

Pacific Coastal Salmon Recovery Fund FY 2017 Report to Congress



An introduction to the Pacific Coast Salmon Recovery Fund

Today, 28 salmon species¹ face extinction on the West Coast and are protected under the Endangered Species Act (ESA). Others have seen drastic reductions in their populations. Many of these species are of profound cultural importance to West Coast Native American Tribes, and their recovery is critical to meeting Federal obligations as stewards of Tribal treaty and trust resources.



Chinook salmon. Photo: NOAA Fisheries

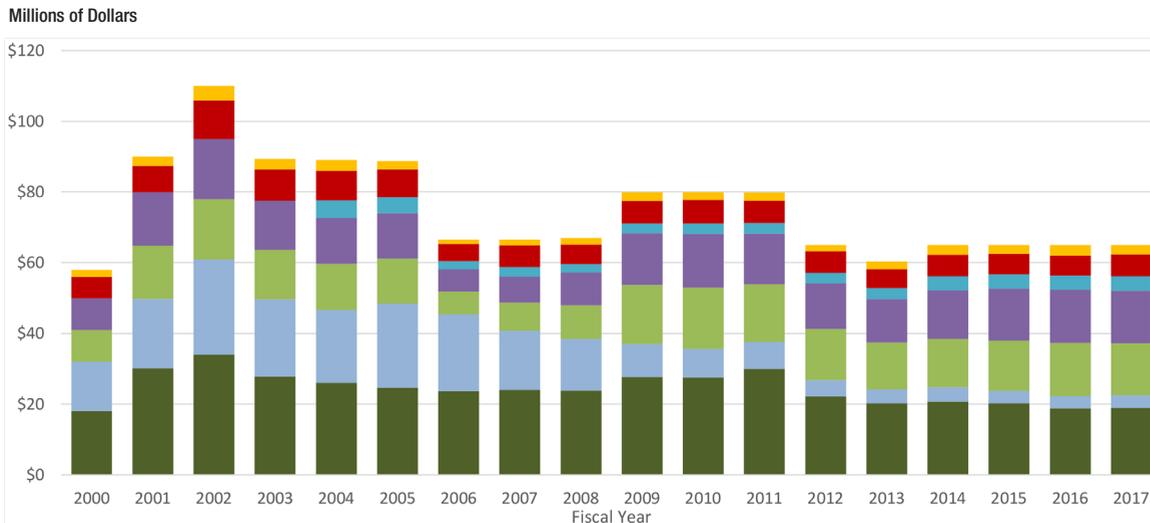
¹In this report, the 28 “species” includes evolutionarily significant units and distinct population segments and the term “salmon” is inclusive of both salmon and steelhead.

In 2000, Congress established the Pacific Coastal Salmon Recovery Fund (PCSRF) to reverse the decline of West Coast salmon populations in California, Oregon, Washington, Alaska, and Idaho. PCSRF is a competitive grants program through which the National Oceanic and Atmospheric Administration’s (NOAA’s) National Marine Fisheries Service (NMFS) administers funding to States and Tribes to protect, conserve, and restore these populations. In addition to these efforts, the program plays a vital role in supporting Tribal treaty fishing rights and subsistence fishing traditions.

PCSRF has awarded an average of \$75 million annually since 2000 (Exhibit 1). With this funding, States and Tribes have leveraged additional resources to collectively implement more than 13,200 projects to conserve West Coast salmon. Projects have restored and improved access to important spawning and rearing habitats. PCSRF-funded activities also include robust planning and monitoring programs that inform strategic prioritization of projects and track salmon conservation accomplishments.

