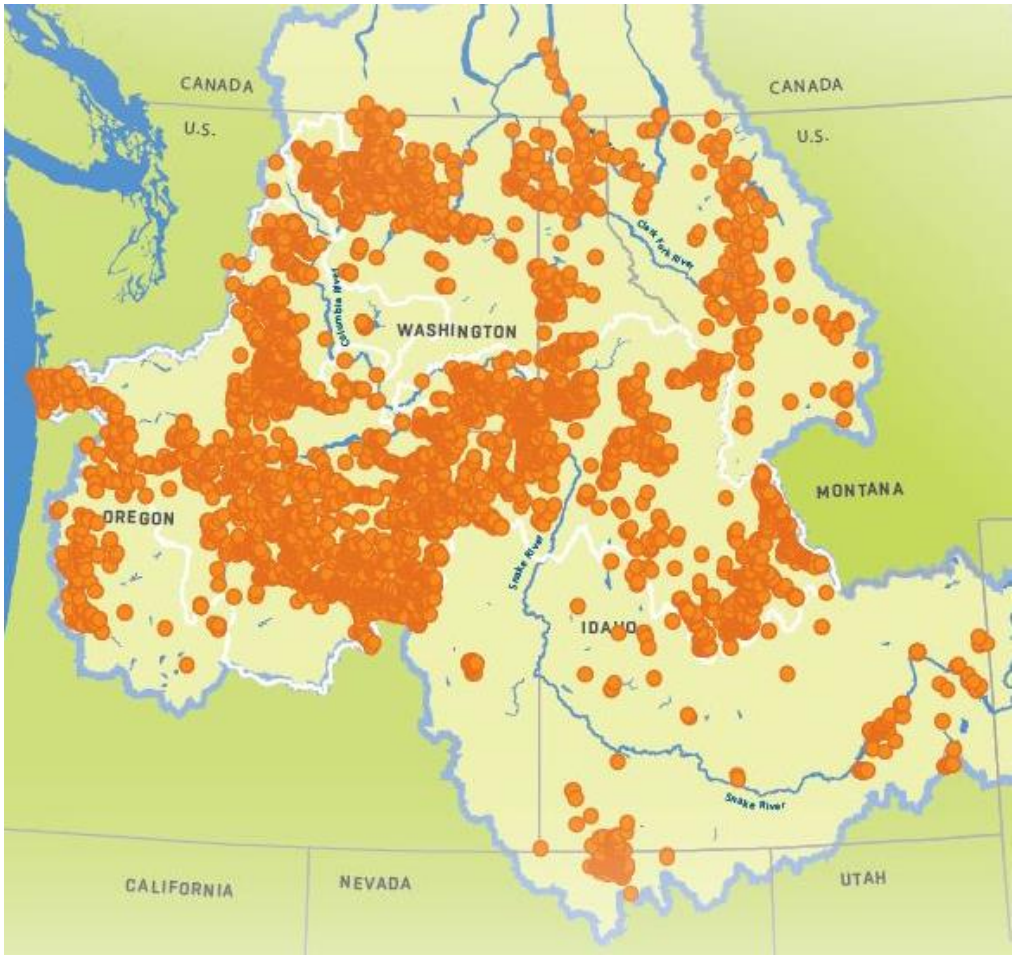
- Protected more than 300,000 acre feet of water.
- Opened access to more than 3,416 miles of fish habitat.
- Restored 422 miles of stream habitat complexity.

Estuary mitigation (2007 to 2017)

- Protected or restored more than 9,290 acres of estuary floodplain.
- Restored or enhanced more than 49 miles of estuarine tidal channels.

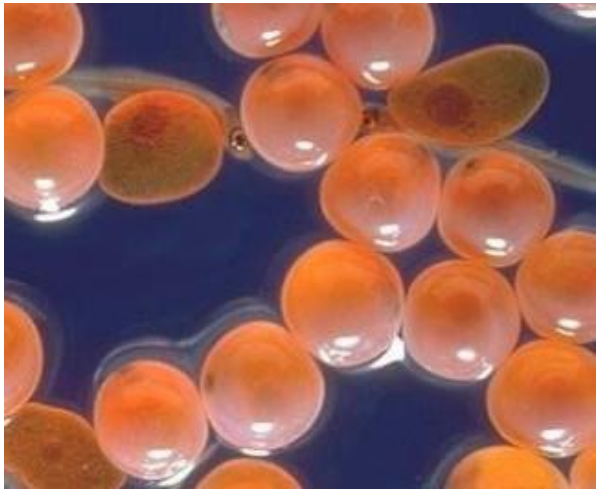
Wildlife mitigation

- Willamette and Idaho wildlife settlements which permanently resolve mitigation responsibilities.



Ongoing issues

- ESA Biological Opinions
- CRSO EIS
- Potential Accord extensions and other agreements
- NPCC fish and wildlife program amendment process
- Climate change/ocean conditions
- Predator management
- Columbia River Treaty
- Proposals for further increased spill
- High head dam passage
- Hatcheries
- Lamprey and sturgeon conservation



QUESTIONS?

FINANCIAL DISCLOSURE

This information was publicly available on July 16, 2018, and contains information not sourced directly from BPA financial statements.