SINCE 2000, PCSRF HAS:

- Restored, created, or protected over 1,090,000 acres of salmon habitat
- Opened over 10,550 miles of streams to spawning fish
- Received \$1.35 billion in Congressionally appropriated funds
- Leveraged over \$1.69 billion in non-PCSRF contributions



State/Tribe	Total Awards
Columbia River Tribes	\$44.1
Pacific Coastal Tribes	\$119.9
Idaho	\$48.2
Oregon	\$231.2
California	\$240.5
Alaska	\$227.9
Washington	\$438.8
Total (rounded to the nearest \$0.1M)	\$1,350.6

Exhibit 1: PCSRF Awards to States and Tribes (\$Millions)

Measuring Progress & Tracking Funding

All PCSRF recipients report on a standard list of metrics for all projects (Exhibit 2). In aggregate, these metrics provide estimates of program-wide accomplishments funded with PCSRF, State-matching, and other partner funds. PCSRF's project and performance metrics database is available online at: www.webapps.nwfsc.noaa.gov/pcsrp

Output	Performance Measure	FY2017	FY2000-FY2017
Instream Habitat Projects	Stream Miles Treated	253	2,737
Wetland Habitat Projects	Acres Created	0	2,115
	Acres Treated	243	29,921
Estuarine Habitat Projects	Acres Created	0	2,353
	Acres Treated	10	5,392
Land Acquisition Projects	Acres Acquired or Protected	1,879	270,769
	Stream Bank Miles Acquired or Protected	33	5,211
Riparian Habitat Projects	Stream Miles Treated	202	11,135
	Acres Treated	2,064	122,981
Upland Habitat Projects	Acres Treated	2,510	645,409
Fish Passage Projects	Number of Barriers Removed	159	3,357
	Stream Miles Opened	1,004	10,554
	Number of Fish Screens Installed	36	1,962
Hatchery Fish Enhancement Projects	Number of Fish Marked for Management Strategies	22,082,668	362,414,796
Research, Monitoring & Evaluation Projects	Miles of Stream Monitored	16,820	507,525

Exhibit 2: Summary of PCSRF Program-wide Performance Measures, FY 2000-2017†

†Reflects annual and accumulated totals at the time database queried for report (December 6, 2017).

Exhibit 3 highlights funding allocations by project category. Throughout the PCSRF Program's existence, habitat restoration and critical monitoring have remained the central emphasis of the program. While other project categories contribute to PCSRF goals, implementing on-the-ground restoration actions is vital to salmon recovery, and consistent monitoring ensures PCSRF investments are effectively meeting the needs of listing species.

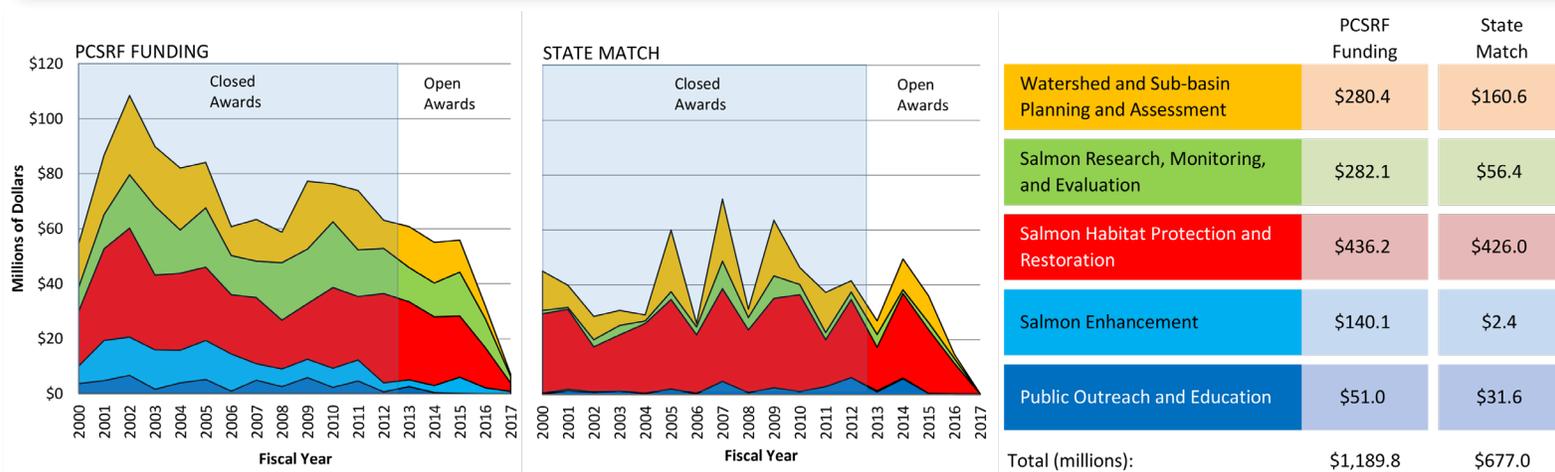
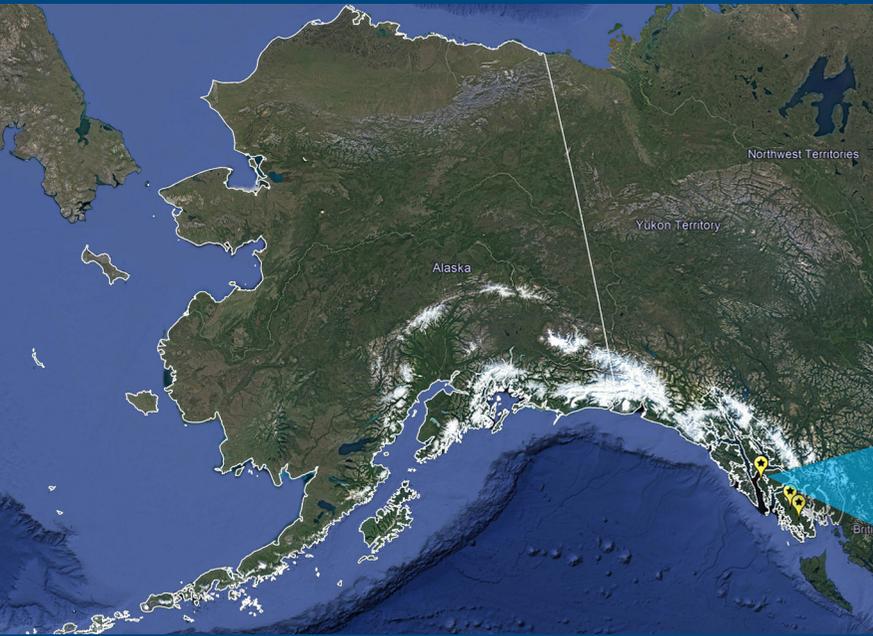


Exhibit 3: PCSRF and State Funding Allocations by Project Type††

†† The sum of total funding allocated across project types does not equal the total of PCSRF awards presented in Exhibit 1. Not all awarded funds have been allocated to projects for the more recent fiscal years.

PCSRF at Work

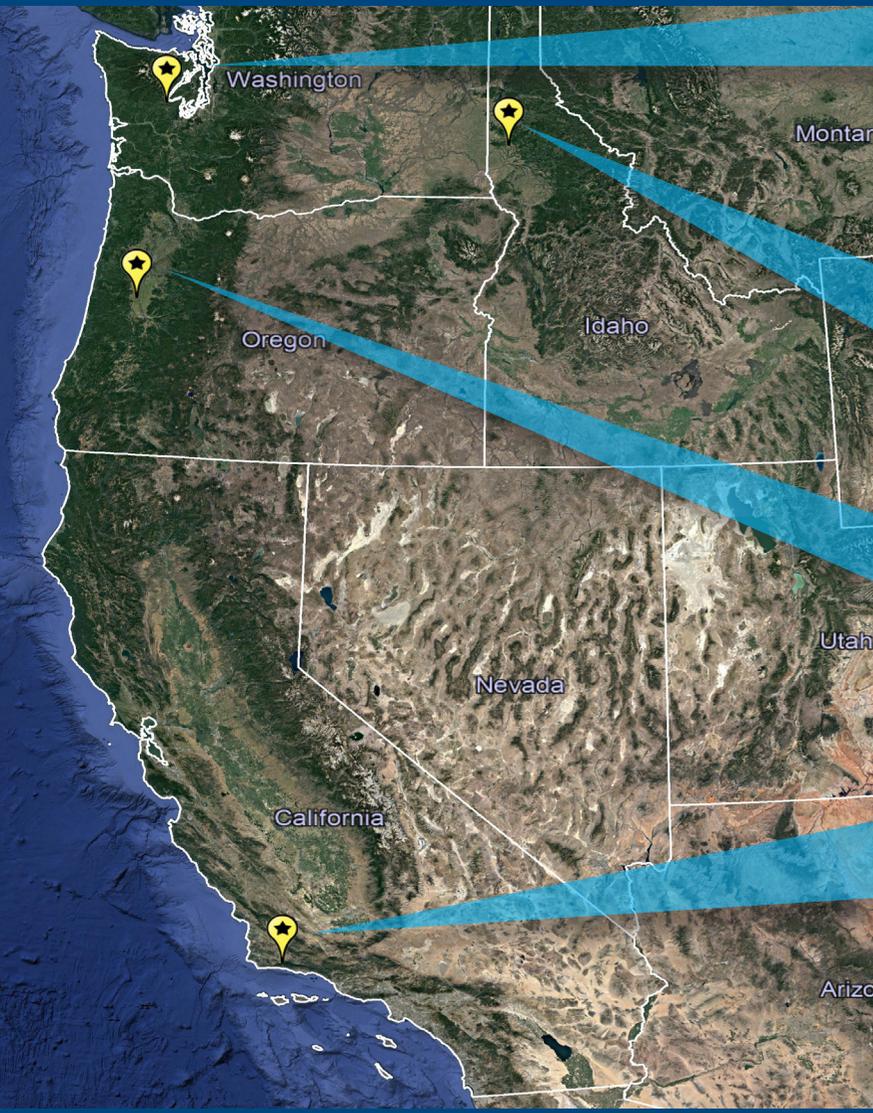


For additional project information:

www.westcoast.fisheries.noaa.gov/protected-species/salmon-steelhead/recovery-planning-and-implementation/pacific-coastal-salmon-recovery-fund.html

ALASKA

Project: Restoring Logged Watersheds in SE Alaska
PCSRF Funds: \$442,602
Matching & Other Funds: \$932,043
Targeted Species: Un-listed Coho, Chum, Pink, Steelhead



WASHINGTON

Project: Skokomish Estuary Restoration
PCSRF Funds: \$130,439
Matching & Other Funds: \$8,065,026
Targeted Species: Threatened Hood Canal Chum, Puget Sound Chinook, Puget Sound Steelhead

IDAHO

Project: Mason Meadow Restoration
PCSRF Funds: \$75,000
Matching & Other Funds: \$150,000
Targeted Species: Threatened Snake River Steelhead

OREGON

Project: Harkens Lake Restoration - Phase 2
PCSRF Funds: \$227,974
Matching & Other Funds: \$185,277
Targeted Species: Threatened Upper Willamette River Chinook

CALIFORNIA

Project: Fish Passage Improvement at Crossing 4, Quiota Creek
PCSRF Funds: \$937,839
Matching & Other Funds: \$178,201
Targeted Species: Endangered Southern California Steelhead

Reversing species' declines

Of the 20 salmon species with sufficient monitoring data to evaluate trends and based on the most recent species status reviews completed in 2016, two species continue to exhibit a declining trend. Of the others, 13 are exhibiting stable trends in abundance and five are exhibiting increasing trends. Nearly all of these species were listed during the 1990s, in part, due to alarming declines in abundance. While most species remain below their recovery goals, the sustained stable and increasing trends represent noteworthy successes in preventing extinctions and dramatic turnarounds from the numbers we witnessed in the 1990s. Changes in ocean conditions, harvest management, hatchery practices, hydropower dam operations, and habitat restoration efforts have all contributed to the improvements in status.

Investing in salmon restoration spurs economic growth for local communities

Salmon restoration benefits fish populations and their habitats, but the value of these investments goes far beyond recovering threatened and endangered species. The financial investments in habitat restoration contribute to local communities and their economies. In fact, the “restoration economy” in the United States employs approximately 126,000 workers and annually generates approximately \$9.5 billion in economic output.ⁱ This activity indirectly “supports an additional 95,000 jobs and \$15.0 billion in economic output through indirect (business-to-business) linkages and increased household spending.”ⁱ



Photo: Mason Conservation District

Several studies indicate that a \$1.0 million investment in watershed restoration, of which PCSRF and State matching funds play a significant role, creates between 13 and 32 jobs and \$2.2 and \$3.4 million in economic activity (Exhibit 4).^{ii, iii, iv}

Every dollar invested in salmon restoration travels through the economy in several ways. PCSRF State and Tribal grantees contract with local watershed groups, conservation agencies, land trusts, and other entities to manage habitat restoration projects. In turn, those agencies contract with local businesses and suppliers to carry out the work.

Investing in restoration also provides communities with longer-term economic stability, including future job creation in rebuilt fisheries and coastal tourism and higher property values.ⁱⁱ In fact, an analysis of three NOAA-funded coastal restoration projects found that each dollar invested returns more than \$15 in long-term net economic benefit.^v

The jobs and economic benefits of salmon restoration activities are largely realized in the local and rural communities, many of which face economic challenges. The vast majority of habitat restoration investments are spent in the state in which the project sponsor is located (approximately 90 percent), and in non-metropolitan counties over 60 percent is spent within the county.^{iii, vi} These economic benefits are often localized and provide important stability to economically distressed communities.^{iii, vi}

Selected Project Types	Definition	Jobs/\$1M ⁱⁱ	Jobs/\$1M ⁱⁱⁱ	Economic Output/\$1M ⁱⁱⁱ
In-stream	Enhancing stream habitat and function	-	14.7	\$2,203,851
Riparian	Restoring riparian habitat function, enhancing and restoring native riparian vegetation	19.0	23.1	\$2,310,128
Wetland	Restoring wetland and estuarine habitat	-	17.6	\$2,259,422
Reconnection	Restoring the flow of water to coastal systems and floodplains	14.6	-	-
Fish Passage	Removing barriers to fish passage (culverts and dams), screening to protect fish from water withdrawals	18.2	15.2	\$2,240,281
Upland	Managing agricultural water, juniper, and noxious weeds	-	15.0	\$2,476,290
Others	Undertaking multiple activities in one comprehensive restoration project	-	14.7	\$2,270,862
	Estimated Average Across All Project Types	17.0	16.3	\$2,311,468

Exhibit 4: Economic Effects per \$1.0 Million Invested in Forest and Watershed Restoration Projects

References

- ⁱ BenDor T, Lester TW, Livengood A, Davis A, Yonavjak L. 2015. Estimating the Size and Impact of the Ecological Restoration Economy. PLoS ONE 10(6): e0128339. doi:10.1371/journal.pone.0128339.
- ⁱⁱ Edwards, P.E.T., A.E. Sutton-Grier and C.E. Coyle. 2013. Investing in nature: Restoring coastal habitat blue infrastructure and green job creation. Marine Policy 38:65-71.
- ⁱⁱⁱ Nielsen-Pincus, M., and C. Moseley. 2013. The Economic and Employment Impacts of Forests and Watershed Restoration. Restoration Ecology 21 (2), 207-214.
- ^{iv} Cullinane Thomas, Catherine; Huber, Christopher; Skrabis, Kristin; and Sidon, Joshua. 2016. Estimating the economic impacts of ecosystem restoration—Methods and case studies. U.S. Geological Survey Open-File Report 2016–1016, 98 p. <http://dx.doi.org/10.3133/ofr20161016>.
- ^v Conathan, M., J. Buchanan, and S. Polefka. 2014. The economic case for restoring coastal ecosystems. Center for American Progress and Oxfam America. April.
- ^{vi} Bonner, K., and M. Hibbard. 2002. The economic and community effects of Oregon Watershed Enhancement Board Investments in Watershed Restoration. University of Oregon, Institute for a Sustainable Environment, Ecosystem Workforce Program, Briefing Papers.

Cover photo: Mason Conservation District.



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